

**Elder Care,
Old-Age Security
and Social Change
in Rural Yogyakarta, Indonesia**

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Elder Care, Old-Age Security and Social Change in Rural Yogyakarta, Indonesia

De zorg voor en bestaanszekerheid van ouderen tegen de achtergrond van sociale veranderingen in ruraal Yogyakarta, Indonesië

Iris N. Keasberry

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For my caring parents

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During her growth I often found this brainchild very interesting and she surprised me often with her developmental leaps. Fortunately, she was a pleasant child to deal with most of the time. She was however, now and then also a very difficult child who seemed not to want to grow up. This child had a very good time and was not at all in a hurry to leave the nest. Nevertheless, as a sensible mother I have untangled myself from her tight embrace and pushed her with a soft, but firm hand into the wide world. This thesis is my brainchild for which I will always keep a special place in my heart.

1. Introduction

This thesis describes the significance of the living conditions and care arrangements of older persons for their old-age security in the villages of Kebonagung (regency of Bantul) and Giriwungu (regency of Gunung Kidul) in the Special Region of Yogyakarta, Indonesia. This chapter presents the background of the study and the research project 'Household and family care for the elderly in an ageing society'. Furthermore, the research problems and research objectives are described, and the research questions are presented that have guided our study. Finally, the structure of the thesis is briefly outlined.

1.1 Background of the research¹

The world population is ageing. In 1982 the World Assembly on Aging brought to the attention of the public and policymakers the fundamental fact that every nation in the world is growing older (Hashimoto and Kendig, 1992a). The year 1999 was designated as 'The Year of the Older Person' by the United Nations, thereby recognising and reaffirming that the global population is ageing at an unprecedented rate. Developed nations have relatively high proportions of people aged 65 and over, but the most rapid increases in elderly population are in the developing world, particularly in East and South-east Asia. This region has accounted for a large proportion of the increase of older people in recent decades and will do so to an even greater extent in the future (Kinsella and Velkoff, 2001).

In 1996, the Indonesian archipelago counted about 206.3 million people. The population, of which two-thirds live on the island of Java, is made up of various ethnic groups. The proportion of older people is still small compared to that of Western countries (6.3 percent over 60 years of age), but is increasing at a remarkably high rate. The elderly population was projected to increase by 191 percent between 1996 and 2025 (US NIA, 1996). The Special Region of Yogyakarta, a province in the central part of Java, is a front-runner in the ageing process. Although the majority of the whole population still lives in rural areas (60 percent in 1999) (World Bank, 2001), the majority of the population in the Special Region of Yogyakarta live in urban areas (71 percent in 2000) (Kasto and Sembiring, 1996).

Developing countries in Asia offer a wide variety of cultural practices regarding care for and intergenerational relationships of older people. The Javanese have a bilateral kinship system that is generally characterised by the values of showing respect (*hormat*) and maintaining harmonious social appearances (*rukun*) towards older and

¹ Parts of this section have been published in (Keasberry, 1998; Keasberry, 2001).

senior relatives (Geertz, 1961; Koentjaraningrat, 1957). The majority of the population adheres to Islam, a religion that emphasises intergenerational concern, kindness and mutual obligations, especially in matters of subsistence and general care (Hammudah 'Abd al 'Ati, 1977). However, the village religious system commonly consists of a complex of animistic, Hinduistic and Islamic elements, a basic Javanese syncretism that is the true folk tradition in the central parts of Java (Geertz, 1960). The main differences for older people living in rural and urban areas are that in the villages most people continue to work, are less economically dependent on their children, the average monthly household income is more sufficient for daily needs and the health condition is less satisfactory (Keasberry, 1997; Population Studies Center, 1999; Rahardjo et al., 1994b).

In combination with demographic change, the processes of social and economic change are affecting the Indonesian society. Traditionally, Javanese children are obligated to take care of their parents, especially when their parents have stopped working (Koentjaraningrat, 1957). When Javanese people became old and were no longer heads of complete households, no longer had young children, and were no longer economically productive, they used to live with their children or siblings' children or grandchildren (Geertz, 1961). In practice this often meant that the youngest child, preferably a daughter, stayed behind in the parental house and co-resided with the parents after marriage. The intergenerational relationships guaranteed the parents' care and support in their old age. However, we expect that these kinds of living arrangements are changing as a consequence of processes of social change and that this will also affect the elder care practices. Households and families that have always provided the support and care for the large majority of elderly people in Indonesia are becoming smaller. Members of families are living further apart as a consequence of increased mobility and migration. It is no longer self-evident that women are working at home or around the house, since the participation of women in paid labour is increasing. In the context of rapid social and economic change, traditional support mechanisms can no longer be fully relied upon for the care of older people. In the near future, Indonesian people will be less certain that their children will care for them in their old age (Andrews, 1992; Mason, 1992). Older persons in Indonesia are as yet little studied and there is a lack of theoretical conceptualization on (elder) care in developing countries. To enable formulation of appropriate policies, it is, however, necessary to understand how elder care and support are arranged.

1.2 Research project

The present study is part of the 'Household and family care for the elderly in an ageing society' project. So far the project consists of the following three studies:

- A study of older persons in the urban area of Yogyakarta by the Population Studies Center at the Gadjah Mada University, Indonesia. This study investigated the socio-economic position of and the perceptions about care for older persons

aged 60 years and over in the sub-districts of Umbulhardjo, Pakualaman and Kraton in the municipality of Yogyakarta (Population Studies Center, 1999);

- A study of older persons in the rural area of Yogyakarta by the Section Sociology of Consumers and Households at the Wageningen University², the Netherlands. This study investigated older persons' lives, care arrangements, support relations, old-age security and livelihood strategies of older persons aged 55 years and over in the villages of Kebonagung (regency of Bantul) and Giriwungu (regency of Gunung Kidul) in the Special Region of Yogyakarta (Keasberry, this thesis); and
- A study of older persons in some rural areas of the Netherlands by the Section Sociology of Consumers and Households at the Wageningen University, the Netherlands. This study investigated care situations and arrangements, informal and formal care, reciprocity and norms of older persons aged 75 and over in the non-urban municipalities of Dodewaard, Echteld, Heteren en Valburg (province of Gelderland) and Chaam, Terheijden en Zundert (province of Brabant) (Luijkx, 2001).

The research project focuses on the issues of the socio-economic position of older people, the amount and kind of care and support needed by older people, the role of households, families and significant others in providing elder care, now and in the immediate future. The research project was set up with a comparative perspective towards rural and urban Yogyakarta on the one hand and rural Indonesia and a rural area in the Netherlands on the other hand. The different study areas share the common problem of the societal consequences of the ageing process. However, it was assumed that given the different demographic and socio-economic contexts, patterns of household and family care for older people as well as the socio-economic position of older people would differ.

The present study of older persons in rural Yogyakarta was started in 1995. In the first phase of preliminary research, I carried out a literature study, language training, secondary data collection, key-informant interviews and preparation of the fieldwork. This was done in part over a three-month period in Indonesia. The second phase of the research consisted of fieldwork conducted in the villages of Kebonagung and Giriwungu during the latter half of 1996. The Population Studies Center of the Gadjah Mada University in Yogyakarta provided hospitality and functioned as a host institution. At the end of 1997, I returned to the Netherlands for the final phase of the study, namely data analysis and reporting.

1.3 Research problems, objectives and questions

The amount of literature on older persons in Indonesia is limited. Most of the studies use the decennial national censuses and intercensal surveys of the Indonesian Central Bureau of Statistics (*Biro Pusat Statistik*) and are not based on actual data

² At the start of the research project, the institution was named the Department of Household and Consumer Studies at the Wageningen Agricultural University.

collection, especially of qualitative data. The majority of the studies are about Java or the whole of Indonesia. They studied the subjects of demographic ageing, socio-economic conditions and well-being of older persons, nutritional health and institutional care. There are no comprehensive studies available that focus on older persons' living conditions, care arrangements and old-age security in rural Indonesia.

The literature on studies of elder care are generally not driven by theory, but rather examine specific 'problems' in the care-giving environment. It has often been observed that many research studies on human ageing are weak in conceptualization and methodological rigor (Bury, 1995: 15; Dieck, 1984 in Streib and Binstock, 1990: 6; Dwyer and Coward, 1992: 151; Horowitz, 1992; Nolan et al., 1996: 4). Moreover, we did not find any record of theories of (elder) care in studies on older persons in developing countries. We only encountered the call for more detailed data and qualitative information, the construction of culturally 'transportable' items and the need for developing comparative theoretical approaches to ageing (Andrews, 1992; Hashimoto and Kendig, 1992a; Hashimoto et al., 1992b: 294, 303; Hugo, 1992a; Phillips, 1992: 18).

In Indonesia, rapid population growth is placing great strain on the provision of various types of public services and utilities (Hugo, 1992a). However, the government provides limited special services for particular groups of older persons, and relies on private and charitable groups to assist in providing for the needy. Social security programmes are typically limited to government-employed individuals with complementary special welfare programmes for the impoverished and the impaired (Chen and Jones, 1989; Jones, 1993). To be able to anticipate future needs of older persons and to formulate appropriate policies, it is important to know more about the living conditions of older persons and their care arrangements with household members, kin, friends and neighbours. The former government of Suharto (1966-1998) acknowledged the problem of the 'low priority' given to ageing and having 'inadequate information' about older persons and the problems they experience (Nardho Gunawan, Director of Family Health, Ministry of Health, in Hugo, 1994c: 74).

The present research seeks to address both the issue of inadequate information and knowledge, and the absence of theoretical conceptualization. Therefore, the research objective has a descriptive and a theoretical component. This research aims to:

1. Gain insight into the lives of older persons, particularly regarding the care they provide themselves and receive from others at the micro-level (household-kin-community). Moreover, it aims to identify the transitions in elder care to be better able to anticipate the needs for elder care in Indonesia in the future.
2. Develop a theoretical framework for care that will be applicable in Indonesia and countries of similar socio-economic and cultural setting. The theoretical framework starts from the assumptions and concepts found in the literature, which are adapted to and tested in the local situation.

This thesis has a societal and practical relevance for policymakers, who are expected to develop programmes and social services to accommodate the problems of old age and improve the lives of older people in rural Indonesia. It has a scientific and

theoretical relevance for researchers, who want to study older persons and elder care in developing countries from a comparative perspective.

The central question of the research is as follows:

HOW DOES SOCIAL CHANGE AFFECT OLDER PERSONS' LIVES, AND WHAT IS THE SIGNIFICANCE OF CARE ARRANGEMENTS AND SUPPORT RELATIONS FOR OLD-AGE SECURITY?

This general research question will be subdivided below. Before we can investigate the care practices and relationships of older persons, we first need to know more about the living conditions of older people. What are the socio-demographic, health and economic characteristics of the lives of older persons? Or more generally stated:

1. HOW CAN THE LIVES OF OLDER PERSONS BE CHARACTERISED?

We are primarily interested in the care practices and support relations of older persons. The supporting activities that older persons provide for themselves, that people in their personal network can give to them, and that they can provide for others. What care arrangements do older persons have? What support relations do older persons have? The individual care arrangements and support network of an older person may lead to patterns of elder care. Hence, the second research question is:

2. WHAT PATTERNS OF ELDER CARE CAN BE DISTINGUISHED?

It will be useful to determine indicators of elder care to assess the needs and well-being of older persons. How secure do older persons feel and what are the factors that influence this feeling? With the relevant indicators it will be possible to assess, act on and prevent problems with care for older persons. Moreover, we assume that people have strategies to provide for a secure old age. This results in the following research questions:

3. WHAT FACTORS AFFECT OLD-AGE SECURITY?

4. WHAT LIVELIHOOD STRATEGIES ARE IMPORTANT FOR OLD-AGE SECURITY?

It is assumed that in the course of time elder care patterns are continuously changing under the influence of processes of cultural change, socio-economic transformations and demographic transitions. Cultural change will bring about changes in norms and values, including those concerning care. We can expect that there will be discrepancies between the norms and values of older parents and the norms and values of their children. For example, while the children traditionally have the obligation to provide care for their parents, changing circumstances will affect their willingness and ability to do so. These circumstances can be demographic and socio-economic. Demographic change consists of the processes of ageing and rejuvenation of the population, which affect the dependency ratio and make it more

unfavourable for older persons. Socio-economic change consists of the general improvement of living conditions such as increasing income, rising levels of education and improving health services. These conditions may change the need for elder care and resources of support. This leads us to the last research question.

5. HOW DO PROCESSES OF SOCIAL CHANGE AFFECT ELDER CARE AND OLD-AGE SECURITY?

To investigate the assumption of social change affecting elder care and consequently old-age security, a comparative element will be included in the study design by selecting two villages. One village was selected on the assumption that it had not been much affected by social change and that the elder care still is much as it traditionally was. The other village was selected on the assumption that it had been affected by social change and that the elder care had consequently changed as well. By comparing the practices of elder care in these villages, we intended to find out how processes of social change affect elder care.

1.4 Outline of the thesis

This thesis starts with a description of the various contexts in which the research problems and older persons are investigated including a discussion of the research methods used in the study. Chapters 6 to 11 describe the analysis of the results according to the research questions. In these chapters case studies are presented to illustrate the issues under discussion. Each chapter ends with a conclusion. Finally in Chapter 12, the research questions are answered and the conclusions of each of the chapters are connected and discussed in relation to the results of other studies and the methods applied.

Chapter 2 presents the context of social change as it presumably influences the lives of older persons, elder care and old-age security. The chapter briefly describes theories of social change and presents the Macro-micro model of social change processes. Then the political, demographic, and socio-cultural contexts are presented, which are important for understanding the developments in Indonesia specifically during the past decades.

Chapter 3 focuses on the local context of elder care, particularly in the villages of Kebonagung and Giriwungu in the Special Region of Yogyakarta. The political and policy context, the geographic and demographic context, and the socio-cultural context of older persons' lives are described. The given local contexts are illustrated with case studies and field notes to show how older persons reflect on the time in which they grew up and became old.

Chapter 4 presents the theoretical premisses, the various research approaches and the conceptual definitions of the study. The theoretical approaches to (elder) care derive from the disciplines of sociology and anthropology, and use household and

gender perspectives. Our starting-point is Tronto's theory of care. Next an overview of studies on older persons in Indonesia is presented to show that the number of studies in this field is limited and that more knowledge is needed to facilitate the development of appropriate policies and services.

In Chapter 5 the methodology of the research project is presented. The discussion of the research design and the selection of study areas, survey respondents and case studies are complemented with the justification for the methodological decisions that were made. The last section describes the methods of data collection and analysis.

With Chapter 6 the analysis of the research results starts. Chapter 6 focuses on the socio-demographic characteristics of older people, which can be defined as age, sex, religion, education, marital status, household composition and size, (co-) residence and children. An overview of the indicators of the socio-demographic status is presented in the conclusion of the chapter.

Chapter 7 describes the health of older persons by looking at certain indicators. These consist of nutritional health, functional capacity of personal and instrumental activities of daily life (ADL/IADL), physical and mental well-being, disease and illness. In the conclusion an overview is given of the finding regarding the health status.

Chapter 8 describes the daily activities of older persons and how older people provide for a livelihood individually and within their household. The resources studied consist of the work situation, individual and household income, food crops, trees and water. The assets studied consist of house, land, livestock and valuable household items.

Chapter 9 describes the living arrangements of older persons and their children to identify the potential of care within the own household. The care arrangements described consists of care for personal activities of daily life (ADL), such as washing oneself, using the toilet and walking outdoors, and support for instrumental activities of daily life (IADL), such as shopping, cutting firewood and cooking. Parents cannot automatically rely on care provided by their children when the latter live elsewhere. Cases of labour migration, transmigration and international labour migration illustrate what the implications of distant children are for the daily care of older parents.

Chapter 10 presents the financial, emotional and social support that older persons receive from or give to relations in and beyond the household. The financial support consists of monetary and material support provided to older persons individually and to the whole household. Various kinds of claims to financial support are described. The exchange of advice, trust and social talk can be a source of emotional support. An analysis is made on what effect children, who live at a large distance from their parents, have on the financial and emotional support that is exchanged. Participation in social activities is considered to be a source of social support. The chapter looks at important social networks like the mutual assistance group, the saving-and-credit

group, the nights patrol group, the women's information group, the Koran recitation group and the social circle of close neighbours.

Chapter 11 presents the perceived security of older persons and several of the livelihood strategies to secure old age. Older persons are assumed to be insecure when they feel uncertain about their food supply, health condition, income in cash or in kind, access to resources and assets, physical capabilities, or when they are emotionally dissatisfied. One way to cope with these insecurities is to have satisfying care arrangements and support relations. Finally, the two research villages are compared to see how elder care is affected by social change and how that affects the old-age security.

Chapter 12 consists of a summary of the main conclusions providing insight into older persons' lives. This section also includes the answers to the research questions. Some salient findings are critically discussed in relation to other studies in Indonesia and in relation to the methods applied in the research. The chapter ends with an evaluation of the theoretical concepts, the framework of elder care, and the scientific and societal relevance of the study.

2. The context of social change¹

The present research is about older persons, elder care and old-age security in rural Java, Indonesia. These subjects are studied in the context of social change. This chapter describes the context of social change as it presumably influences the lives of older persons, elder care and security in old age. The first sub-section briefly describes theories of social change. Then the political, demographic, and socio-cultural contexts that are important for understanding the developments in Indonesia are presented. Furthermore, the historical, economic and geographical contexts are sketched to provide the necessary background.

When describing the different processes of social change, we tried to select those aspects that can be hypothesised to have an impact on older persons' lives and elder care. In doing this, we shift our focus from the national to the regional, and from governmental to institutional and individual levels. In the final section, we will posit linkages between aspects of social change and elder care in the form of hypotheses, and argue our choice of research villages.

2.1 Theoretical approach to social change

This section presents our theoretical approach to social change. First, we briefly describe some classical modernization theories, such as the evolutionary theories, developmental theories, historical materialism and functionalism. Secondly, we describe some alternative theories of social change, such as Kooy's model for the development of norms and values, and the behaviour of the family, Van der Loo and Van Reijen's Model of Modernization Paradoxes and Bell and Mau's Cybernetic Model of Social Change. Then we define the concepts of modernization and social change and explain why we opt for the concept of social change. Finally, a theoretical model is presented, which offers the framework for looking at the complex processes of social change at the macro-level as well as the micro-level. This is called the Macro-Micro Model of Social Change Processes.

2.1.1 Classical theories

The process of change called modernization has been described, strongly criticised and further developed by many social scientists over a long period. Trying to get an insight into these modernization theories, approaches, models and concepts is difficult, because there are many different theories that are sometimes mutually contradictory or overlapping. Modernization is a complex concept, because it comprises many

¹ Parts of this Chapter, in particular the sections 2.1, 2.2.1, 2.2.2, 2.4.4 and 2.5, have been published in Keasberry (1998).

phenomena and constituent processes. Therefore, *the* theory of modernization does not exist and for the purpose of this thesis only a short overview is given.

The base for social-scientific thinking about social change, particularly with regard to the family, has been formed by many classical theories. Evolutionary theories suggest that all societies move from a simple to a more complex state, and as societies become more complex, areas of social life that once were integrated, become clearly separate from one another (differentiation). Nineteenth-century theories of social evolution often tended to be unilinear, asserting that there is a single track of development from simple to complex. Change in simple societies is supposed to progress slowly at first and then at an ever-increasing rate. Development theories emphasise the analogy with the development of human beings, with social systems following the stages of the life course. Historical materialism originates from Marx who assumed that every society rests on an economic base (infrastructure), which determines changes in the political, legal and cultural institutions (superstructure). These institutions and groups are in constant competition for power in order to control the material world and subordinate it to their own purposes. Functionalism suggests that the function of a social practice or institution contributes to the continuation of the society as a whole and that these functions can change over time. Shifts in functions and changes in structures are indicative of the influence of social change on the family in a culture or society (Clayton, 1975a; Giddens, 1993c). These classical theories have in common that they perceive human evolution as a development passing through several phases and leading to progress. They rest on the firm belief that humanity stood at the start of a new epoch at the beginning of the nineteenth century. These views have contributed to the rigid opposition of past and present, and traditional and modern (Van der Loo and Van Reijen, 1990).

The classical modernization theories and the approaches derived from them have met with much criticism, mainly concerning their alleged uniformity and universality, ethnocentrism, harmonious character, mono-causality, self-governing processes, and abstract and general character. It was seldom taken into account that processes of modernization vary in content and speed, depending on time and place, and leading to different outcomes. Sometimes there tended to be a romanticising of the past and insufficient attention was paid to the paradoxical character of modernization processes. Modernization is multi-dimensional, which makes it difficult to untangle the complex of causal factors. When applied to households and families, the usual assumption is that these institutions are just recipients of stimuli from larger societal systems, which they cannot control, thus leading to structural and functional changes or adaptations. However, households and families can also be seen as actors, initiators of change and actively interacting with other structures (Clayton, 1975a; Cowgill, 1986; Van der Loo and Van Reijen, 1990). Pennartz and Niehof see family households as 'creative agencies' (1999: 214).

2.1.2 *Alternative theories*

In response to the criticism on the classical theories, alternative approaches for studying social change were developed. Here, we will discuss Kooy (1985), Van der Loo and Van Reijen (1990), and Bell and Mau (1971), because they all present models which relate macro-level processes of change to micro-level changes within the family and household.

Kooy composed a model² of the development of norms and values about sexuality, marriage and family, in relation to actual behaviour (micro-processes of change). The norms, values and family behaviour are influenced by increasing domestication through science and technology, secularisation, societal differentiation and integration at a higher level, as well as individuation (macro-processes of change). In industrialised societies a transition took place from the extended patriarchal and economically self-sufficient family household, to the nuclear family with an egalitarian structure and a focus on consumption and affectionate-emotional relationships. Kooy postulates that the evolution of family has accelerated very fast, because the political-social transition of the French Revolution and the technological-economic transition of the Industrial Revolution occurred at approximately the same time (Kooy, 1985). Although Kooy could not evade the criticism of the unilineal, dichotomist and ethnocentric characterisation of family because of his putting the traditional family at the beginning of the evolution and the modern-Western family at the end, he did succeed in combining the micro- and macro-processes of change in one model.

Van der Loo and Van Reijen have tried to develop a conceptual model in which both the different modernization phenomena and the different theories about modernization are put in order to describe and analyse the paradoxical character of the modernization process. In their Model of Modernization Paradoxes³ they assume that the social reality and the human actions are to be approached through the aspects of structure, culture, person and nature. Starting from a structural approach of changing action patterns and interaction forms, modernization is described as a process of differentiation. The cultural dimension of changing beliefs, ideas, symbols, values, norms and meanings, which are directing one's actions and give relevance to them, makes of modernization a process of rationalisation. Though people's actions may be determined by possibilities and constraints from the surrounding structures and value-systems, people's actions are also connected to a certain personality. Van der Loo and Van Reijen mainly analyse modernization from the individual point of view and as a process of individualisation. Furthermore, the increasing control of humans over biophysical nature characterises modernization as a process of domestication. These four dimensions of the modernization process are closely interlinked and form a coherent system of paradoxical phenomena. These paradoxical phenomena include both a decrease of

² The original title of the model is: "Schematische voorstelling van een veronderstelde ontwikkelingsgang inzake gezinsbehoren en gezinszijn sinds het optreden van twee grote revoluties" (Kooy 1985: 198).

³ Van der Loo and Van Reijen derived their Model of Modernization Paradoxes from Parsons (1966; 1971), which was adjusted previously in a more general form by Adriaansens (1983).

scale and expansion, pluralization and generalisation, an increase in autonomy together with an increase in dependency. The strength of the Model of Modernization Paradoxes is that it is based on human actions, and that it takes account of the manifold processes of modernization, which may seem to be contradictory and contrasting but are in fact two sides of the same modernization coin. The model enables one to obtain insight into the modernization process as experienced by human beings and societies (Van der Loo and Van Reijen, 1990).

Bell and Mau developed the Cybernetic-Decisional Model of Social Change. This model interrelates the aspects of the real world (human biology, population, ecosystem, resources, technologies, organisational settings) that feedback information in a reciprocal fashion. Additionally, it recognises that every social change is a function of decisions made at the individual, group, social system, or societal-cultural levels. The strength of Bell and Mau's model is that it combines macro-level and micro-level processes of which the last are specified into beliefs, images of the future, values, decision-making processes and individual action. Moreover, it allows for the possibility that the family is an initiator as well as a receiver of social change (Bell and Mau, 1971; in Clayton, 1975a).

2.1.3 The concepts of social change and modernization

In literature the concepts of 'social change' and 'modernization' are often interchangeably used. Many writers have tried to define these terms, but seldom succeeded to give an unambiguous definition. Only Holmes and Holmes (1995: 251-3) present a short systematic discussion of the differences in the conceptualisation of modernization. Modernization can be seen as an internal and external force for change. Modernization as an internal change, change that comes from within society, is exemplified by the history of technological development, industrialization, and urbanisation in America. This view fits Van der Loo and Van Reijen's general definition of modernization as "A complex of interrelated structural, cultural, psychological and physical changes, that has been crystallised out during the past centuries and so has formed the world in which we live now, and that is still pushing in a certain direction"⁴ [our translation].

Anthropologists are particularly interested in what happens to older persons when societies become subject to rapid and profound transformation of their lifestyle through contact with the West. In recent years anthropologists tend to view modernization as an external force of change that characteristically involves urbanisation, industrialization, scientific development, mass education and communication through mass media exposure (Holmes and Holmes, 1995). Clayton (1975a: 69) states that among scholars of family change there is consensus about

⁴ Originally it is defined as: "Modernisering duidt op een complex van onderling samenhangende structurele, culturele, psychische en fysische veranderingen dat zich de afgelopen eeuwen heeft uitgekristalliseerd en aldus de wereld waarin wij momenteel leven heeft gevormd en nog steeds in een bepaalde richting stuwt" (Van der Loo and Van Reijen, 1990: 11).

industrialization, urbanisation, increasing societal complexity, and modernization as being four interlocking causal variables. However, we think that modernization is a much broader concept, and that it covers a longer historical time-span than covered by the dimensions above.

We prefer the concept of 'social change' to 'modernization'. 'Social change' does not imply - like 'modernization' does - the dichotomization of traditional, backward, and underdeveloped societies versus advanced and developed societies. The concept 'modernization' also has normative connotations, suggesting progress along the lines of the so-called Western world. Cowgill and Holmes (1972), for example, present 'modernization' as a run along a continuum from preliterate society, via peasant society to a modern industrial society. We try to avoid such an ethnocentric perspective of the developing world and consider modernization as a particular kind of change that is defined as an external change. Social change encompasses more than modernization, and is an ongoing process that does not follow a determinate direction.

Actually, we favour the notion of 'change' to express the entire process in its broadest possible meaning, treating 'social change' as one of the sub-processes, like 'cultural change', 'economic change', 'technological change', etc. However, this distinction is never applied in literature and would be confusing to use here. Therefore we opted for the concept of social change. We define it as a complex of interrelated natural, cultural, societal and individual transitions, of which domestication, rationalisation, differentiation and individualisation are considered the key processes, which formed the world in which we live now and are still going on, not heading in a predetermined direction. Any type of change is of interest in this study, provided it has implications for the rural older persons and their care relationships.

The following definitions of the key processes of social change are borrowed from Van der Loo and Van Reijen (1990: 30-3). They refer to changes with respect to nature, culture, society and the individual. 'Domestication' indicates the extent in which individuals are able to control their biological and natural conditions. 'Rationalisation' is concerned with arranging and systemising phenomena in order to make them predictable and controllable. 'Differentiation' is considered the division of an originally homogeneous entity into parts with their own character and composition. 'Individualisation' refers to the increasing importance of the individual as detached from the collective actions in the direct environment.

Under the processes of social change many specific sub-processes can be subsumed, like industrialization, urbanisation, migration, commercialisation, institutionalisation, women's emancipation, societal stratification, ageing, development of medical and communication technology, increasing levels of education and literacy, etc.

2.1.4 Macro-Micro Model of Social Change Processes

Caldwell and Hill (1988) already stated that single factor or single-level models of any significant demographic process will be inadequate and that some sort of a more complex observational framework will be necessary. However, linking micro-level models to macro-level models for continuity of analysis and explanation is a perennial problem in the social sciences (Streib and Binstock, 1990). It is difficult to connect the social changes at the macro-level with the elder care at the micro-level, because these represent a complex of variables at each level. In this sub-section a theoretical model is presented to interpret these different levels and the connections between them. This model serves as a working hypothesis and contextual framework, rather than a comprehensive set of interrelated propositions.

The basis of our theoretical framework (Figure 2.1) is adapted from the theories of Bell and Mau (1971), Kooy (1985) and Van der Loo and Van Reijen (1990) that were discussed in sub-section 2.1.2. The model aims to offer a broad outline of the complex processes of social change at the macro-level as well as at micro-level, connected by an intermediate level. It will be illustrated by examples of social change and older persons' lives in the Indonesian context.

In the model, the social reality and human actions are approached through the dimensions of nature, culture, society and individual. 'Nature' characterises social change as a process of domestication illustrated by developments in agrarian technology, labour practices and land tenure in rural Java, Indonesia. 'Culture' characterises social change as a process of rationalisation, 'the individual' as a process of individualisation. These are investigated by looking at the changing norms and values, beliefs and ideas in relation to Islamisation, economic change, changes in gender values and relationships and moral ties. 'Society' indicates social change as a process of differentiation that can be illustrated for rural Java by processes of changing land distribution practices and agrarian (de-) commercialisation.

Individual older persons, their household, family and social network respond to many stimuli from other major institutions in society, which leads to changes and adaptations in familial structures and elder care. The processes of domestication, rationalisation, societal differentiation and individualisation are assumed to create, in an interactive way, far-reaching transitions in the ideas and practices with regard to elder care. The sections 2.2 until 2.5 show the possible implications of these macro-processes of social change for elder care.

Individuals live in different worlds constrained by different aspects of the past, present and future. These aspects are shown in the model as: human biology, population, ecosystem, resources, technologies, and organisational settings or institutions including familial, educational, religious, protective, political, economic, and social settings. In addition to these aspects, others can be listed. All the aspects of the 'direct environment' are taken into consideration by, for example, children as they plan to take care of their parents. Their place in society and the way they view

the population, ecosystem, future resources, etc. all affect their thinking ('beliefs and values') about caring for a parent.

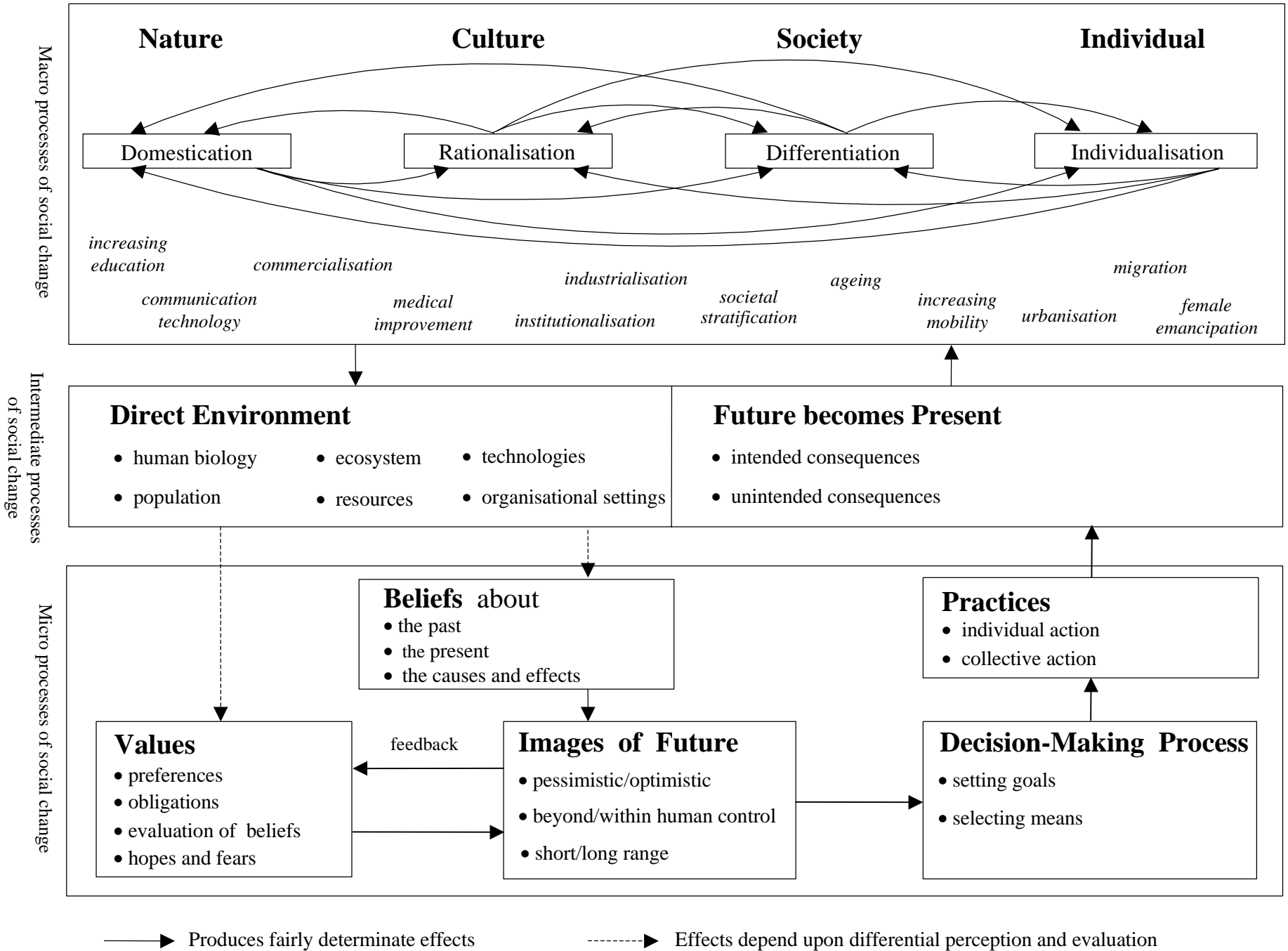
The children's 'beliefs about the past' are for example memories of the joys and difficulties of caring for their grandparents who lived with them in the same house when they were young. Their 'beliefs about the present' consist, for instance, of their evaluation of elder care and how it would affect their present family life should a parent coreside with them. What individuals and groups think of themselves and what significant others believe to be true about them are important determinants of 'images of the future'. In the 'beliefs about causes and effects' personal and societal considerations are interconnected. The children's own familial goal is for example perceived as: "Although it is a burden to take care of my mother, because it means an extra mouth to feed and she will interfere in the household chores, she reduces the burden of household tasks when she looks after the baby and cooks". While their responsibility is probably felt as: "We have to take care of our mother otherwise the neighbours will speak badly of us".

The 'image of the future' can be seen as "an expectation about the state of things to come at some future time" (Bell and Mau, 1971: 23). Images of the future may vary in many ways: pessimistic or optimistic, beyond human control or (in-) directly within it, short-range or long-range. In combination with the three types of beliefs (see above) a fair assessment of the image of the future can be made. The images of the future reinforce the 'values' about, for instance, elder care and the type of family life that people want to provide. They might prefer a small nuclear household or they might feel obligated to take care of a parent. The feedback is that their preferences and obligations (their values) further refine their image of the future. As they move back and forth considering their values and images, they eventually make a 'decision'.

'Decision-making' is an ongoing process that involves the examination of the beliefs, considerations, expectations for the future and the arguments that are put forward. It is assumed that, before an action can take place, some decision must occur that results in a particular choice. The 'practice' may be individual or collective depending on the unit under consideration and the relevant context of applicability. For instance, a daughter may decide to take care of her mother in her mother's house or several children could provide care for their mother by having her live with them on a rotational basis.

Finally, if a trend in the type of care for elderly people becomes apparent among households, change will be initiated at the societal level; the 'future becomes the present'. The intention is to provide good care for ageing parents. When many individuals, households or families act the same with regard to the care they provide for their older persons, they can initiate change in elder care. These changes, coupled with a general reduction of the number of children born and raised in a household, as well as increased longevity, will contribute to the macro-social change process of an ageing society.

Figure 2.1 Macro-Micro Model of Social Change Processes



2.2 Political and economic context

The Javanese in the current cohort of the older Indonesians have lived through a series of dramatic events, all of which affect to a greater or lesser extent their experience of old age. The survey sample and case studies used in this research include persons aged 55 years and older in 1997. The respondents were thus born in 1942 or in the beginning of the twentieth century at the earliest. The following sections describe the political context in which the older persons of today were born, raised and lived their adult lives. First, we briefly describe the political history. Next we focus on agricultural aspects and economic change in rural areas since the study was conducted in two villages. Finally, we describe prevailing social welfare policies; elder care programmes and social services as provided by the Indonesian government.

It was very difficult to discuss the political context of the respondents' lives. Several reasons could have contributed to why respondents (pretended) not to understand the questions or (said they) no longer remember past events. Was it because Indonesian people are generally reluctant to talk about politics? Did older persons' memory fail? Was it because most of the respondents had not received an education and could not retrieve the sequence of historical events?⁵ Or was it because they lived in an isolated village and political events did not reach the villages in the old days? Admittedly, our picture of the political context is based on literature study rather than oral history.

2.2.1 From colonial control to confusing democracy

Foreign forces governed Yogyakarta for a long time. The oldest respondents in the present research were born under Dutch colonial rule. In 1942, during the Second World War, Japan took control of Java from the Dutch and occupied the island until mid-1945. When it became clear that their defeat was near, the Japanese set up a committee to draft a constitution for Indonesian independence. However, the Japanese surrendered to the allies before independence could be formally granted.

Indonesian nationalist groups had been active for some time and under pressure from militant factions, nationalist leaders Soekarno and Hatta declared independence on August 17, 1945. Shortly thereafter, British troops landed on Java to reclaim Indonesia for the allies and the Dutch. Four years of violent struggle followed. Dutch troops were successful in retaking ground, but after prolonged guerrilla attacks and under the threat of sanctions from the United Nations and the United States, the Dutch began political negotiation, and Indonesian independence was granted on December 27, 1949.

Soekarno became the nation's first president and the Indonesian government began to function as a constitutional democracy. The early years of Soekarno's term were

⁵ Chapter 6.1.1 will describe more detailed the problems that we experienced with the event calendar method.

characterised by economic decay, bureaucratic inefficiency, and major political cleavages. The young democracy struggled, and failed to keep an elected government in office during this transition era. In 1957 President Soekarno decided to take control and changed the structure of the government to a more authoritarian system. He introduced 'guided democracy' through which he tried to balance the power of the communists, Muslims and nationalists (Ricklefs, 1993). However, political problems continued which did not help to rebuild the economy after the war. The new system promoted national unity, but led to a situation where loyalty became more important than competence in rewarding government workers. Unfavourable conditions for export, expansion of the government apparatus, and a lack of control over foreign investors were among the major problems. The situation was becoming ever more disastrous when inflation took an enormous toll, and poverty and hunger became widespread (Booth, 2000).

On October 1, 1965, some units of the palace guard attempted a coup, which was stopped by the regular army. Army officials alleged that the communist party was behind the coup attempt, and in late 1965 and early 1966 the army and its supporters killed hundreds of thousands of suspected communist sympathisers in Central and East Java, Bali, and elsewhere. The youngest respondents were in their twenties during this time and the oldest respondents were already over age 60.

Daerah Istimewa (Special Region of) Yogyakarta owes its foundation to Prince Mangkubumi, who built the Kraton (palace) in 1755. He took the title of 'sultan' and adopted the name of Hamengkubuwono, meaning literally 'the universe on the lap of the king', which all his successors have used. Yogyakarta has always been the centre of revolutionary forces. From 1946 to 1949 Yogyakarta became first the capital city of the Republic. The sultan let rebels, including Suharto, use the palace as their headquarters. Sultan Hamengkubuwono IX supported the revolution and because of his support and influence, Yogyakarta was granted the independent status of special territory in 1950. Yogyakarta is now a self-governing district answerable directly to Jakarta, not to the governor of Central Java (Turner et al., 1995; Sardjono-Soesman and Oosterman, 1992).

In 1967 Suharto, an army general, became president of Indonesia, an office he kept until 1998. Suharto's long term in office brought a return to political stability and a period of substantial economic progress and development, particularly during the oil boom of the 1970s. This resulted in higher wages, an increase in the standard of living and government investment in infrastructure. Indonesian civil servants were required to support Suharto's party Golkar during the election time. Since the New Order began, proliferation of business, industry and government caused an increasing demand for skilled workforce. Consequently, a boom in education and training occurred, which acted as a major pull factor for the rural population (Cribb and Brown, 1995).

In the second half of the nineties the political developments were accelerating in Indonesia due to economic changes. In June 1996 there was a coup within the PDI⁶ and Megawati Soekarnoputri, the daughter of Soekarno, was deposed as party leader by a government friendly fraction. Severe riots followed between the police and Megawati supporters. In August 1997 the financial crisis in South-east Asia reached Indonesia. Fast deregulation and uncontrolled liberalisation of the financial sector resulted in a foreign debt of 80 billion US dollars for the private sector. This undermined the trust in the national currency, which caused a huge devaluation of the Indonesian Rupiah and the crash of the exchange market in Jakarta. Many Indonesian business ventures went bankrupt and mass unemployment and decreasing productivity followed.

Concomitant with the economic crisis, Indonesia also witnessed a drastic political change. In the beginning of 1998 the students' demonstrations for reformations built up and were supported by prominent university, political and retired high military figures. They were criticising the regime's practices of 'corruption, collusion and nepotism', which ultimately resulted in President Suharto's resignation in May 1998. These events mark the end of the New Order period and most people hoped that drastic changes were going to take place (*reformasi*). However, most of the signs of hope seem to have changed into signs of confusion, confusion about the fundamental issues of identity and the struggle for power in Jakarta. At present, Indonesia seems more divided than ever⁷. Summarising, current cohort of the older persons on Java have experienced cycles of stability and instability, both political and economic, throughout their lifetimes. The older person's families and livelihoods have been affected by these historical events that concern the process of social change.

2.2.2 Agrarian transitions in rural Java

In the former sub-section we noticed that changes in the political context often relate to changes in the economic context. In this sub-section, we will focus on the changing economic context of rural Java affecting the lives of the older persons under study. Hüsken and White argue that the process of social-economic differentiation, consisting of "commercialisation and 'decommercialisation', and the changing agrarian relations which accompany them, seem to have been cyclically alternating responses to changing conditions of the outside market which determined their course and pace" (Hüsken and White, 1989: 247). Although it is very difficult to draw firm conclusions due to a lack of reliable data, the authors convincingly demonstrate such a cycle beginning in the Colonial Period.

Since the early eighteenth century many regions of Java (especially northern Java) were incorporated into the commodity production of mainly sugar, rice and indigo. With

⁶ *Partai Demokrasi Indonesia* PDI (Indonesian Democratic Party).

⁷ See Schulte Nordholt (2001) and Van Dijk (2001) for a description of the 'political arena' after President Suharto had stepped down.

the introduction of the Cultivation System⁸ (1830) this practice extended even further; sugarcane was mainly produced in the lowlands and coffee in the uplands. In addition to rice, new commercial crops like soybeans and groundnuts expanded as secondary crops. Markets in land (both for sale and lease) and agrarian production as well as 'free' wage labour practices were common in both food and export crop production. The period after the First World War was a period of relatively rapid economic growth through agrarian commercialisation and the strengthening of the village elite. Other accompanying agrarian developments were the concentration of land holdings and wealth, the proletarianisation of marginal peasants, the monetisation of the rural economy and the rationalisation of farm management in paddy cultivation through labour cost-saving practices (Hüsken and White, 1989).

For a long time social stratification was mainly determined by access to land⁹. Three broad agrarian classes existed on Java. Firstly, a substantial group of (near) landless peasants¹⁰, who were sometimes attached to peasant households with land, but also frequently constituting a more mobile group of itinerant free labourers. Secondly, a large mass of peasants with rights to land and with heavy tributary and corvée obligations attached to those rights. Thirdly, a minority of village officials who had control of a large proportion of village lands as salary plus the rights to unpaid labour to cultivate these in addition to their own property. Wage-labour arrangements and sharecropping between landless and landholding peasants were customary (Hüsken and White, 1989).

The Great Depression of the 1930's abruptly stopped the processes of land distribution and agrarian commercialisation. These processes even began to reverse during the Japanese occupation and ensuing national revolution (1942-49). Wage employment in both plantation and peasant agriculture reduced drastically, the rich lost most of their capital and their control over labour, social differentiation subsequently decreased and a system of 'shared poverty' emerged. The collapse of export crop industries and process of demonetisation resulted in the agrarian decommercialisation. In the immediate post-independence years of Soekarno the rural commercialisation started again, but only for

⁸ The governor-general Van den Bosch (1830-33) proposed the Cultivation System to force cultivation of export crops by peasants for delivery at fixed prices and/or against remission of land rent to the colonial government. It continued until the formal opening of Java to private and corporate estate agriculture by the Agrarian Law of 1870 (Ricklefs, 1993).

⁹ Koentjoeringrat (1957) distinguishes three modes of Javanese social stratification based on status, Islam participation or land ownership.

¹⁰ The precise criteria for the stratification of 'peasants' are not clear. In the 'Inquiry into the Native Tax Burden' of 1923 it is likely that 'poor peasants' are those with less than 0.5/0.7 ha, 'middle peasants' those with 0.5/0.7 to 1.4 ha, and 'wealthy peasants' those with more than 1.4 ha (Wertheim 1964 in Hüsken and White 1989:243). In a research of 1981 White and Wiradi divide *sawah* ownership into classes of 'very small peasants' with less than 0.25 ha, 'small peasants' owning 0.25-0.49 ha, 'middle peasants' owning 0.5-0.99 ha, and 'large landholders' with 1.0 ha and above (1989:292). According to Hüsken's research in Gondosari of 1976-77 land ownership is distributed as 'marginal peasants' who own less than 0.25 ha *sawah*, 'small peasants' with 0.25-0.5 ha *sawah*, 'rich and middle peasants' who own 0.5-2.5 ha *sawah*, and 'large landowners' with more than 2.5 ha *sawah* (1989:307). Besides these different strata of 'peasants' Hüsken distinguishes the 'landless non-owners'.

a short time and under severe macro-economic constraints. In the following years of the Guided Democracy and Guided Economy (1957-65) Indonesia again experienced a decline of exports, hyperinflation and political turmoil over land reform implementation. Only for the New Order regime by President Suharto is it possible to speak of agricultural policies and associated structural changes in a context of overall economic growth (Hüsken and White, 1989).

During the years 1880-1980 the rice production growth can be divided into three periods. Before 1900, almost all production growth was achieved by expansion of the irrigated land area. Between 1900-60, the area expansion was accompanied by increases in double cropping. Despite the fact that rice and other food crop production was steadily increasing, it still failed to keep up with the population growth until the mid-60's. Only since the 1960's yield growth was realised through the large-scale incorporation of new inputs and therefore capable of producing surplus (Hüsken and White, 1989).

During the Soekarno era (1945-65) one can speak of a proto-Green Revolution phase in which various attempts were made to provide credit and extension to the rice farmers and to stimulate the use of artificial fertilisers and improved seed varieties (pre-IRRI¹¹). From 1961 until 1965 a 'Mass Guidance' campaign by students succeeded to improve rice production in many regions. Nevertheless, in the immediate period after the coup the problems of the agricultural production were neglected, which resulted in poor harvests and a severe shortage - the main cause of the rapid inflation of 40% - and accompanying urban riots in 1967 (Hüsken and White, 1989).

Next efforts to enlarge food supplies were initiated by increasing imports of rice and wheat and by attempting to augment the domestic rice production. With the new rice intensification program '*Bimas Gotong Royong*' the state contracted a number of multinational corporations for the provision of the necessary Green Revolution inputs. However, through mismanagement and corruption this program almost failed causing the state to take direct control in 1970. After several other rice crises during years 1972-73, the state shifted from a 'command' production strategy to a more effective and costly 'command plus subsidisation' strategy (Hüsken and White, 1989: 252). At the time this was possible because of the rising state revenues from annual IGGI¹² grants and loans and the even larger revenues from the price of Indonesian crude oil since the OPEC¹³ windfall in 1974.

These policies resulted in the introduction of labour-saving technologies, shifts in the labour practices, changes in the land tenure arrangements, and, last but not least, a

¹¹ The International Rice Research Institute (IRRI) in Los Baños, Philippines, developed the high yielding varieties (HYV) of rice for which large quantities of artificial fertilisers and the use of pesticides are necessary. Enormous growth of rice production was the result, but small farmers became also dependent on the providers of agrarian input and moneylenders.

¹² Inter-Governmental Group on Indonesia (IGGI).

¹³ Organisation of Petroleum Exporting Countries (OPEC).

doubling in the rice production. Increases in cropping intensity were achieved through a quantitative increase in modern inputs like the high-yielding rice varieties, chemical fertilisers and insecticides. Also cultivation methods like straight-row planting and more frequent weeding were profitable for the production. The implementation of technologies included improved irrigation systems, introduction of water pumps for dry-season cultivation, uniform planting schedules (promoted by the government for purposes of water rotation and crop protection), the replacement of rotary or toothed weeders for hand weeding, the sickle in place of the finger-knife (*ani-ani*) for harvesting, diesel powered rice hullers instead of hand pounding, and in some areas threshing machines in place of hand flails and tractors for the hand hoe or animal-drawn plough (Hüsken and White, 1989: White and Wiradi, 1989).

One consequence of the process of domestication was the alteration in the use and the arrangements of labour. The demand for hired labour declined due to labour-saving technology and increased inputs of family labour. For those who could afford it, the tractor or draft cattle eased the men's task of land preparation, but for those who could not afford this it meant a backlog. A greater demand of intensified production for small tasks which required no mass labour inputs at one time, e.g. application of fertiliser and pesticides, crop inspection and water control, made it possible to involve family members instead of hired labourers. The real wages for (pre-) harvesting generally increased for both women and men, but the so-called *bawon* wage - labour paid with an in-kind proportion of the harvest - decreased. This decline, however, was more than compensated by yield increases, so that the total quantity paid out to harvesters rose (White and Wiradi, 1989).

With fixed-rent transactions, land mainly flows from smaller to larger landowners or between larger owners, and share tenanted land usually flows from larger to smaller owners and landless households. It seems that it has become more difficult to obtain share tenancies, which is especially strenuous for the poorer households with little or no access to land (White and Wiradi, 1989). In general it may be said that the rich farmers have benefited the most from the agrarian technological changes and from the transitions in labour practices and land tenure, at the expense of the poorer farmers and landless people.

There are many general consequences of the processes of agrarian change for the Javanese individual of which only a few are described here. The proportion of landless and near-landless households has dramatically increased. Households may have become landless through the sale of land, the loss of tenancy rights, or a 'new' household that has not (yet) inherited land because of the absence or small size of parental holdings (White and Wiradi, 1989). For these households, it is nowadays more difficult to provide for their livelihood, because land owners hire less labourers, and it is harder to obtain a share tenancy, and there are more competitors.

Sources and size of income differ between classes, but for all classes it is evident that there is more variation in the source of income than before. Marginal and landless peasants are mainly sharecropping other people's land, or work as an agricultural day-

labourer. They need to supplement their income with non-agrarian earnings from petty trade, household industry, collecting firewood for sale, from the 'service' sector (e.g. as servant, pedicab driver), from wage employment in a factory, illegal timber trade, or from seasonal/continuous out-migration to urban centres. A consequence of the diversification of labour is, firstly, that more effort is needed to provide for a living. Secondly, more work has to be done for the same wage. Thirdly, various periods in the cropping cycle are periods of unpaid work due to the changed labour practices. Therefore, poor peasants are more inclined to seek loans and thus become dependent on a moneylender (Hüsken, 1989; White and Wiradi, 1989).

As a consequence of economic transition the source of income of rural households has changed from mainly agrarian to various sources, including non-agrarian ones. The expansion of the large landholders' and village elite's power, the unequal land distribution, the introduction of labour-saving agrarian technologies, the difficult access to the new production techniques, agrarian inputs and extension services, the more restrictive and exclusionary labour recruitment practices, and the decline of tenancy arrangements all affected the small, marginal peasants and landless households in rural Java. In order to be able to support themselves these families were either forced to seek non-agrarian income sources as a supplement to their (insufficient) subsistence farming or sharecropping practices, or had to seek completely different work upon losing their land ownership, land use or tenancy arrangement.

As industrialization unfolds, a decreasing proportion of households get their cash income from family-run enterprises such as a family farm or shop. Instead, they come to rely on income from wage employment of individual household members. Because young adults are increasingly able to find alternative means of income generation, their parent's control of productive agrarian resources becomes less decisive for the children's loyalty and obedience. One consequence of the transition from family production to wage earning is, in family systems where parents traditionally selected children's mates, that adult children select their partner themselves. According to Mason (1992) these shifts together with a greater emphasis on personal attraction are thought to increase the wife's voice in family decisions.

Agrarian activities can be carried out up to a very high age. The JEN¹⁴-research indicates that there is a difference in the economic position of older persons living in the rural area and in the urban area. Rural older persons are two times more often capable of earning an income and providing their cost of living than urban older persons (Rahardjo et al., 1994b). Therefore, it is hypothesised that rural older landholders are more independent from others than urban older persons. Under the circumstances of the above-mentioned agrarian transitions, however, it is nowadays increasingly difficult for older persons to stay independent and rely as long as possible on subsistence farming.

¹⁴ *Jaringan Epidemiologi Nasional* (National Network of Epidemiology) studied the quality of older persons life in rural Lampung Tengah and Sukoharjo, and urban Bogor and Pasuruan, Indonesia.

According to Mason (1992), it is possible that industrialization results in a rise of per capita income, which may both undermine inter-generational family ties and have positive effects for the older persons in the form of greater independence and overall welfare. Rising incomes in the urban areas make the financial safety net - traditionally provided by the extended family - less critical to individual survival and makes older persons less dependent on their offspring. It would allow older persons to purchase greater privacy as well as care itself. The study in the city of Yogyakarta shows that older persons mainly rely on their own income (including pension) and much lesser on assistance from family members outside the household (Population Studies Center, 1999).

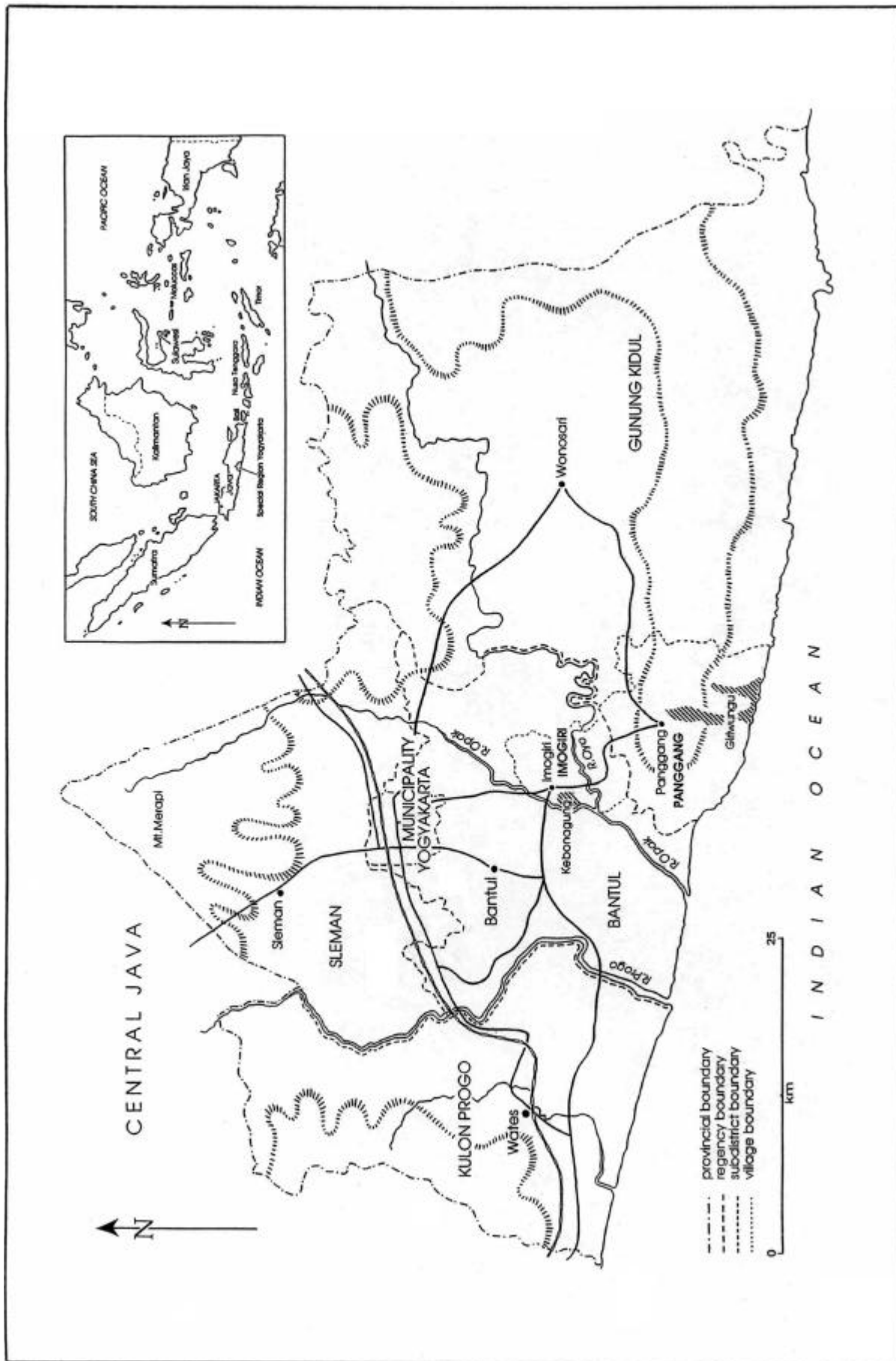


Figure 2.2 Map of the Special Region Yogyakarta.

2.3 Geographic and demographic context

The global population is ageing. The process of ageing refers to the increasing proportion of older persons within a population. Most developed nations are the demographically oldest in the world today. What is less widely appreciated is the fact that developing countries are ageing as well, often at a much faster rate than in the developed countries. Asia has accounted for a large proportion of the increase in the world's older population in recent decades and will do so to an even greater extent in the future. In Indonesia the proportion of persons aged sixty years and over is only 7.3 percent of the population, but in absolute terms the older population is quite large (15.3 million in 2000). It is even projected that the number of older persons will have more than doubled to 34.0 million in the year 2030 (Kinsella and Velkoff, 2001).

Demographic change can be seen as an important dimension of social change. "Demographic ageing in most developed countries has been accompanied by marked improvements in living standards and the building of social security systems. In developing countries, by contrast, this process has largely been determined by progress in medical sciences (especially in vaccination and contraception), and these countries have lagged far behind in improving their living standards and building social security systems. In general, demographic ageing in developing countries is occurring in a context of long-term poverty. This limits the potential for responding adequately to its socio-economic impact" (Ministry of Foreign Affairs, The Netherlands, 1999: 14). Patterns of population ageing vary throughout the developing world, depending on social, economic and geographical factors. In this section, we describe the demographic context specifically for the ageing process in Special Region Yogyakarta.

2.3.1 Geographical setting and older population

The people of Indonesia comprises of more than three hundred distinct ethno-linguistic groups and live distributed over in an archipelago of over 13,000 islands extending over some forty degrees of longitude (Hugo et al., 1987). Indonesia's population is distributed unevenly over these islands. In 1990 sixty percent of the total population lived on Java on seven percent of the nation's land area (BPS, 1993b; BPS, 1992a in Kasto and Sembiring, 1996). The disparities are largely a reflection of major ecological differences between the regions and their relative capacities for sustained intensive cultivation of food. The ecological and demographic contrast between Java and the so-called Outer Islands inspired Geertz to write his book 'Agricultural involution' (1968). Some commentators suggest that there is also a political-economic contrast between Java and the other islands. Java is not only the location of two-thirds of the national population, the dominant ethnic group and the nation's capital, but also the seat of national political and economic power and decision-making (Hugo et al., 1987).

The physical environment is a limiting factor to human settlement, as indicated by the influence of relief, soils, water and climate on population numbers and density. In

Java, the lowland areas are most densely populated, especially the well-drained, fertile alluvial plains of East and Central Java. Smaller areas of West Java have neutral or basic soils derived from recent volcanic ejecta, which are exceptionally fertile and support some of the highest densities of agricultural population. However, in places where acidic volcanic or heavily leached lateritic soils predominate agricultural potential is limited (Hugo et al., 1987). High rainfall and tropical heat make generally a very humid climate, which tends to be even all year round. In Java the wet season usually falls between October and April, and the dry season between May and September (Turner et al., 1995). With altitude, however, there are significant differences in soil fertility, drainage, temperature and rainfall conditions, and these have a major influence upon the agriculture practised.

The Special Region of Yogyakarta (see Figure 2.2) forms an enclave shaped like a triangle with its base on the south coast of the Indonesian Ocean and its apex at the explosive volcano, Gunung Merapi (height 2,911 metres). It consists of the regencies Kulon Progo, Bantul, Gunung Kidul, Sleman and the municipality of Yogyakarta. In the present research, we compare two villages in the Special Region of Yogyakarta: the village of Kebonagung in the sub-district Imogiri of regency Bantul, and the village of Giriwungu in the sub-district Panggang of regency Gunung Kidul. Although the celestial latitude of the study areas is only about ten kilometres, the ecological environment differs enormously. The geographical setting and ecological environment of the study areas are described in more detail in Chapter 3.2.1.

In Indonesia most people live on the island of Java of which Special Region Yogyakarta is the most populated province after DKI Jakarta (Kasto and Sembiring, 1996). Population ageing refers to the increasing proportion of older persons within a population. This process is related to both fertility and mortality patterns, which are discussed in the next sub-section. Indonesia belongs to the group of countries where fertility declines rapidly. However, the demographic transition process unfolds at regionally different speeds. The regional frontrunners are the provinces of Bali, East Java, Yogyakarta and North Sulawesi (Niehof, 1995). In Table 2.1 we show that the population of Special Region Yogyakarta is ageing.

Although the elderly population in Indonesia now makes up seven percent of the population this is expected to more than double by 2030 (Kinsella and Velkoff, 2001). The proportion of older persons in the population of Special Region Yogyakarta is larger than the proportion in the whole of Indonesia. Because of dramatically declining fertility (see sub-section 2.3.2), the growth rate of population in Special Region Yogyakarta continues to decline from 1.1 percent in 1971-80 to 0.2 percent in 1990-2000. As a consequence the ageing process is accelerating (Table 2.1).

Table 2.1 Annual average population growth and older population in Indonesia and Special Region Yogyakarta (DIY), 1971-2000

Country/Province	Population ^{a/b}			Annual growth rate	
	Total	Aged 60+	Percent	Total	Aged 60+
Indonesia:					
- 1971	118,367,850	5,306,874	4.5	-	-
- 1980	146,776,473	7,998,543	5.5	2.4	4.7
- 1990	179,243,375	11,277,557	6.3	2.0	3.5
- 2000	209,535,490	15,262,199	7.3	1.6	3.1
D.I. Yogyakarta:					
- 1971	2,488,544	169,634	6.8	-	-
- 1980	2,750,128	226,271	8.2	1.1	3.3
- 1990	2,912,611	317,042	10.9	0.6	3.4
- 2000	2,968,180	364,698	12.3	0.2	1.4

Data of 2000 are projected. Sources of crude data: ^a BPS, 1974, 1983, 1992 and Ananta, 1994 in Wirakartakusumah and Anwar, 1994c: 20-21; ^b Bappeda Propinsi DIY, 1993 in Sewaka et al., 1996: 27.

2.3.2 Fertility, mortality and dependency

Demographic ageing is usually the result of two trends. The first trend is prolonged decline in fertility, which increases the proportion of older people. The second trend is increased life expectancy. Declines in infant and child mortality reflect improved community health and medical progress, which prevents infections that may be fatal to children. Besides, increased life expectancy among older people reflects an improved quality of life. The combined changes of couples having fewer offspring and people who live longer, affect the population structure by increasing the proportion of the older population (Wirakartakusumah and Anwar, 1994c).

The late 1960's are largely regarded as the 'base' level of fertility prior to the implementation of the family planning programme in Indonesia (Hull and Dasvarma, 1988). Table 2.2 shows that the change in fertility has been dramatic. The total fertility rate¹⁵ dropped from 5.6 in 1967-70 to 2.8 in 1991-94. Continued declines in Indonesia's fertility rate are projected for the years hereafter. Between 2000-2005, the fertility rate is projected to go down to 2.2 and drop to 1.8 in 2015-2020. Ananta projected that Indonesia will reach its demographic transition¹⁶ in 2000-2005 (Ananta,

¹⁵ The total fertility rate (TFR) is an estimation of the total number of children a female just born would bear at the prevailing age-specific fertility rates if she survived to the end of her reproductive life (Keyfitz and Flieger, 1990).

¹⁶ 'Demographic transition' originally referred to the theory that demographic changes follow determined stages based on socio-economic changes. The theory states that at the beginning fertility and mortality rate are stable at very high rates. As socio-economic development progresses, mortality rate declines and is followed by a similar decline in fertility. Finally, both mortality and fertility rates are low and these rates result in a relatively stable and very small population growth rate (Hoffmann-Nowotny, 1988: 73-89; NN, 1973). Generally, it is believed that

Anwar and Chotib, 1992). At that time, the country will reach a replacement level of fertility or a net reproduction rate¹⁷ that is equal to one. After the year 2005, Indonesia will enter a post-demographic transition period. Declines in Indonesia's fertility occurred faster than and in excess of the rate of growth of the national economy, which is frequently referred to as the 'fertility revolution' (Wirakartakusumah and Anwar, 1994c: 15).

Table 2.2 Total Fertility Rates, Infant Mortality Rates and Life expectancy at birth in Indonesia and Special Region Yogyakarta (DIY), 1967-2020

Period	Total Fertility Rate per woman		Infant Mortality Rate per 1,000 births		Life expectancy at birth in years	
	Indonesia	DIY	Indonesia	DIY	Indonesia	DIY
<u>1967-1970</u> ^a	5.6	4.8	145	102	45.7	53.4
1971-1975 ^a	5.2	4.5	.	.	.	.
<u>1976-1979</u> ^a	4.7	3.4	109	62	52.2	61.8
1981-1984 ^a	4.1	2.9	.	.	.	.
<u>1986-1989</u> ^a	3.3	2.1	71	42	59.8	66.6
1991/ <u>92</u> -1994 ^a	2.8	2.0	60 ^d	38 ^d	64.4	71.7
1995/ <u>97</u> -2000	2.6 ^b	1.9 ^c	52 ^d	35 ^d	.	.
2000-2005	2.2 ^b	1.8 ^c	.	.	.	.
2015-2020	1.8 ^b	1.7 ^c	.	.	.	.

Years of IMR (Trussel method) and life expectancy are underlined. Data of 1995-2020 are projected.
.: data not available.

Sources: ^a BPS, 1997: 19, 56, 59; ^b Ananta and Anwar, 1994 in Wirakartakusumah and Anwar, 1994c: 14; ^c Ananta et al., 1995: 6, 15; ^d Kasto and Sembiring, 1996: 32.

Different methods and data sets for estimating demographic variables have made time-series analysis difficult in Indonesia. Therefore, the infant mortality rate (IMR) data in Table 2.2 should be interpreted with caution. The IMR¹⁸ in Indonesia was projected to be 145 per 1,000 births in 1967 and is projected to decline further to 52 in 1997. In thirty years the infant mortality rate declined to a third. Continued declines in mortality rate are reflected in increased life expectancy. Life expectancy at birth¹⁹ rose from 45.7 years (48.0 and 45.0 for males and females) at the end of the sixties to 64.4 years (respectively 61.3 and 54.4) in 1992. A rapid increase in life expectancy

the demographic transition theory has failed because it is based on European countries and studies in developing countries show that demographic changes do occur even without any significant socio-economic change. The case of Indonesia also shows that mortality and fertility declined in a relatively short period due to respectively medical technology developed elsewhere and family planning programmes. 'Demographic transition' is now used as a description of changes rather than as a theory (Ananta, Anwar and Chotib, 1992).

¹⁷ The net reproduction rate (NRR) is the average number of daughters a woman will have during her reproductive years given the assumptions of fertility and mortality at given rates.

¹⁸ The infant mortality rate (IMR) is an estimation of the number of deaths of children under age one during a period divided by the total number of live births during that period, multiplied by 1,000 (Keyfitz, and Flieger, 1990).

¹⁹ The life expectancy at birth is the average number of years that a person born can expect to live under mortality conditions prevailing at time of birth (Keyfitz, and Flieger, 1990).

at birth in Indonesia reflects a rapid transition in mortality or a ‘mortality revolution’ (Hugo, 1994c: 16). In Chapter 3.2.2, the TFR, IMR and life expectancy data will be described for the Special Region of Yogyakarta since such data about the local villages are not available.

Table 2.3 Dependency ratio in Indonesia and Special Region Yogyakarta, 1971-2020

Country/Province	Dependency ratio		
	Children (0-14 years)	Elderly (65+ years)	Total
Indonesia^a:			
- 1971	82.2	4.7	86.8
- 1980	73.3	5.8	79.1
- 1990	61.5	6.3	67.8
- 2000	46.2	7.0	53.2
- 2010	37.9	8.3	46.2
- 2020	31.2	10.1	41.4
Special Region Yogyakarta:			
- 1971 ^b	74.6	7.8	82.4
- 1980 ^b	59.0	9.1	68.1
- 1990 ^c	43.9	11.3	77.5
- 2000 ^c	33.2	11.6	58.0
- 2010 ^c	32.1	12.6	49.1
- 2020 ^c	26.1	13.3	43.2

Sources: ^a BPS, 1974, 1980, 1992; Ananta and Anwar, 1994 in Wirakartakusumah and Anwar, 1994c: 18; ^b calculated with data from BPS, 1976; BPS, 1981; ^c Ananta et al., 1995: 16. Data of 2000-2020 are projected.

Changes in fertility and mortality affect age composition of the population. One measure of this age composition is the dependency ratio²⁰ (see Table 2.3). In Indonesia, the dependency ratio rose from 80.7 in 1961 to 86.8 ten years later. This means that every citizen in his or her productive age (15-64 years) supported an increasing number of unproductive citizens. In 1990, the dependency ratio went down to 67.8 and will continue to decline to 53.2 in 2000 and 41.4 in 2020. Declines in the dependency ratio have significant impacts on national development, especially when the number falls below 50. Then two persons in their productive ages support not more than one unproductive citizen. Indonesia is projected to enter the so-called ‘golden era’ in the year 2005. The composition of dependency ratio also changes. The young dependency ratio goes down and the old dependency ratio goes up, which implies that productive citizens support a smaller number of young people but a larger number of elderly people. These changes in the population structure will cause a shift in demands for goods and services from children to older persons

²⁰ The dependency ratio is a measure of the age composition: the ratio of the number of children under the age of 15 and persons above the age of 65 in a population to the number of persons in the intermediate ages of 15-64, multiplied by 100 (Keyfitz and Flieger, 1990).

(Wirakartakusumah and Anwar, 1994c: 17-9). Dependency ratio data of the Special Region of Yogyakarta will be discussed in Chapter 3.2.2.

2.3.3 Rural-urban migration and economic motivations

In Indonesia, analysis of migration is very difficult due to changing definitions, lack of detailed data, and the use of different measurement methods. Therefore, it is impossible to present accurate estimates of the extent of migration at any level (national, provincial, district or rural-urban). Consequently, this sub-section can only offer an incomplete insight into the demographic context of migration in relation to ageing.

Although decline of fertility and mortality contribute to the population growth in rural and urban areas, the major cause of the more rapid growth of the urban population is net migration from rural to urban areas. Indonesia is still predominantly rural. The population living in rural areas was 82.7% in 1971, 77.6% in 1980 and 69.1% in 1990 (derived from Kinsella and Velkoff, 2001). But the urban population is unevenly distributed. In 1994, the share of urban population²¹ is in Java 68.8% and in the Outer Islands 31.2% (Firman, 1997).

Apparently, the main motivation for a person to move out of a village is economic. The socio-economic conditions in the place of origin are not sufficient to find an occupation and to earn enough income (Mantra, 1981; Mantra and Kasai, 1987; Rotge, 1995). Some persons move out of a village to seek (higher) education, which is a postponed economic motivation. Migration of young adults to urban areas, and to some extent of return migration of older adults from urban areas back to rural homes, will result in disproportionate numbers of older persons in the rural areas. Consequently, the rural areas are ageing.

We distinguish three different types of migration: commuting, circular migration or circulation, and permanent migration. Commuting refers to an absence from home for more than six but less than twenty-four hours. Commuters generally do not sleep at the place of their destination. Circular migration refers to an absence of at least twenty-four hours from home for an indefinite duration but with the intention of returning in the near future. Permanent migration refers to an absence with the intention of not coming back except for short-term visits such as on holidays (*Lebaran*, for instance) (Rotge, 1995). In other studies permanent migration is sometimes called lifetime migration.

²¹ A locality is defined as being 'urban' if the three following requirements are met: 1. a population density of 5,000 people or more per square kilometre; 2. 25 per cent or less of the households working in the agricultural sector; 3. eight or more kinds of urban facilities. These facilities include primary/junior high/senior high school or equivalent; cinema; hospital; maternity hospital/mother-child hospital; primary health care centre/clinic; road that can be used by three- or four-wheeled motorised vehicles; telephone/post-office agency, market with building, shopping centre; bank; factory; restaurants; public electricity; party-equipment renting services (BPS, 1988 in Firman, 1997).

As indicated by the 1930 census, under the colonial population reallocation programme the Yogyakarta region was already a major population sending area to Sumatra (Rotgé, 1995). Since 1966, the aims of the transmigration policy of the Indonesian government shifted from redistribution of population in order to reduce the overpopulation in Java to meeting the labour requirements for development of the outer islands. Generally, there are five types of transmigration that reflect different types of sponsors²². It is not surprising that the Special Region of Yogyakarta is a well-known source of migrants to other parts of Indonesia (Nagib, 1986 in Hardjanto, 1994). This finds support in the fact that the province experienced the highest out-migration (17.45%) of all provinces in 1990 (see Table 2.4).

Table 2.4 Lifetime migration (in, out and net) in Indonesia as a whole and in Special Region Yogyakarta (1971, 1980, 1990)

Inter-provincial migration	In-migration	% of total population	Out-migration	% of total population	Net-migration	Total population
Indonesia:						
- 1971	5,843,173	4.94	5,843,173	4.94	0	118,367,850
- 1980	10,230,798	6.97	10,230,798	6.97	0	146,776,473
- 1990	14,779,738	8.25	14,779,738	8.25	0	179,247,783
D.I. Yogyakarta:						
- 1971	101,204	4.07	266,933	10.73	-165,729	2,488,544
- 1980	180,367	6.56	253,447	9.22	-73,080	2,750,128
- 1990	266,500	9.15	508,215	17.45	-241,715	2,912,611

Sources: BPS Population Census 1971, 1980 and 1990 in Alatas (1994: 18-21).

Increased migration typically concurs with industrialization and urbanisation, which involves the physical separation of the senior and younger generations. Subsequently, the rate at which young, unmarried individuals leave their rural homes and migrate to urban areas to take up employment increases (Cowgill, 1986; Mason, 1992). Because older persons often remain behind, relationships and care practices will change. For instance, there will probably be less physical contact between children and their parents, and the contact will be maintained more by means of telephone and postal services, because they live at a larger distance from each other. Children will only visit their parents, depending on the distance, in the weekends, during vacations or holidays when they do not have to work. Besides, it is expected that under the influence of increasing physical distance between the generations, there will be shifts in the type of caring activities shifts, from more personal care and emotional support to more financial and material support. It will also be more difficult for the older persons to provide help to their (grand) children if they do not live nearby. In the past, the children were the most important care-

²² See Mantra (1981: 2,134) and Hugo et al. (1987: 309) for a more detailed description of transmigration types since 1905.

providers for their parents. If children do not live in the same village anymore, we believe that other types of caretakers will take over the role of primary caregiver, e.g. other relatives, friends, neighbours and community members. Hence, possible consequences for the older persons of migration of the younger generation are less physical and more superficial contacts with children, while other members of the personal network may become primary caregivers. In such a situation reciprocal care may be less feasible.

Additionally, urbanisation is affecting the importance of land. Ownership of house and land are considered non-perishable properties that hold power for older persons, to ensure that support will be forthcoming. The greater the ability of older persons to accumulate property, the greater the leverage they have over younger generations, both in control of such property and its usufruct during their lives, and in the disposition of it at their demise (Cowgill, 1986; Chen and Jones, 1989). Formerly, the prospect of inheriting parental assets made children willing to live with parents (Mason, 1992). But when, as a consequence of agrarian developments, people own less land and inheriting land becomes less important because other labour alternatives are available to the children, it is likely that resources and power will shift from parents to children. Co-residence will then decline or change in character.

2.4 Socio-cultural context

In this section, we describe the socio-cultural context of village life in Java in general. First, we examine the social structure of the village. Secondly, we describe the influence of kinship and inheritance patterns on familial care for the aged. Thirdly, the ideological principles of the *Pancasila*, the process of Islamisation and other religious beliefs are described. Finally, the gendered impact of industrialization and labour participation on the role of care provider is described.

2.4.1 Social structure and moral ties

A Javanese village (*desa*) comprises certain administrative levels. A village is divided into hamlets (*dusun*), which are again divided into neighbourhoods (*rukun warga*). A neighbourhood is divided into groups of approximately ten households each (*rukun tetangga*, which literally means the bond of households). For a household the direct neighbours are probably more important than distant kin because they rely on each other for support. In times of need, such as sickness or death, the whole neighbourhood comes to help and provides assistance as required. This may consist of practical help, but also of money for funeral expenses.

Direct neighbours rather than relatives and friends are the principal guests invited to *slametan*²³ gatherings or receive a part of the food offering. The relationship with neighbours is one of mutual help (Koentjaraningrat, 1957). Although one usually refers in the same breath to neighbours and friends, the relation with neighbours need not necessarily be one of friendship. *Gotong royong* is also a practice of mutual help among neighbours that should always be taken into consideration in Javanese²⁴ social life.

According to Cribb and Brown (1995), the overall effect of social changes is the erosion of the long-standing social and moral ties which bind agricultural communities together. The rural society is held together by bonds of responsibility and obligation, backed not so much by wealth as by history. These ties will deteriorate, to be replaced by ties based either on wealth or on connections with the central government. The differentiation of social units like the family and community in the rural area and the process of individualisation will presumably change the social and moral ties. These ties of responsibility and mutual obligations have always bound agricultural communities together, but it is expected that communal sharing and help will become less common than before. Hence, it can be hypothesised that inter-generational support and mutual aid will decline.

2.4.2 Kinship, inheritance and familial care

Kertzner and Fricke (1997) argue that kinship systems and patterns of inheritance profoundly influence living arrangements and care of the aged. They compared the northern European stem family with the north Indian joint family. Retirement in the stem family system involves transferring ownership and managerial authority to the younger couple, resulting in a sudden loss of power and status of the older couple and simultaneous dependence on the younger couple. In the joint family system managerial authority is transferred gradually from father to son as the son(s) get older. The actual transfer of ownership comes later, ideally after the father's death. This results in smoother intergenerational relations, status and autonomy rising with age for both men and women because they have a legitimate claim to a share of the household's resources.

Javanese behaviour is often characterised for its strong sense of hierarchy, as for instance expressed in the different levels in the Javanese language²⁵, through which

²³ A *slametan* is a Javanese religious ritual and communal feast centred around a ceremonial meal that is offered to the spirits. See Chapter 2.4.3 for an explanation and 3.3.1 for case studies of *slametan* rituals.

²⁴ Outside of Jakarta, the inhabitants of Java consist largely of three ethnic groups: Sundanese in West Java, Javanese in Central and East Java, and Madurese in the northern part of East Java (Bowen, 1986: 545-561). In this study, the use of 'Javanese' refers to practices of inhabitants on the island Java and not to a particular ethnic group.

²⁵ The structure in Javanese language distinguishes three levels of social relations between addresser and addressee. *Ngoko* is used to address a person of a lower status or rank, who is younger or of the same social level. *Kromo* is used to address a person of a higher status or rank,

one is expected to acknowledge differences in rank, status and social distance. Social rank is based on different indicators such as sex, relative age, and class position. The latter relates to descent, education, occupation, property and wealth. Furthermore, religious-ideological views and kinship are important in this respect. Outside the circle of primary relatives, the kinship element is often the weakest of these indicators. Nevertheless, the nuclear family²⁶ (parents, children and spouse) is the most important kinship-based unit in a Javanese village (Geertz, 1961; Koentjaraningrat, 1957). We will now briefly describe the bilateral kinship system.

Within a bilateral kinship system, one is equally related to the families of both parents. Consequently, the kindred²⁷ is the significant social entity, which involves recognition of all individuals to whom one is related through blood, marriage, or adoption (Holmes and Holmes, 1995). Bilateral kinship places the older person in a network of relationships out of which group bonds may be created, depending on proximity, mutual interest, and individual attraction (Keith, 1992). However, Koentjaraningrat (1967) states that at the village level in Java, outside the nuclear family the significance of kinship ties is very limited. The kindred consists of up to three generations of local relatives, usually direct descendants of a person's great-grandfather on his father's as well as his mother's side. Actually, the effective kindred mainly include members of a person's generation to the third degree of co-laterality, and only occasionally, is it extended to kin of the generation of the parents. Additionally, all the kindred also include several close local relatives of the wife (Geertz, 1961). This kin group meets occasionally at special events such as *slametan* for rites of passage in the life cycle (birth, circumcision, marriage and death) and calendrical *slametan* (ending of the Fast, Muslim New Year etc.).

As in other parts of Indonesia, the parents in Java usually arrange the marriages of their children. Although we do not have exact figures on this, it seems likely that the institution of arranged marriage is in decline (Niehof, 1998). There is no formal rule of residence after marriage. Newly-wed couples, who often live with one of the parents during the initial period of marriage, may form temporary or permanent extended families. There is also no fixed rule for property division at death. According to Islamic law, sons inherit twice as much as daughters. However, according to the customary Javanese law, all children inherit equally. Even so, often both rules are ignored and

who is older or of a higher social level. *Kromo inggil* is used to refer to a third person of higher status or rank (Koentjaraningrat, 1957). Although the national language (*bahasa Indonesia*) is spoken throughout Indonesia, most (older) respondents in the village can only speak *ngoko* Javanese.

²⁶ A household may be composed of a nuclear family, a set of biological parents and their dependant offspring, or an extended family, two or more nuclear families linked together through parent and child or siblings. A Javanese household (*somah*) is not always characterised by a separate dwelling but invariably by a separate kitchen. Each household cooks its own meal (Koentjaraningrat, 1967) In practice, the term *keluarga* is used for household, nuclear family and kindred depending on the particular circumstances.

²⁷ The kindred is the network of relatives that each ego has outside his nuclear family. Javanese make some distinction between "near kin" (*sedulur tjedak*) and "distant kin" (*sedulur adoh*). The "near kin" consist of one's four grandparents and their descendants (Geertz, 1961).

one may find that a needy child has been given the entire inheritance. The main concern is that no child will be without a minimal means of support. The transfer of property to descendants is a continual process, which does not only occur at death. Parents can give (some of) the children portions of their property throughout their lives (Geertz, 1961). In the rural areas one of the children usually coresides with the parents after marrying, thus forming an extended family. In that case they usually work together on the land. When the (grand-) parents become too old to work, they usually divide their property among the children and give the house and a portion of the land to the child that takes care of them.

Members of the kindred group are expected to help each other with *slametan* festivities at the occasion of weddings, circumcisions, or births, by contributing substantially in food, money and labour. There is a moral obligation to care for any close kinsman who is needy, particularly parents and siblings. This may also be applied to secondary kin such as a destitute aunt or nephew if there is no closer relative to take care of them. Finally, a person who cannot support himself or has no spouse to live with, may come to live permanently in the household of a relative, preferably the home of one of his/her children (Geertz, 1961).

A Javanese child has the obligation to take care of his parents, especially when they have retired from work (Koentjaraningrat, 1957). "When Javanese become old and no longer are heads of complete households, no longer have young children, and no longer can produce enough to live on, their children or their sibling's children or their grandchildren take them into their homes" (Geertz, 1961: 145). The decline of fertility, the increase in educational level and rural-urban migration, however, has consequences for the family structure, shifting from extended to nuclear. At the same time, life expectancy has increased and people live longer. This means that it becomes more difficult for the children to comply with the obligation to take care of their older parents. Therefore, parents will be less certain that their children will care for them in their old age (Andrews, 1992; Chen and Jones, 1989; Mason, 1992).

The general feeling of good will towards all kin is underlying family relations. Older persons, especially when they are relatives, are entitled to great respect. Children should show or feel respect (respectively *hormat* or *sungkan*) to their parents and acknowledge their authority. Respect is expressed by the use of high-level language (*kromo*). Besides, one should pay older relatives and older persons, like the direct neighbours of your parents, a yearly visit and ask for forgiveness at the *Lebaran* holiday. According to some observers, respect for the aged tends to be greater in societies in which the extended family is intact, particularly if it functions as the household unit (Holmes and Holmes, 1995).

The Indonesian values of filial piety and familism²⁸ on the one side and the changing living conditions on the other, are likely to cause conflicts between older parents and

²⁸ Social scientists refer to a value system of familism when familistic values are placed over personal concerns, the centrality of family is stressed, and clearly delineates proper courses of

their children. Parents may have expectations about the care they receive from their children and will probably be disappointed if their children do not live up to them. Children may feel responsible for taking care of their older parents and probably feel guilty when they are not able to fulfil their parents' needs. Nevertheless, it is also possible that children want their parents to live with them, while the parents like to stay independent or do not want to move from their own house.

Schooling may also break down traditional values and norms, including family values and the obligation of children to care for their older parents. Although the evidence is still incomplete, Mason (1992: 23) speculates that one reason for that may be that children receive less time in care and guidance from their parents and therefore may feel less of a debt to them. The parents are probably also less willing to sacrifice the younger generation's prospects in order to provide physical care for them since they themselves have invested a lot in a better future for their children.

2.4.3 *Pancasila, Islam and religious beliefs*

In all areas of Indonesia, the introduction of Islam was the beginning of a major process of change. Arab traders probably established settlements in the latter part of the seventh century. However, it was not until the fifteenth and sixteenth centuries that Indonesian rulers converted to Islam and it became the dominant religion. The history of Islam is not a subject of this research, but it is important to understand that the process of Islamisation started long ago and is still continuing.

On June 1st, 1945, President Soekarno laid down his doctrine of *Pancasila*. The Five Principles that were to become the official philosophy of independent Indonesia: belief in one God, nationalism, humanitarianism, social justice and democracy (Ricklefs, 1993). The first principle of belief in One Supreme God was not just the God of Islam, and the state was not to be an Islamic state. Bypassing the Javanese followers of Kejawen, the Christians and other religious minorities would have interfered with the proclaimed unitary Indonesia.

During the 1950's and 1960's Muslim political parties were never strong or united enough to impose their views on the rest of Indonesia. Through political restriction and control under the New Order it was impossible for the Muslims to achieve their aims by legal political actions. Some Muslims challenged the state directly by an armed revolution of what is commonly referred to as the Darul Islam²⁹ movement. But a much greater proportion of the pious Muslim population concluded that the political struggle could not be won and that their efforts should be devoted to society as a whole.

action of all who identify with the kinship unit. Familism is primarily a characteristic of societies wherein kinship is stressed over other forms of relationship and affiliation is with larger groups such as clans, lineages, kindreds, or extended-family household groups (Holmes and Holmes, 1995: 113).

²⁹ Literally 'World of Territory of Islam' (Cribb and Brown, 1995: 39).

In 1984 it was required by law that parties adopt the *Pancasila* as their sole guiding principle. This started a process of politicisation of Islam, as a result of which numerous Islamic leaders joined the Golkar³⁰ party to pursue their religious aims from within and with the support of the state. Paradoxically, this process inspired a growth of the Islamic faith in Indonesian society (Cribb and Brown, 1995).

Although Islam is said to be the main religion in Indonesia, the religious practices found in the villages are like - what Geertz calls - the *abangan* variant and the *santri* variant, the one dominating over the other depending on place and context. However, Geertz's classification is not undisputed and, at any rate, the villagers themselves rarely use the terms. The village religious system commonly consists of an integrated complex of animistic, Hindu, and Islamic elements, a basic Javanese syncretism that is the true folk tradition in the central parts of Java. The *abangan* religious tradition is primarily made up of the ritual feast called the *slametan*, an extensive and intricate complex of spirit beliefs, and a whole set of theories and practices of curing, sorcery, and magic. The *santri* religious tradition consists not only of a careful and regular execution of the basic rituals of Islam - the prayers, the Fast, the Pilgrimage - but also of a whole complex of social, charitable, and political Islamic organisations (Geertz, 1960).³¹

The *slametan*, also called *kenduren* or *sedekahan*³², is a religious ritual and communal feast centred around a ceremonial meal that is offered to the spirits. It symbolises the mystic and social unity of those participating in it. *Slametans* fall into four main types: *slametan* on the crises of life, calendrical *slametan*, *slametan* concerned with the social integration of the village and the intermittent *slametan* given for a special occasion. In the next chapter, we will give some descriptions of these *slametans*.

Processes of social change and increasing purification of the Islamic faith changed the religious beliefs and practices in the villages. Moreover, these practices have enforced the Indonesian ethics of filial piety and familism. Cowgill regards these values as contributing to a high status and active role in society of older persons (Cowgill, 1986). Indonesian children are supposed to show respect to their parents and to acknowledge their authority, and it is an obligatory duty to take care of them in their old age (Koentjaraningrat, 1957). A preliminary conclusion is that older persons

³⁰ The *Golongan Karya* (GOLKAR), literally Functional Groups, established in October 1964 by the army to coordinate army-civilian cooperative bodies and reorganised during Suharto's New Order into a military-bureaucratic condominium over the nation (Ricklefs, 1993).

³¹ The third sub-variant of the general Javanese religious system is called the *prijaji*. They are not described here since they were not present in the villages of study. See for a detailed description 'The religion of Java' by Geertz (1960).

³² We observed a slight difference in word use. The word *slametan* was used for all types of ceremonial meals. *Kenduren* was only used for intermittent ritual meals at home. *Sedekahan* was only used for religious meals connected with the Muslim calendar and was organised together with all the male household heads of one neighbourhood (*RT*) at the house of the Head of the Neighbourhood (*Kadus*).

have a high status within their families, that they are included in the activities of their nuclear households and that the majority of the children strongly rejects the notion of ever permitting their parents to be placed in a nursing home.

2.4.4 Female roles and labour participation

The impact of the agrarian rationalisation of labour-saving technologies, shifts in hired labour recruitment and payment practices mainly affected the women of poorer households. Before the introduction of the new practices, women usually performed the most labour intensive farming operations like transplanting, weeding and harvesting. Hiring contract labourers and using machines operated by men eliminated expenses related to the women's farming activities. This implied abandoning the former 'open field system' in which everyone was allowed access to the harvest (Hüsken, 1989: 307; Hüsken and White, 1989: 254).

On the one hand, the changes in agrarian labour practices deprived women in rural areas from their specific rice cultivating tasks, and compelled them to look for other sources of income. On the other hand, Mason (1992) notes that industrialization has increased the labour force participation of women. The growth of labour-intensive industries led to an increased recruitment of female workers.

Additionally there is more differentiation in the roles of women. This is reflected in three role models for Indonesian women. The *ibu* - literally mother or respectful term to address an (older) woman - stands for the role of providing care, material and moral support for children but also for other dependent persons within a particular social circle. The *ibu rumah tangga* (housewife) focuses her attention and provision of care more exclusively on her own nuclear family and household. Another role model for women is actively participating in the labour force. In this case their lives are structured by their work rather than by their domestic and family backgrounds (Niehof, 1995).

We expect that the process of industrialization will reduce the care for the older persons. For the *ibu* it is quite normal to live together with parents (in-law) or to take care of them. Thus, in this situation the older person is assured of physical care and economic support in old age. The *ibu rumah tangga* is focused on her nuclear family. Therefore she is apparently less willing to share her home with her parents (in-law), but will still try to support them if necessary. The woman working outside the household has least to offer for the older person, because there is little opportunity for care and support. These women do not have the time to care for the older persons besides their work and household activities, and their urban houses generally do not have enough space for a three-generation-family.

Increased employment of wives may enhance their power in the family, which in turn may give them a greater say in where or with whom they will reside. This may reduce the co-residence with the parent(s). The wives' increased contribution to family income may also make the formation of a nuclear household more financially feasible

and may thereby further undermine inter-generational co-residence (Mason, 1992). The whole process of social change makes women less able to care for older family members. This may result in neglect of the older persons and an increased stress for working mothers, who are supposed to care for not only parents (in-law) but also for children and a husband. On the other hand, the importance of senior family members may increase when they help with baby-sitting, cooking and other domestic chores to relieve the tasks of their daughter (in-law).

2.5 Hypothesising the impact of social change on elder care

This chapter describes the context of social change for elder care in Indonesia. When describing processes of social change, we tried to hypothesise their impact on older persons' lives and the elder care. Below, we summarise the assumed effects of social change on elder care that were discussed in the chapter.

1. Agrarian development and industrialization will result in less co-residence of adult children with older parents.
2. Industrialization will undermine inter-generational family ties but also increase independence and overall welfare for older persons.
3. Older rural landholders are more independent and more often capable of earning an income than urban older persons.
4. Monetisation will ensue in the formation of (more) specialised institutions and organisation for elder care.
5. Declining fertility results in less children to provide care for older parents.
6. Declining mortality and increasing longevity result in more elderly people who need more personal care, instrumental support and health services.
7. The changing dependency ratio implies that productive people support a smaller number of young people and a larger number of old people. This will create a shift in demand for goods and services from children to older persons.
8. Migration of young adults out of and migration of retirees into rural areas will result in disproportionate numbers of older persons (ageing) in rural areas.
9. Industrialization, urbanisation and migration will change relationships and care practices between older parents and their children by less physical and more superficial contacts, less personal care and emotional support, and more monetary and material support.
10. Availability of fewer children for elder care will result in other acting as caregivers such as kin, friends, neighbours and community members.
11. By out-migration of the younger generation, mutual assistance between children and older parents will be less feasible.
12. Agrarian developments and urbanisation will diminish the significance of the inheritance of land, resources and power will shift from parents to children and co-residence will decline or change in character.
13. The overall effect of social changes will be erosion of social and moral ties of social units, such as family and community. The social and moral ties will be replaced by ties based on wealth or connections with the central government. As a consequence, there will be less caregivers for older persons, and declining inter-generational support and mutual aid.

14. Changing value systems and living conditions will cause conflicts between expectations of older parents and responsibilities of children that cannot be easily reconciled.
15. Schooling may break down the obligation of children to take care of their parents.
16. Islamisation will enforce filial piety, which is favourable to a high status and active role in society of older persons.
17. Agrarian developments, industrialization and labour force participation of women will reduce co-residence with parents, make women less available for or more burdened by care for older relatives, and may increase the caring role (e.g. for grandchildren) by older persons.

Of the processes of social change, we assume that migration and longevity will have a major impact on familial, elder care in rural areas. As young persons move out of the village to seek work and a livelihood in a city, older persons will be left behind without their children who were traditionally providing care in old age. When older persons live longer, they will generally need more care in the final stage of their lives. To test the hypothesis of social change effecting elder care, we selected two villages. A village with low or no out-migration that is relatively more prosperous but still has its main employment in agriculture. Another village with high out-migration that is poor and has limited agricultural possibilities. We hypothesise that the impact of social change on elder care will be most pronounced in the village with high out-migration.

3. The local context and old age

In this chapter we will focus on the local context of elder care, particularly the two study villages of Kebonagung and Giriwungu in the Special Region Yogyakarta. We will describe the political and policy context, the geographic and demographic context, and the socio-cultural context of older persons' lives. We will illustrate this with experiences and perceptions of the older persons themselves.

3.1 Political and policy context

The political context in which the respondents were born, grew up and grew old is described in Chapter 2.2. In this chapter, we will briefly present some personal experiences of the older respondents in the villages. Because the respondents found questions about historic events hard to answer, it was difficult to put their life histories in a neat chronological time-frame. The next section deals with the social welfare policy pursued by the Indonesian government before the economic crisis and resignation of President Suharto. At the end of the section, the services and programmes for old age are described.

3.1.1 Experiences of political history

The oldest respondents of 75 years and older in this research were born in a society controlled by the Dutch colonial government. Most respondents claimed not to remember anything from this colonial period. However, people from Kebonagung referred to the sugar factory and the, still existing, unused railway near Bantul as a legacy of the Dutch. People from Giriwungu could have been too isolated and far away to be much aware of the Dutch occupation. Otherwise, the respondents were too young and oblivious of the political situation.

The older persons included in this study had either just been born or were at the most in their late thirties during World War II and the independence movement. Respondents talked about the period that, apparently, the Dutch were pushing through (*Jaman Doorstoot*, 1947-50) after which the period of prosperity came (*jaman makmur*).

“Many of my friends died in the hunger period... Although we had much money and went to a market far away, there were no people who sold food at the market. Ya, that was the hunger period. I hope that that will never happen again. We only ate what we found. We looked for anything that we could eat. I was [still] strong and healthy, hungry and could not sleep. Food was very expensive and we could only eat leaves from the garden. There were not even cassava leaves! [...] Later we went to the old forest and we ate a kind of leaves called *gembili*.”

Simbah Niti (±90, female, retired), Giriwungu.

“During the occupation period (*jaman penjaja*), [according to the hamlet head this could have been during every war], the market was closed down and we were not allowed to trade anymore. I was then trading in the villages. I walked in the direction of Wonosari to the village of Sodo, and Wareng, and Singkar. I walked on and on until I arrived at the market Kuwon. There I traded in the street. I had to go far away, because there were no people who bought it here. The ones that bought were people from the mountains. In the mountains there were no people who made palm sugar. When I sold everything there, I bought merchandise from the villages and sold that at the market here. This is called buy-and-sell trade (*dagang beli*).

During the Japanese time, I still worked in Wonosari. At first, the Japanese were not here [in Kebonagung], only in Yogyakarta and Wonosari, not in the villages. I remember that I counted 35 Japanese army trucks driving in a row through Wonosari. They slept in the trucks. When I was in the city [of Yogyakarta] to sell palm sugar and left the Pringharjo market, I saw Japanese soldiers sporting. They were running in sport clothes with Japanese hats and without shirts. People liked to look at them and laugh, because they made these stiff head movements to the left and right. [She shows how.] That is sport!

In the past there were a lot of army men here and in Yogyakarta, but the Dutch or the English had no effect on the village life. People were only scared that they would get shot. So we did not sell at the market. I never saw the army here [in the village of Sriharjo]. When I was in the mountains, an airplane made the sound like ‘tek, tek, tek, tek, tek, tek, tek ...’. At that time there were parachutes. I was wearing one sling cloth, my [future] husband was also wearing one sling cloth [with merchandise]. Because of the parachutes, we immediately started to run. I dropped my sling cloth and ran. By the time that we returned in the village, the military had already returned to their headquarter in Yogya. So I never saw them in the village.”

Simbah Rejo (±72, female, retired), Kebonagung.

In general, many respondents think that life has become better economically. They often mention the improvements in livelihood, housing, infrastructure and education. The case study below describes the improved livelihood. Other case studies of changed living conditions will be presented in the Chapters 6 till 11.

Interviewer: “Is your life better or worse now compared to the past?”

Simbah Niti: “It is better now.”

Interviewer: “Can you give an example of what has become better compared to the past?”

Simbah Niti: “For example that farmers get more yield from their efforts. A farmer can eat until s/he is full and feels good. Clothes are also very good [nowadays]. [...] In the past farmers only occasionally had yields from the fields. Sometimes there was no yield. While I think that farmers always have yield from the fields at present. Moreover, it is possible to eat until you are full and still sell [the surplus of] the vegetables.”

Simbah Niti (±90, female, retired), Giriwungu.

The fieldwork of this research was finished at the end of 1997 when the recent economic crisis was just emerging. People were confronted with sharply increasing prices and decreasing cash income. We did not study how the respondents were affected by and coped with the economic crisis. However, we heard from Indonesian

researchers in the field that older persons said that the crisis was nothing compared to the hunger period during the Japanese war. They can cope by cutting down expenditures, using money more carefully and increasing total debts. People in the villages probably can still provide for food. Many labour migrants, who lived in the cities, returned to their native villages where they could not do anything. They did not stay long before they tried their luck again in the cities (oral information at the workshop on the Economic Crisis and Social Security in Indonesia, Berg en Dal, 1999). Skoufias et al. (2000) studied household data of 100 villages in eight provinces throughout Indonesia during the economic crisis (May 1997-August 1998). Their conclusion was that there was a considerable drop in the welfare of households. Average per capita expenditures declined significantly, and at the same time inequality increased. The poverty rate also appears to have doubled from the pre-crisis level. However, transitions into and out of poverty reveal remarkable fluidity. Many households have indeed suffered from falling incomes and increasing poverty, but some appear to have experienced improvements in their welfare.

3.1.2 Social welfare policy

In poor countries with competing demands on scarce resources and problems, such as poverty alleviation, hunger, unemployment, and mass illiteracy, ageing-related problems can be low on the list of national priorities. This was certainly the case for Indonesia for many years. During our fieldwork at the end of the Suharto era, we noticed a small increase in attention to problems of older persons and the ageing issue. This attention will probably have decreased again, considering the turbulent political period that people in Indonesia are going through now.

In 1984 a policy named the Basic Design for Social Welfare Development was set up to anticipate the increasing number of social welfare problems, including ageing issues. The policy was ideologically based on the *Pancasila*¹ and reflected a number of articles stated in the 1945 Constitution. The articles declare that:

1. Every citizen is entitled to employment and a decent life (item 2 of article 27).
2. The indigent and abandoned children are cared for by the state (article 34).

Programmes and services for older persons were based on the following principles:

1. Every citizen has the right to have a good and reasonable life, and no one will be left behind in the process of national development.
2. Family and community are the best places for older persons. Institutional homes are the ultimate alternative to take care of the very old, homeless and destitute older persons having no family that can take care of them.
3. The value to respect older persons and place them in an honoured position with high esteem should be passed on from older to young generations. The value can be a means to overcome the ageing problems in the modern Indonesian society

¹ This Indonesian state philosophy states on care for the older persons: [The philosophy of life of the Indonesian people will] “deem it sinful if children and relatives neglect their elders, and those children and relatives will on the other hand feel themselves lucky and honoured, if they are in a position to make their elders happy” (anon., Indonesian Country Paper, 1982: 2).

(Soepardo, 1992).

Wirakartakusumah has observed that present and past efforts at managing senior citizen's issues and providing guidance to older persons are sporadic. They were untargeted and not integrated and remained sectoral within the offices of the Ministry of Social Affairs, Ministry of Health and Ministry of Manpower (State Ministry of Population/National Family Planning Coordinating Board, 1994).

To co-ordinate efforts at managing senior citizens' affairs, the Co-ordinating Minister for Social Welfare issued a decision, calling for the establishment of a Working Group on Senior Citizens' Welfare in 1989. The inter-sectoral group was to assist the Minister in the coordination of activities designed to improve the welfare of older persons. The recommended policies, which aimed at prevention of the possible negative impacts of an ageing population, were divided into three major categories.

1. Policies on economic activities of senior citizens to establish patterns of employment suitable for the older persons.
2. Policies on social activities of senior citizens to maintain the values of the extended family in order to continue familial support for the older persons. These policies also emphasise the need to implement religious and social values of respect for the older persons. In addition, policies are adopted in anticipation of increased needs for older persons services, such as social facilities, housing, recreational centres and religious guidance.
3. Policies on health of senior citizens to delay the biological ageing effects by formulating appropriate nutrition and preventing modern degenerative diseases (Wirakartakusumah, 1994d).

Generally, national development policies put special emphasis on the principle of self-reliance for the family. Law number 10 of 1992 concerns the population development and development of prosperous family² including the older persons³ (State Ministry of Population and the Environment, 1992). The 1993 Broad Guidelines of State Policy stipulate that efforts should be made to build sound and stable Indonesian families because it is believed that strong family support is the best insurance in old age. Although Wirakartakusumah hypothesised certain developments that will diminish the traditional support system of the older persons, he does not describe a programme that provides social security services for older persons. In spite of all social changes, decreasing family sizes, increasing mobility and increasing labour participation of women, he still assumes that older persons are capable and willing to carry household responsibilities and financial obligations. Many older persons still function as head of the household and work (Wirakartakusumah et

² "The term 'prosperous family' signifies a concept much wider than the materialistic one and is closer to the concept of welfare in its widest sense. It pertains to the ideal family in the Indonesian cultural concept, namely one which is formed on the basis of legal marriage, capable of obtaining all its spiritual as well as material needs, and maintaining a harmonious, compatible, and balanced relationships within the family as well as with its socio-cultural." (State Ministry of Population and the Environment, 1992: vii).

³ However, the Jakarta Post reports that there is [still] no well defined national policy to improve the life of the older persons in 2000 (Jaffer, 2000).

al., 1997). However, he did not question why older persons are still the head of the household or if they still work by choice. Wirakartakusumah and Soepardo seem to overlook the possibility that older persons have to work because it is necessary to provide a living. Niehof believes that the denial of problems with an ageing population and elder care relates to the ideology of the *Pancasila* and the belief in the so-called Asian values. The *Pancasila* assumes that support of the older persons will be provided by children and other relatives. The Asian values are said to promote communalism and solidarity as opposed to individualism and egoism (Niehof, 1995). Hugo also believes that the limited attention paid to ageing at the policy level are caused by ideological assumptions about the Indonesian traditional extended family that will take care of the older population as it has in the past (Hugo, 1992a).

3.1.3 Elder care services and programmes

In Indonesia the formal age of retirement is between 55-59 years. In urban areas more than half of the older persons retire at that age. Older persons in rural areas tend to postpone retirement; they will continue working until a much older age (Sigit, 1988). Recently, efforts were made to raise the pension age to 60 years in accordance with the increase in life expectancy. This has actually been applied to high-ranking officials who are now retired after they reach 60-65 years of age (Soepardo, 1992).

That a government applies a formal retirement age does not imply that they provide for national pension schemes. The Indonesian government only give pensions to civil servants, members of the armed forces and employees of state-owned corporations, corresponding to approximately 11.5% of the total labour force in 1986 (Esmara and Tjiptoherijanto, 1986). The social security schemes for these fortunate few are compulsory income contributory schemes rather than taxation-based pension schemes⁴. However, most older persons work in agriculture and they only gradually resign as their age increases. The main reason given for the decision to stop working was (in order of importance) ill health, retirement in urban areas, not being permitted to work in rural areas. For older persons, income from the own economic activity is the main source of support. The financial support of the vast majority of the older persons depends very much on what they have been able to put aside during their working lives, what their spouse has left to them, or what support their family can provide (Chen and Jones, 1989; Sigit, 1988).

Because of agrarian commercialisation and income flows from non-agrarian activities there is an ongoing process of monetisation in the rural areas of Java. Money tends to objectify and formalise the relationships among the people involved in exchange (Cowgill, 1986). Uncertain is whether this will lead to the formation of specialised institutions and organisations for elder care, as happened in many countries around the world. There are some elderly homes around Jakarta and Yogyakarta, but these

⁴ See for more information on the social security system in Indonesia (Griffin, 1986; Ihromi, 1989; Nugent, 1990; Jones, 1988; Jones, 1993; Esmara and Tjiptoherijanto, 1986).

are meant for poor older persons who can not take care of themselves anymore and who do not have children and other family members capable of supporting them. In urban areas, in the case of older persons who do not want to live together with their children, the children sometimes pay for professional help of a servant or nurse. In this way, older persons are able to stay independent in their own house.

The government regards the homes for older persons as a last resort for those who are destitute and have no relatives to fall back on. The family is seen as ultimately responsible for its older dependants. In 1980 only 0.1% of the older persons lived in an old age home in Indonesia (Chen and Jones, 1989). In 1992, 155 older person's homes existed in Indonesia, consisting of 69 governmental and 86 private homes, a distinction dating back to the colonial period (Soepardo, 1992). Surveys report a strong resistance to the idea of living in an older person's home, because respondents strongly believe that it is the family's obligation to provide care for its older members. Although half of the older population of Java believed that nursing homes are important to have, a much smaller proportion said they would consider living in one (Adi, 1982; Rudkin, 1994a).

In the Special Region of Yogyakarta five elderly homes (*panti wreda*) were established with a total of 221 inhabitants (BPS, 1992b: 184), one of which is located in the study area of the regency Bantul. It is in Kasongan, about twelve kilometres from the village of Kebonagung. The Head of the Social Health Section at the District Imogiri reported that only three persons from the district Imogiri were living in that home. People can enter an elderly home when they are poor and their family cannot take care of them anymore⁵.

Government programmes for older persons are implemented at the national, provincial, regency and district level, through the Ministry of Social Affairs. We checked the programmes in our study areas and found that although increasing attention was being paid to services for older persons, no programmes were implemented in the villages of Kebonagung and Giriwungu. In both villages there are health centres (*Puskesmas*) but these do not pay special attention to older persons. The *Posyandu lansia* (integrated health post for the elderly), which provides special health and nutrition programmes for older persons, is a new phenomena in Indonesia and not yet established in the study area. The assistant (*pembantu Puskesmas*) reported that there would be a programme for male, retired civil servants (*Persatuan Wredatama Republik Indonesia*) of the district Panggang at the *Puskesmas* in the hamlet of Jurug at the end of 1997. The target group consisted of twenty-five participants of a credit and saving group of pensioners (*arisan pensiunan*) and a veteran's group (*kumpulan veteran*). The aim was to give these persons a physical check-up, take body weight and measure blood haemoglobin levels.

⁵ See Vernet, (1997) for a case study of the elderly home Abiyoso in the village of Pakem, northern of the Yogyakarta.

Table 3.1 Use of health care services (N=355)

Applied health care service	Freq.	Percent	Mean annual expenditure (Rp)
Modern or industrial fabricated medicines	193	54.4	21,991
Traditional or self-made medicines	179	50.4	16,166
Local health centre (<i>Puskesmas</i>)	110	31.0	5,085
Doctor's assistant (<i>mantri kesehatan</i>)	6	1.7	8,175
Hospital	25	7.0	298,535
Traditional healer (<i>dukun</i>)	4	1.1	7,588
Masseur (<i>dukun pijet</i>)	39	11.0	1,991
Ceremonial meal (<i>slametan</i>)	1	0.3	200,000

We asked if the older respondents used health care services in the last year (see Table 3.1). Half of the elderly had used modern or industrial fabricated medicines as well as traditional or self-made medicines. Only a third went to the local governmental clinic. This confirms the suggestion that not many elderly people use the services of the *Puskesmas*. Very few elderly (7%) went to the hospital probably because of the high expenditures involved and the large distance from the village. The nearest hospital is in Yogyakarta at approximately fifteen kilometres from Kebonagung and twenty-five kilometres from Giriwungu.

Not many people said they consulted a traditional healer, although it is still very common to do so. Perhaps these are social desirable answers because the Indonesian government frowns upon traditional healing as being superstition. Still, 11 percent went to the masseur. We also asked whether the respondents went to the traditional midwife (*dukun bayi*) or trained midwife (*bidan*) because these were often the only health service providers in the village. We were unable to verify with survey data our impression that midwives are consulted for health problems other than maternal services. Nevertheless, a respondent of the case studies mentioned that she had consulted the midwife for her headache (see Chapter 7.2.1).

The mean annual expenditures for health services ranged from Rp 1,991 for massages to Rp 298,535 for hospital bills. The mean total expenditure of last year was Rp 48,333. Only one respondent reported to have organised a ceremonial meal, which happened to be a very expensive *slametan* for which they slaughtered a cow.

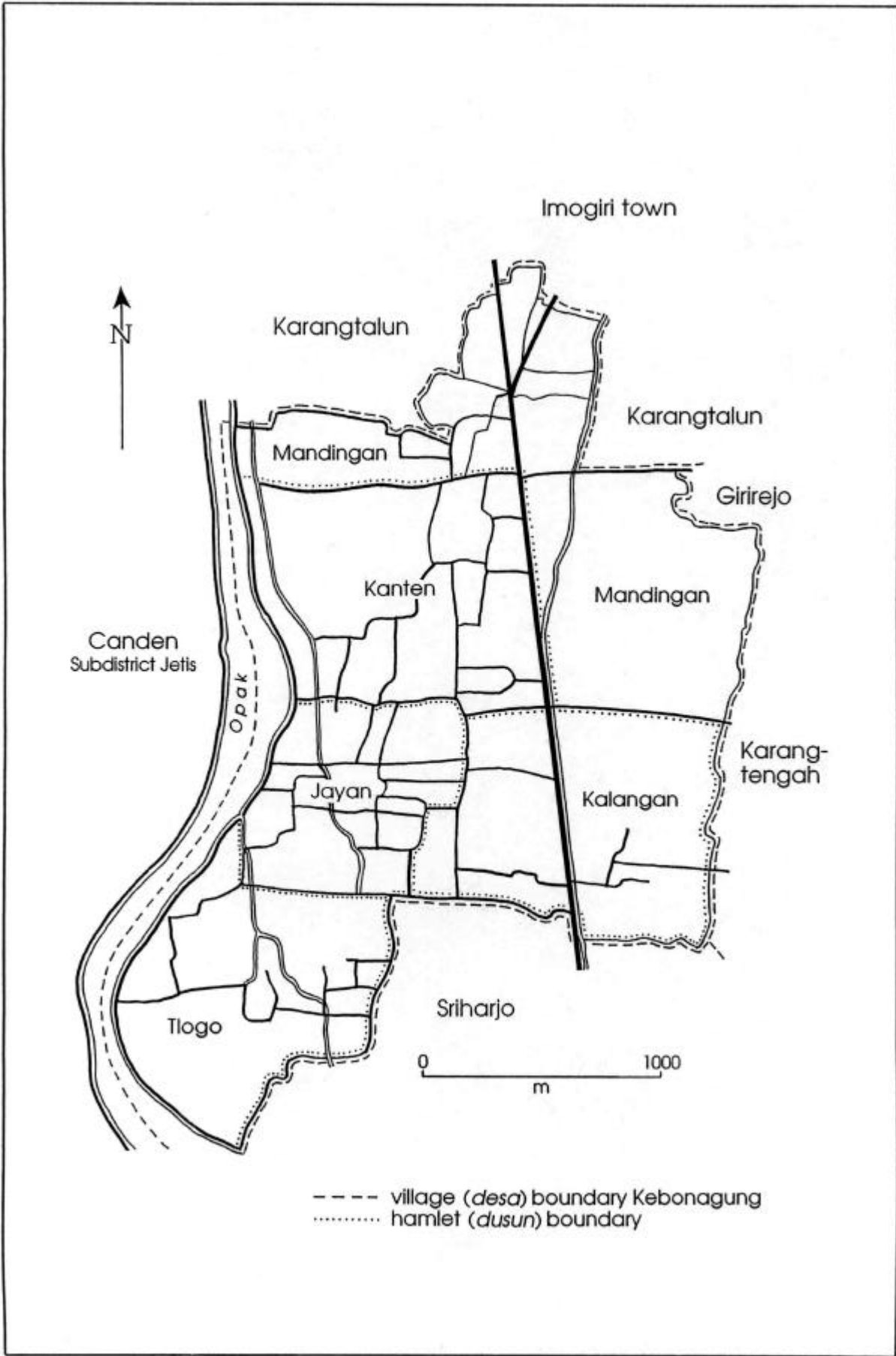


Figure 3.1 Map of the village Kebonagung (sub-district Imogiri, regency Bantul)

3.2 Geographic and demographic context

In this section we will focus on the local context of the villages Kebonagung and Giriwungu in the Special Region Yogyakarta. These villages are only ten kilometres apart from one another, but differ a lot ecologically. The geographical setting and ecological environment are determining factors to human settlement. We expected that the relatively minimal conditions in Giriwungu represent a push factor for out-migration of younger persons, more than in Kebonagung. In addition to the demographic transitions of declining fertility and increasing life expectancy, we expected that the ageing process is more prominent in the village of Giriwungu. All these aspects of demographic ageing are discussed in the context of the local background.

3.2.1 Geographical setting and population of the villages

The village of Kebonagung is situated in the lowland areas approximately fifteen kilometres south of the city Yogyakarta (see Figure 3.1). The soil in Bantul has been classified as unusually fertile because of sediments of volcanic origin, which made “the best agricultural land for growing rice” (Rotge, 1995: 17, 21). Hence, the area mainly consists of well-irrigated ricefields (*sawah*) where triple cropping is usually possible. The river Opak provides water for the irrigation canals and most households have access to groundwater from a well. When one leaves the main road that connects Yogyakarta to Panggang, one passes spacious rice fields with concrete irrigation canals on the way to Kebonagung. The area is flat and there are almost no trees or bushes along the rice fields.

Kebonagung consists of five hamlets named Mandingan, Kanten, Jayan, Kalangan and Tlogo. The total population is 3,257 persons divided over 729 households (Data Monografi, Tahun Juni-Desember 1996). Eighteen percent of the population is aged fifty-five years and older in 1996 (Kantor Kades Kebonagung, 1996a). On average, households in Kebonagung consist of four to five persons. The two-generation household without older persons and the (more than) three-generation household with older persons are the most prevailing (see Annex 3.1 and 3.2).

The village looks relatively prosperous because there are asphalt roads and the gardens are fenced. Gardens are hardly used to cultivate vegetables. People only grow fruit trees such as banana and coconut around the house. Most houses have stone walls, many an inside-bathroom, electricity and some have a television set. The non-agricultural economic activities executed in the village consist of producing food snacks, selling small household necessities at a shop (*warung*), crocheting bags for a middleman from Yogyakarta, producing palm sugar in the small factory, collecting sand from and chipping stones near the river for a wholesale buyer, and building a dam in the river for a construction project. When one walks on the main road, one can see the Sewu Mountains of Panggang in the south.

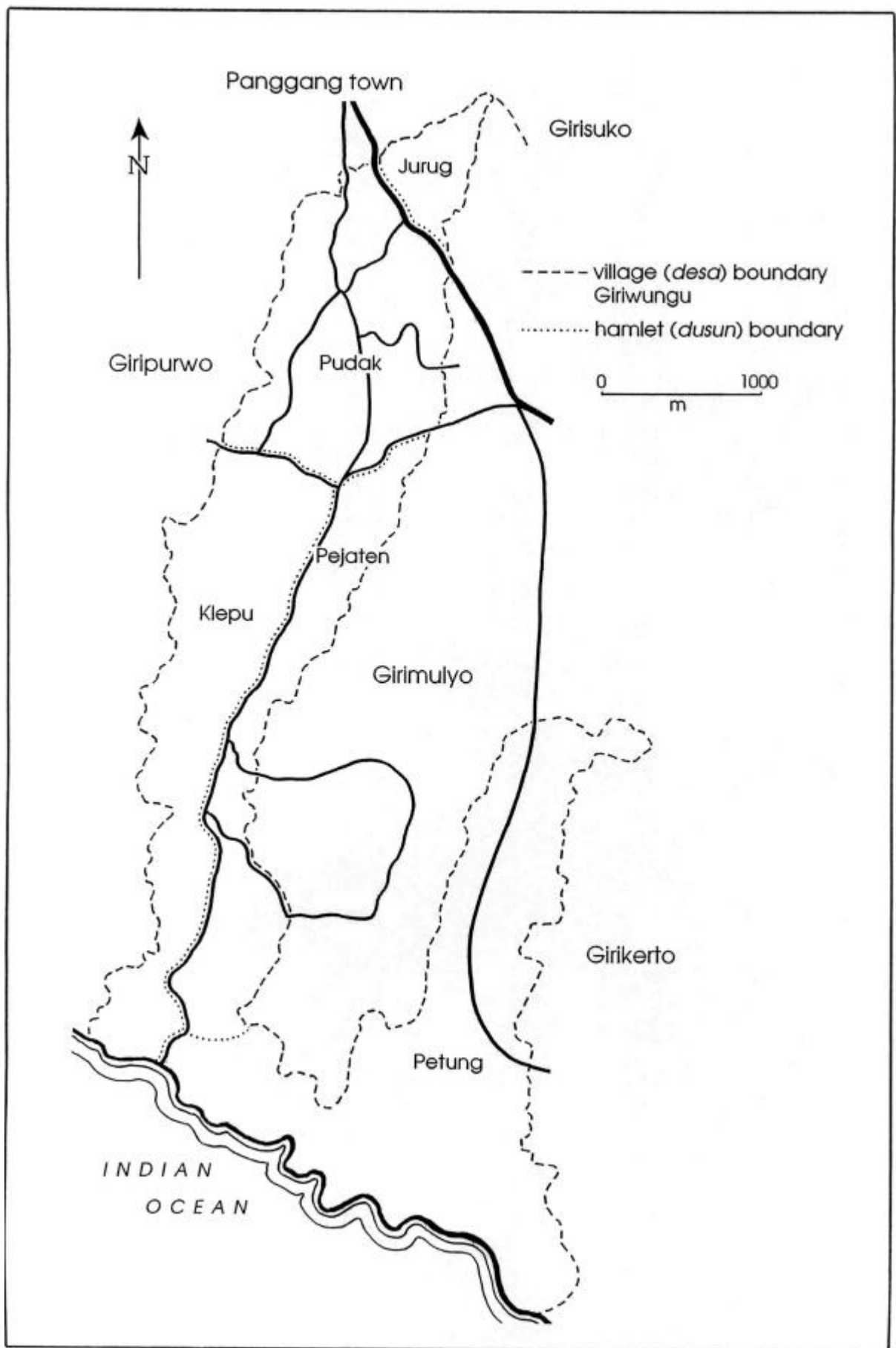


Figure 3.2 Map of the village Giriwungu (sub-district Panggang, regency Gunung Kidul)

The village of Giriwungu is located approximately twenty-five kilometres south of Yogyakarta in the limestone Sewu Mountains⁶ (height 150-700 metres) near the Indonesian Ocean (see Figure 3.2). The soils are for the most part made of calcareous materials that have a very porous nature and do not retain rainfall (Rotge, 1995). Consequently, the hilly area mainly consists of forests with less fertile, dry gardens (*tegal*) in forest clearings. In these gardens, cassava is grown most of the time and rice once a year if there is enough rain. The area has almost no natural water sources and the level of ground water is too deep for wells. Even for household use water is only available during the rainy season. People who can afford it buy water from a tank truck during the dry season, which they store. The temperature and humidity are lower in the mountains than in the lowlands and it can become very cold at night.

Giriwungu looks relatively poor as only the main road is made of asphalt and the side-roads are either just hardened with stones or dirt roads. Most of the houses are made of wood and bamboo, and have an open bathroom outside. Since 1995, all hamlets have electricity except for the hamlet Salak, which is reported to be too 'far' from the main road. Few households have television. Non-agricultural job opportunities are absent in the village, with the exception of small trade from stalls (*warung*).

Giriwungu consists of five hamlets named Jurug, Pudak, Pejaten, Klepu and Petung. The total population is 2,492 persons divided over 563 households (Data Monografi Giriwungu, Kec. Panggang, Semester I (satu) tahun 1997). Twenty-one percent of the population is aged fifty-five years and older in 1996 (Kantor Kades Giriwungu, 1996c). Household size and composition per hamlet are similar to those in Kebonagung (see tables in Annex 3.1 and 3.2). On average, households in Giriwungu consist of four to five persons. The two-generation household without older persons and the (more than) three-generation household with older persons are the most prevailing.

Table 3.2 shows that physical environment is an important factor for settlement and agriculture. We focus on the study areas of Bantul and Gunung Kidul. Although the regency of Bantul is a smaller area than the regency of Gunung Kidul, it has a much higher population density. The data also show that Bantul mainly produces wetland rice and does not have dry land rice, and that Gunung Kidul produces almost no wetland paddy and more dryland paddy. Besides, in Bantul the rice yields are higher per hectare and there is more than one harvest a year, because of the high yielding rice varieties that are used. The fertile wet rice area of Bantul resulted in an increasing population density during the years 1961-98. The infertile dry land area of Gunung Kidul had a decreasing population density during the same period.

⁶ *Gunung Sewu* means Thousand Mountains in Javanese.

Table 3.2 Area size, population density and agricultural production by regency/municipality of Special Region Yogyakarta (DIY), 1961-1998.

	Kulon Progo	Bantul	Gunung Kidul	Sleman	Mun. Yogyakarta	Total DIY
Size of area (km ²) ^{a/b}	586	507	1,485	575	33	3,186
Percentage	18.4	15.9	46.6	18.0	1.0	100
Population:						
- 1961 ^b	337,127	499,163	571,823	516,653	306,296	2,231,062
- 1971 ^{b/c}	370,629	568,618	620,085	588,304	340,908	2,488,544
- 1980 ^{b/c}	380,685	634,442	659,486	677,323	398,192	2,750,128
- 1990 ^c	372,309	696,905	651,004	780,334	412,059	2,912,611
- 1998 ^c	353,768	726,672	623,158	845,289	409,604	2,958,491
Density (per km ²):						
- 1961	575	985	385	899	9,282	700
- 1971	632	1,122	418	1,023	10,331	786
- 1980	650	1,254	444	1,180	12,444	864
- 1990	635	1,375	438	1,357	12,487	914
- 1998	604	1,433	420	1,470	12,412	929
Yield rate wetland (quintal/ha) ^a	50.7	54.0	35.3	51.5	51.4	
Production wetland paddy/capita ^a	219.0	212.0	3.3	370.0	1.0	
Yield rate dryland (quintal/ha) ^a	29.0	27.7	28.9	34.1	-	
Production dryland paddy/capita (kg) ^a	4.3	-	145.0	1.9	-	

Sources: ^a Daerah Istimewa Yogyakarta: Dalam angka 1986 in Rotge (1995: 26); ^b BPS (1963) and Intercensal Survey (1985) in Mantra and Kasai (1987: 14); ^c Sewaka et al. (1996: 7,8). Data of 1998 are projected.

3.2.2 Local ageing

Demographic ageing results from declining fertility and an increasing life expectancy. These affect the age composition of the population, which can be measured by the dependency ratio. The data of Special Region Yogyakarta discussed here are presented in Tables 2.2 and 2.3 (Chapter 2.3.2). Local data are not available.

We have already mentioned that demographic transition is taking place at regionally varying rates. The total fertility rate in Special Region Yogyakarta is the lowest of all provinces in Indonesia. Between 1967-2000 fertility decline proceeded faster in Yogyakarta (60.4%) than in Indonesia as a whole (53.6%). Yogyakarta's total fertility rate dropped from 4.8 in 1967-70 to 2.0 in 1991-94. The fertility rate is projected to go down to 1.8 in 2005 and 1.7 in 2020. The latest data show that the Special Region Yogyakarta has already reached replacement level fertility, as have the provinces of East Java, Bali and North Sulawesi (Wirakartakusumah and Anwar, 1994c: 15). This means that women have relatively less children in Yogyakarta. While at the end of

the 1960s parents had five children to take care of them in old age, now they only have two.

In the Special Region Yogyakarta the infant mortality rate was 102 per 1,000 births in 1967 and declined to 35 in 1997. Between 2000-05, the infant mortality rate is projected to further decline to 23.0 for male and 24.3 for female births (Ananta et al., 1995: 6, 15). Yogyakarta has the highest life expectancy of all provinces in 1990-95 (Ananta, 1992: 16), which is 71.7 years. It implies that this province is going to have relatively more older people who will need more personal care, instrumental support and health services, while they have less children to provide it.

Table 2.3 shows that in 1990, every 100 potentially productive citizens had to support 44 young and 11 elderly unproductive citizens of the Special Region Yogyakarta. This contrasts with Indonesia as a whole, where every 100 productive citizens had to support 62 young and 6 elderly unproductive citizens. In 1990 Yogyakarta had the highest proportion of persons aged over 65 years in comparison to the other provinces. The dependency ratio does not only reflect the burden of the support that the potentially productive labour force has to carry, but also the distribution of consumption of a population. The needs of older persons are very different from those of young persons. The Special Region Yogyakarta and the other front-running provinces need to be prepared to confront ageing problems and provide for appropriate health services (Ananta, 1992: 19-24).

3.2.3 Rural-urban migration

Besides fertility and mortality trends, migration also affects the age composition of the population. Table 2.4 (Chapter 2.3.3) presents data of in-, out- and net-migration between the Special Region Yogyakarta and other provinces. In 1990, Yogyakarta experienced the highest out-migration of all provinces. Unfortunately, migration data are not available at regency level. Nevertheless, since Kulon Progo and Gunung Kidul are the poorest regencies of Special Region Yogyakarta these regencies are expected to have the highest out-migration (see for a more detailed explanation also Chapter 5.2.1).

In the wet-rice village of Kebonagung (regency Bantul), we observed that (family members of) respondents were commuting to the city of Yogyakarta, or practised circular or permanent migration to Jakarta. Kebonagung is approximately fifteen kilometres from Yogyakarta and public transport passes by regularly, enabling people to commute. The occupations of commuting persons were *becak* driver, construction labourer, factory labourer or civil servant. However, this is not an exhaustive enumeration of occupations because we focused our study on older persons, and migrants are usually younger persons. Nevertheless, some of the ageing respondents experienced migration themselves. One of the respondents was commuting to the market in Imogiri on a daily basis, selling home-made cassava products along the way. We also observed (older) respondents who practised circular migration to Jakarta, or had practised it and returned to the village for their

retirement. Hugo calls this kind of urban-rural flow of migrants “retirement migration” (Hugo, 1992b: 35). They were usually working as a domestic help, labourer or had other low paid jobs.

In the dry-land village of Giriwungu (regency Gunung Kidul), we observed that people were commuting to the markets or schools in the surrounding areas. The people in Giriwungu are mainly subsistence farmers and they only sell surplus at the weekly market in Legundi (Girimulyo) when they need to buy something at the market. They go to the market in the back of a truck, which passes at four and returns at seven o'clock in the morning on *Wage* day⁷. In the harvest period, a middleman comes to the village daily to buy the surplus of cassava and corn. One respondent buys coconuts and bananas in neighbouring villages, which he sells at the market in Trowono (± 20 km. in the direction of Wonosari) or Imogiri (± 10 km. in the direction of Yogyakarta). Every day young people commute to the secondary school in Panggang or for higher education in Wonosari. They go by minibus that runs only twice a day, at six a.m. and one p.m. We did not meet persons from Giriwungu who commute to Yogyakarta. The distance is approximately 25 km. of which the first part is through the mountains. Public transport between Giriwungu and Yogyakarta is too infrequent and takes too long. There are hardly any small food vendors (*bakul*) selling home-made food products in the area.

There is also circular migration between Giriwungu and Jakarta. In fact, almost every young person leaves the village after s/he finishes secondary school⁸. It is not clear whether these young adults intend to return to the village or migrate permanently. They probably do not know themselves and it will depend on their ability to find a job with which they can make a living. For decades, people from Giriwungu have migrated permanently to Jakarta, Bogor and to other islands. The newly arriving young adults usually live together with kin at the place of destination. Migrants from the same village tend to go to the same area, which is also the case for people from Giriwungu.

Giriwungu also has experienced transmigration. From the fact that respondents said that one had to be married to be eligible, we conclude that it concerns the government-sponsored transmigration programme. The Hamlet Head reported that in 1983 he had accompanied a group of one hundred household heads to Pematang-Panggang II (Sumatra). Other respondents reported the destination of Baturaja in Sumatra and that many persons had followed spontaneously with a migrant who had paid a return visit to the village.

⁷ See Annex 3.3 for an explanation of the Javanese calendar.

⁸ I did not observe an out-migration of so many young adults in Kebonagung. However, this observation can be biased because I lived with a single elderly woman and had fewer contacts with young adults in that village. In Giriwungu I lived with a three-generation family of which the (grand-) child was one of the few villagers who attended tertiary school. Because of that she was more often in the village and through her we had more contact with her peers. That is probably why it became obvious that most of these peers left the village at a certain time.

3.3 Socio-cultural context

In this section, we describe the local socio-cultural context for a better understanding of the case studies of older persons. It is important to understand the religious beliefs that older persons hold and their use of the Javanese and Muslim calendars. Finally, we will conclude this chapter with a description of the local terms to address older persons and the emic concepts of becoming and being old(er).

3.3.1 Religious beliefs: Slametan, Tuhan and dukun

Javanese religious life is centred round the ceremonial meal called *slametan*. There are four main types of *slametans*. *Slametans* are held at life-course events, at special days, for enhancing social integration, or at some specific occasion. For each type an example is given. The first type is the *slametan* centred round life-course events: birth, circumcision, marriage and death. These so-called rites of passage emphasise human life, the transitions and phases through which an individual passes during his or her life.

A *slametan* for all their deceased ancestors was organised at our neighbours' house when their family, who had migrated to Sumatra, came to visit them. The women had already been preparing and cooking the food since morning. We - as neighbours - were offered some *cucur* (fried cookies made of rice flour, sugar and coconut). In the afternoon *kyai* Niti, his daughter-in-law Sadiyah and granddaughter Surani, and the five family members from Sumatra went to the cemetery. Sudiya told us that they covered one gravestone (*kijing*) with a white cloth, burned incense, scattered flowers on the gravestone and lighted a bamboo pipe with lamp oil in it. Everyone had to touch the gravestones of three ancestors with perfumed oil three times. She laughed because she thought it was funny that she did not know the meaning of their actions. It was only a small *slametan*, and no prayer (*kenduren*) was held in the evening.

Fieldnotes Giriwungu, 10 July 1997 (*Kamis Legi*)

The second type is the periodical *slametan* associated with the Muslim calendar, the Javanese calendar, the agricultural cycle, or a combination of these. *Slametans* given to celebrate Islamic holidays are, for example: the birth of the Prophet Mohammed (12 *Mulud*⁹), the commemoration of deceased parents at the beginning of the Fast (29 *Ruwah*), the Fasting (starting on 21 *Puasa*) with evening *slametans* (*Malaman*), the ending of the Fast or *Idul Fitri* (1 *Syawal*), and the Day of Sacrifice or *Idul Adha/Korban* (10 *Besar*). *Slametans* surrounding the agricultural cycle are held at the start of rice planting in the field (*Labuh gabah*), after weeding and before harvesting. To select an appropriate day on which to "open" the land farmers combine the Javanese calendar with the Muslim calendar.

⁹ See Annex 3.3 for an explanation of the yearly Muslim calendar and a description of the names of the month.

Today was a holiday, a *sedekahan* for the birthday of Mohammed, in honour of which my landlady, *ibu* Rupi, had already started cooking at noon. She made - among other things - beautiful halve round balls of rice which she wrapped in banana leaves. I saw that *kyai* Niti (the neighbour) had already left in his best clothes (*batik* blouse, *sarong* and black Muslim hat) at 15.40 hr. Later I found out that he was the leader of the prayers (*kaum*) and that he administered several neighbourhood associations (*RT*'s) consecutively. I followed my landlord, *pak* Marjo, when I saw him leaving after a thorough ablution. He was also dressed in his best clothes and carried the bowl with food in a Hindu way on his head. On arrival at the house of the head of the neighbourhood (*Kadus*) I noticed that the *sedekahan* is a real male affair. The men were sitting inside on the floor and some women and children sat outside near the door. I did not want to disturb the process and only wanted to peak inside like the women did. But *Pak Kadus* called me inside and said that I had to sit next to him. They were waiting until *kyai* Niti finished the prayers at the other neighbourhood. At the back of the house *Pak* Marjo, Mar, Jumino and Budimaryono (some of the younger men) were mixing all the rice that everyone brought with him and scooped it on leaves of the *Jati* tree. They put the rice, white and pink chips (*krupuk*) and packages of fermented soybean cake (*tempe*) in the middle of the circle of sitting men. When *kyai* Niti came in the men started to pray and a coconut shell was burned outside. I could also smell incense but did not see it. Next *pak* Marjo and the other helpers distributed the food among all the men and they took it home.

Fieldnotes Giriwungu, 17 July 1997 (12 *Mulud*)

The third type of *slametan* is directed ad the social integration of the village, the *bersih desa* or 'cleansing of the village' of evil spirits. According to Geertz (1960: 82), the food is offered to the guardian spirit of the village (*danjang desa*) at the latter's place of burial, or in the mosque in strong *santri* villages, or at the house of the village headman. The *bersih desa* is always held in *Sela*, the eleventh month of the Muslim lunar year, but on different days in different villages according to local tradition. Social integration and well-being were the objectives of another village *slametan* that I heard about, which is described in the following fieldnotes.

Ibu Sudiyah told us: "The purpose of *Telasan* [*telas* means finished] is to end a certain request (*nyenyuwun*) to God (*Tuhan*). For the previous seven days, my father-in-law [*kaum* Niti] and his friends from many neighbourhoods did *nyenyuwun* to God in the tradition of walking around the village until three o'clock at night. After that they slept anywhere, for example at the T-junction or under a tree. They performed this ceremony to ask God that our village be peaceful and that no one become ill. To end the request they gave a *Telasan slametan*. Later [that evening] about 25 people participated in the *Telasan* activities, like the heads of neighbourhood (*Bapak RT/RW*), village officials (*Bapak Perangkat*) and people who do *nyenyuwun*. Vegetables and other food products are not bought but many people offer it and there are people who help with cooking."

Fieldnotes Giriwungu, 3 July 1997 (the night before *Jumat* (Friday) *Kliwon*)

The fourth type is the *slametan* given for some special occasion or purpose, such as departure for a long trip, a change of residence, illness, sorcery, etc. These rather simple *slametans* are a defence against mishap. My landlord, *pak* Marjo, organised a

slametan for me at home the night before I left the village in order to have a safe trip back to Yogyakarta and to the Netherlands. He also held a *slametan* when his cow recovered from an illness. The following case was the most astonishing *slametan* we had ever heard of and could be ascribed to the effect of the 'modern era'.

M: "This is to be eaten although it is not soggy. Do not only drink! [laughs]
I1: "We have to eat this." I2: "Is this *rempeyek* (crisp chips made of flour and peanuts)?" I1: "*Kedelai* (soybean)." I2: "*Kedelai*?" I1: "Is this soybean, *mbah*?"
M: "Don't know because this was made by some people from Petung. *Slametan* for a scooter. People from here [the area of Panggang] have to give a *slametan* when they buy a scooter." [...]
I2: "They made a *slametan* because they bought a scooter?"
M: "Slaughtered two chickens."
I2: "One gives a *slametan* when a scooter is bought too?" [laughs] I1: "People from here just make a *slametan* when they buy a new scooter."
M: "This is the tradition of people from here. Every time they buy a new scooter, *among* (rice and *slametan* food) is made. Take *nasi gurih* (fried and salted rice) too. The rice [that she received] is still in the basket now." [...] M: "How about when no *among* is made? Doesn't matter, *to*?" [laughs]
I1: "Yes." "*Simbah* asks why does one have to make a *slametan*? If no *slametan* is made it does not matter." I2: "Yes."

Interview transcript of *simbah* Marto (M), assistant/interpreter (I1) and researcher (I2). Giriwungu, 12 July 1997.

In the rural areas the Javanese religion is made up of a complex of beliefs in spirits, curing, sorcery, magic and God. This combination was difficult to understand and this sub-section on religious beliefs just touches upon the subject. One of the interviewers, who was a pious Catholic and had a Bachelor's degree, told me very seriously the following story about her grandmother.

My grandmother, who was 99 years old, fell when she was sweeping the yard. She did not want to live anymore and said: 'It is already time to die.' She had a talisman (*aji-aji*) to protect her life. [The informant did not know what kind of talisman but thought that it is usually a ring or a dagger (*keris*).] My grandmother said: 'The spell has to vanish.' The family called the healer (*dukun*) and he mixed bathing water with the juice of a half-ripe coconut (*kelapa cengkir*). This mixture made the spirit (*jin-jin*) inside the talisman go away.

My grandmother was a Catholic and when the *dukun* left she called for the pastor to administer the extreme unction. The pastor asked: 'Are you sure that you're ready to die? How do you know that?' Grandmother answered: 'I am ready!' but she did not tell the pastor that the *dukun* had already visited her. Two days later she died.

Fieldnotes, 27 February 1997.

Although most of the respondents did not actively practice one of the five approved religions, many mentioned God when something bad had happened to them outside

their control. They felt tested by Him in the event of an accident, sickness, death or money loss. They thought it was just fate determined by God that something bad happened to them and that they had to surrender to it. But they also asked God for things that they needed or wanted, e.g. food to survive or their children to remain at home, and felt blessed when their request was fulfilled.

We talked with an elderly respondent about the loss of her son at a young age. He was still suckled but could already walk when he died.

Interviewer: "Why did he die, *mbah*?"

Simbah Niti: "He died because he was sick."

Interviewer: "Do you still remember what sickness he died of?"

Simbah Niti: "The common plague. But maybe it was his fate, so he could not become better. [...] He died because it was the fate of God (*takdir Tuhan*). His finish line was just until there."

Simbah Niti (±90+, female, retired), Giriwungu. Interview transcript, 1 July 1997.

In several of the cases described above the *dukun* was already mentioned. The practices (curing, sorcery and ritual) of a *dukun* take up a very important place in the religious beliefs of the Javanese people. There are all kinds of *dukuns*¹⁰. We came across *dukun bayi* (midwives), *dukun pijat* (masseurs), and the ones who were just called *dukun*. The last kind was the most important. People often assured us that the *dukuns* whom they talked about and the *dukuns* that we actually met were practising their skills based on the Holy Koran. They are referred to as '*dukun aliran putih*', which literally means 'white curer'. There were also more obscure *dukuns*, who were related to 'black magic', but we never met one. One can go to a *dukun* for different reasons for instance to cure an illness, insanity, or frequent fainting. Sorcery and magic are used for example to ask for a talisman, to counteract another *dukun* who had put a spell on you for someone who was jealous, or to win a football game. These are also often applied in cases of love for instance to find a wife, or to mend a household that is not harmonious (often in case of the threat of divorce).

Mbah Niti's adult grandson, *Mujiat*, had an accident with the factory car in Bogor three months ago. The driver was dead but *Mujiat* only broke his foot. The doctor told him that it had to be amputated. But the *dukun*, *Pak Haji* [title and term to address someone who made the pilgrimage to Mecca], healed it by rubbing a toe while saying "*Bismillah* (in the name of God)". Then it healed, she said, but *Mujiat* was still in hospital.

Simbah Niti (±90+, female, retired), Giriwungu.

In rural Java, the combination of ceremonial meals (*slametans*), belief in God (*Tuhan*) and healers (*dukun*) are important aspects of people's lives.

¹⁰ See Geertz (1960) for a complete list of kinds of *dukuns*.

3.3.2 *Emic concepts of old - elderly - aged*

In studies on older persons, researchers often use the pension age to define their research population. The literature review of studies in Indonesia presented in Table 4.1 (Chapter 4.2.1) demonstrates that the selected age is usually sixty years. As mentioned, different pension ages exist in Indonesia. Regular civil servants and military employees retire at age fifty-five, formal job employees retire at age sixty and the high-ranked people like researchers and professors retire at age sixty-five or seventy. The Indonesian government applies the age of sixty and over as the determinant of old age. In addition, life expectancy at birth presently is about sixty (Wirakartakusumah and Anwar in Hugo, 1994c: 20). Finally, people after the age of sixty no longer have to extend their identification card. Of course for people who work in the informal sectors there is no retirement age. They usually go on working as long as they can.

Lately, more attention has been given to the older persons in Indonesia and several terms are current. The concept that is mostly used in policies, programmes or scientific literature is *orang lanjut usia (lansia)*, literally meaning 'person of advanced age'. The term *golongan lanjut umur (glamur)* is less often used and means 'group or category of advanced age'. Some researchers and policy makers, however, prefer the term *warga senior* for 'senior citizen', which has a less stigmatising connotation¹¹.

Nevertheless, in the villages under study we found that one uses *orang tua*, which means 'old person'. Everyone, also non-kin, addresses older persons as *simbah* or shortly *mbah* meaning 'grand-parent', *nyai* for 'grand-mother' and *kyai* for 'grand-father'. We mainly heard the latter two terms in the poorer village of Giriwungu.

Moreover, 'being old' is relative for older persons themselves. The following cases show that terms to address older persons are changing according to age, physical looks and capacity, status of grandparenthood and by social change.

We asked *simbah* Niti, who is known as the oldest inhabitant of the hamlet, whether her friends were already old. She never agreed, not even when her friends were in their seventies. She said proudly: "I am old, they are not old!"

Simbah Niti (±90+, female, retired), Giriwungu.

Simbah Ngatinem does not consider herself to be old (although others do) because she is still working in the field everyday and is not yet decrepit.

Simbah Ngatinem (61, female, farmer), Giriwungu

¹¹ Personal communication by Dr. Mely G. Tan, senior researcher at the Centre for Social and Cultural Research of the Indonesian Institute of Science (LIPI) in Jakarta, whom the author wishes to thank for her kind help and contribution.

Bapak Dwijo mentioned that some people have been calling him *simbah* since five years ago, although he did not have grandchildren at the time. He thinks that it was because he started to look old.

Bapak Dwijo (64, male, petty trader and labourer), Giriwungu

Javanese children are taught to show respect to older persons, which they must demonstrate in their speech. Kin terms are used to address all persons, kin and non-kin, except for persons younger than the speaker, and servants. The use of the national Indonesian language has promoted the use of the terms *bapak* (father and sir) and *ibu* (mother and madam). The following case shows that it is not always a clear and simple matter to know which term to use.

Simbah Muh is 58 years old and therefore one of the youngest respondents. We asked him when people started to say *mbah* to him.

Simbah Muh: "That is difficult to answer. The most important is that grandchildren and children from nephews and nieces call me *mbah*. I do not know when it started. Some people call me *mbah*, but *mbah* is not used exclusively. Others call me *kang* (older brother) or *lik* (uncle). When my first grandchild Agus started to call me *mbah*, his father and mother also called me *mbah* to teach it to him. When my son-in-law called me *bapak* (Sir) once, I got very angry because people from the past used to say *mak* (Javanese for Sir). I do not like *bapak*. Children usually say *mak*. I also become angry with Agus when he calls his mother *mamak* (mama), because he has to talk like people from here who say *mbok*. Just be normal."

Simbah Muh (58, male, palm sugar collector), Kebonagung.

In the description of interviews and case studies of the present theses, we address the older respondents the way we did in the field. Usually we used the term *simbah* or *mbah* to show our respect and because everyone did so. Only in the case of *bapak Dwijo* we used the term *bapak*, probably because we spoke Indonesian to each other.

When we tried to describe the emic definitions of old age, the respondents repeatedly mentioned the following words: *tua*, *jompo*, *pikun* and *krepo*. These concepts are not well defined and comprise overlapping dimensions of becoming old. The following interview texts illustrate that.

Interviewer: "Physically not strong is that the meaning of *jompo*?"

Dwijo: "My child will have difficulties if we wait [to live together with him in Jakarta] until we are *jompo*. We will not wait until we are *jompo*."

Interviewer: "What is the meaning of *jompo* then?"

Dwijo: "When you are not able to walk back and forth and your thoughts are befuddled, less normal. When you are like a young child. Finish eating, ask for food again."

Interviewer: And when do people say 'that person is old (*tua*)'?"

Dwijo: "After fifty years. A long life (*umur panjang*) is one hundred years. That means [that I am] halfway. When you are halfway that means already old (*sudah tua*)."

Bapak Dwijo (64, male, petty trader and labourer), Giriwungu.

Interviewer: "When is someone old (*tua*)?"

Ngatinem: "When someone is very old and decrepit (*renta*) or bent (*bungkuk*). Teeth already gone, not strong, only sitting around and the children take care of everything. Recently I can [choose to sit and be taken care of by my children] or maybe [I wait] until I die..." [laughs].

Simbah Ngatinem (61, female, farmer), Giriwungu.

"Then [after a life of hard work at the age of approximately 53 years] her daughter Parjinem would not allow her to work hard anymore because she was already old (*sudah tua*). Parjinem said: 'Mother does not have to work anymore. Just stay at home. Do whatever you can do at home.'"

Simbah Rejo (±72, female, retired), Kebonagung.

The younger sister, *simbah* Arjo and Arjo's son-in-law, Sismanto: "*Mbah* Amat is already very old and no longer healthy. She hears less [although she can answer the interviewer] and has to walk with a stick. She is senile (*pikun*), which means that the condition of her body is not good. She does not walk straight up, is already decrepit (*jompo*)... worthless (*krepo*). Everything is already troublesome. She can only eat. *Jompo* means that everything [health] is weak, free, unhampered (*prei*) [without the responsibility of earning a living]. She does not walk straight up, sees less, hears less, for anything she is not in demand anymore."

Simbah Amat (±80, female, retired), Kebonagung.

According to Mrs. Ngatirah, the daughter: "Nyai Suto is senile (*pikun*) because she is old (*sudah tua*). *Tua* means decrepit (*jompo*). The definition of *jompo* is that her thoughts are not normal. When she wants to eat or drink it has to be provided. If it is not provided, she does not eat. She often does not understand anything. Her senility started about two years ago. There was not a cause why nyai Suto became senile. She became senile straightaway. She cannot take a bath by herself. She does not even have the idea to take a bath and eat. When I do not bathe her, she does not bathe. I have to ask her: 'Does mother want to go to the toilet?' If she answers 'yes' then I take her to the toilet. Urinating she can do alone. I usually ask her: 'Do I need to bring you to the toilet or not?' Putting on clothes she cannot do at all. She likes to tear up her clothes. People who are decrepit (*jompo*) and senile (*pikun*) cannot put on clothes alone."

Simbah Suto (±100, female, retired), Giriwungu.

Becoming old or ageing is a process that takes place gradually. The Indonesian and Javanese concepts have in common that the ageing process consists of changes in the four aspects as described below. These aspects of ageing may indicate successive phases but that is not essential.

- Age: attaining a certain high age that is sometimes associated with retirement and often with obtaining grandchildren.
- Physical strength: decreasing physical strength and health.
- Activity status: changing activity status from working less at the farm or other job to stop working with the consequence of not earning an income in cash or kind anymore.
- Control: decreasing responsibility for and control of tasks and property like household chores, money, yield, livestock, land and house.
- Spirit: decreasing mental health and sense of life.

The emic concepts do not exactly match one of these aspects. However, we do believe that the emic concepts point to a diminishing process, which happens gradually and consecutively. We construed the following definitions of the emic concepts of ageing:

- *Tua* means old of age or old compared to other generations. *Sudah tua* literally means already old, which is used for circumstances that one is too old for what is required. *Tua renta* means very old, in one's old age, decrepit, dilapidated.
- *Jompo* means old, aged, decrepit, infirm, not fully in the right mind anymore.
- *Pikun* means very old, senile, demented.
- *Krepo* means disabled, invalid, worthless, poor and miserable, not fully in the right mind anymore.

None of these concepts approximates the condition of retirement. Retirement in the sense of stopping with work and receiving a pension does not generally happen to older persons in the rural areas of Indonesia. Only civil servants receive a pension at the age of fifty-five or older and these few formal retirees still continue working at the farm after retirement because the pension is usually not enough to live on. Therefore, most people in rural areas do not retire abruptly or suddenly from one moment to the other, but more gradually, step by step working less and changing to lighter work at the farm and/or around the house.

4. Older persons, elder care and old-age security

The main subjects in the present study are older persons, elder care and old-age security. This chapter presents the theoretical premises, research approaches and conceptual definitions. The theoretical approaches to (elder) care are derived from the sociological-anthropological, household and other perspectives. Studies on elder care are often weak in theoretical conceptualization, which is even more applicable for studies in developing countries. Our starting point is Tronto's theory of care. There are limited studies on older persons in Indonesia and the lack of knowledge needs to be amended to facilitate the development of appropriate policies and services.

4.1 Theoretical approaches to elder care

Traditionally, sociologists study people in their own society and anthropologists study people in other societies. If these people are old(er) they are studied by gerontologists. As a household sociologist specialised in so-called non-western studies, I am not overly concerned about the traditional boundaries between sociology, anthropology or gerontology. I apply theories and methods that are appropriate for studying elder care at the household level in a local context, in this case rural Yogyakarta, Indonesia. It is necessary to study older persons and significant others in their own environment to fully understand attitudes toward older persons, the treatment they receive, the evaluation of old age, and the roles considered appropriate for older persons. Hence, I agree with Niehof (1997) who makes a plea for an interdisciplinary collaboration in studying older persons and the removal of the partitions between anthropology and sociology. The same should be applied to other sciences, whether they are named social gerontology (Knipscheer et al., 1995), anthropological gerontology (Holmes and Holmes, 1995), anthropological demography (Kertzer and Fricke, 1997), or differently.

4.1.1 Sociological-anthropological perspectives

Most research on elder care has been carried out in so-called developed countries. The theories presented in these studies are not necessarily directly applicable to developing countries. Binstock and Shanas (1985) edited extensive volumes on human ageing from biological, psychological and sociological perspectives. However, they do not discuss theories on elder care and their international perspectives mainly refer to developed countries. The promising title of the chapter about an international perspective on family care of the elderly by Kosberg (1992b) unfortunately does not emanate from any theory. Holmes and Holmes (1995) write a good introduction on the socio-cultural aspects of ageing, but fail to formulate a theory. Fry and Keith (1986) only scratch the surface of grand theories in their handbook of anthropological methods for old age research. Nevertheless, the last books describe the kind of

sociological-anthropological perspectives that are valuable for studying older persons and are applied in the present study. These perspectives include the comparative analysis, the holistic perspective, the emic-etic perspective, the case-study approach, and the process analysis.

The value of a comparative analysis is that it forces us to reflect critically on existing categories and opinions, which opens the way to new insights. How persons behave in and experience old age depends on the social and cultural context and individual circumstances. However, in developing countries, the material requirements for enjoying old age are not a matter of course (Niehof, 1997; *my translation*). In the research project 'Household and family care for the elderly in ageing societies', a comparison will be made between elder care in a rural area in the Netherlands and Indonesia. This thesis deals with the latter. Bengtson argues that the comparative method is particularly useful in the development of cumulative theory in the micro-sociology of ageing, although such studies are relatively rare. He presents four case studies involving comparisons among groups, each beginning with the statement of a 'universal' theory reflecting some aspect of ageing. The theories are the disengagement theory, the modernisation theory (which we discussed in detail in Chapter 2.1), the theory concerning attitudes toward death, and the theory that compares value orientations of age groups (Bengtson, 1986).

Holism departs from the belief that one aspect of life cannot be effectively studied without considering the whole. Life is lived as a whole, not in bits and pieces. It is therefore important that the entire context of older person's lives is taken into account. Hence, practices, beliefs and aspirations of elder care are all examined with reference to their socio-cultural and physical environment. Queries to obtain information about the social and cultural characteristics that are likely to affect care-giving relationships between older persons and members of their families are presented by Keith (1992). The first query concerns the life course as a cultural unit. How is the life course perceived? How is old age defined? How do these perceptions affect views about who is an appropriate recipient or giver of care? The second query relates to requirements of functionality. What are the requirements for full adult participation in a society? How does ageing affect the ability to fulfil these requirements? What supports 'built in' to social and domestic arrangements buffer loss of functionality? The third query concerns the sources of status and access to sources. How does ageing promote or impede access to status and resources? When and how are resources and assets transmitted from generation to generation? How do status and resources affect the care-giving relationship? The fourth query relates to kinship and residence. How do household, kinship and living arrangements interact to determine what potential caregivers are likely to be living with or near older persons? We have already explained that Javanese people have a bilateral kinship system (see Chapter 2.4.2). Bilateral kinship, places the older persons, like all members of such societies, in a network of relationships out of which group bonds *may* be created, depending on proximity, mutual interest, and individual attraction (Keith, 1992: 25). The last query relates to the care-taking roles. Who are perceived as appropriate caregivers? What other roles are these people expected to perform?

How do these other roles affect their availability as caretakers? All these aspects of the socio-cultural context are taken into account in the present study with emphasis on the perceptions of the older persons themselves.

The emic-etic perspective¹ stresses that any cultural situation can be viewed from the inside and from the outside. The emic perspective refers to how (older) persons themselves perceive their own situation, the so-called 'inside view'. The etic perspective refers to the outside view of "the community of scientific observers" (Harris, 1968: 575). The emic and etic perspective is equally important in the present study, although the emic perspective offers greater challenges and insights. Emic perspectives not only lead us to new meanings and different assumptions about reality, but they enable us to create instruments that appropriately measure culturally significant variables. The meaning of old age and the effectiveness of solutions to the problems of old age can only be understood and evaluated in terms of the cultural context in which older persons live.

The case-study approach is typically used to study small groups or communities through intensive long-term involvement, such as participant observation. Emic, holistic, qualitative research, without a normative bias, is essential to comprehending the value systems of the subjects and understanding the complexities and subtleties of communication. We would like to emphasise that both qualitative and quantitative methods are valuable in studying older persons and elder care. A combination of qualitative and quantitative research methods is necessary to understand the process being studied in culturally appropriate terms, to obtain accurate information on behaviour, and to interpret the meanings behind the behaviours. Integration of qualitative information in the study design must be followed by integration in data analysis and the presentation of results (Scrimshaw, 1990). This thesis weaves the two together, illustrating survey findings with concrete examples, pointing out discrepancies between what people say they do and what they actually do, exploring interrelationships according to theoretically derived hypotheses, and validating qualitative findings with survey data.

Anthropologists interested in older persons have been particularly concerned with modernisation influences in developing countries and the effect that they have on the status and roles of older persons. This fits in with their interest in change and process (Holmes and Holmes, 1995). We have already elaborated on theories of modernisation processes and social change in Chapter 2.1. The process of social change is the context in which older persons, elder care and old-age security are studied in the present research.

¹ Emic comes from the word phonemic, the combination of meaningful sounds unique to a particular language. Emic is not a universal reference to language but a specific reference to a particular language. Etic is derived from the word phonetic, the term for the science of all human speech production. Etic refers to the scientific perspective that a researcher brings to the analysis. This constitutes his or her cross-cultural frame of reference and is an objective and controlled procedure for weighing and sifting facts and theoretical viewpoints (Holmes and Holmes, 1995: 9).

4.1.2 *Household perspective*²

In addition to the sociological-anthropological perspectives described above, we also use a household perspective. Households embedded in and interwoven with social networks in their environment have an important, albeit non-exclusive, role in provision of (elder) care. Besides the fulfilment of its general functions of production, reproduction and consumption, a focus on households is also important for other reasons. The research on and the resolution of many urgent social problems require consideration of the functioning of households in order to understand the causes of and solutions to these problems (Pennartz and Niehof, 1999). Studying the household within the entire social network will improve our understanding of everyone's contributions and the complex dynamics that lead specific members to become caregivers.

The definition of household is a point of endless debate. However, such debate is necessary when there are still social scientists that take the unity and the joint utility function of the household for granted³. I realised this again when I presented the plan for the present research to my Indonesian colleagues. It was my intention to ask elder respondents in the study areas whether they have their own money and if they are able to decide how to spend it. My Indonesian colleagues strongly rejected the idea of household members who may have individual goals and accused me of having a Western bias towards individualism. However, not all Javanese households appeared to be as harmonious and united, as they wanted me to believe. Persons living near each other are a potential source of tension and conflicts, even when they are family.

It is not necessary to aim for a rigid universal definition of *the* household. In general the concepts of family and household are defined and interpreted too statically. They are usually described as primary groups with either fixed boundaries, e.g. people living under the same roof, or with a fixed set of functions, e.g. provision of material needs, socialisation, and psycho-emotional support (Zwart, 1994). The Central Bureau of Statistics in Indonesia uses a rather static definition of a household: "An individual or a group of people living in a physical/census building unit or part thereof who make common provision for food and other essentials of living" (BPS, 1992b: xxx). Although it is very convenient for planners to extrapolate ideas on ideal households to local-level situations or to take neat units such as nuclear households as a point of departure in research and planning, this approach does not fit reality (Wolf, 2000).

Several researchers studied the Javanese family and used more or less interchangeable terms such as 'nuclear family (household)' (Geertz, 1961; Koentjaraningrat, 1957), 'household' (Geertz, 1961; Koentjaraningrat, 1957; White, 1980) and 'hearth hold' (Jay, 1969). Wolf (1986) and Evans (1985a) among others

² The section on the concept of household has been published largely in Keasberry (1999a).

³ See Moser (1993) and Kabeer (1991) for a more detailed discussion of the assumptions with regard to the household as a "natural socio-economic unit" and as a "joint utility/welfare function".

reviewed these studies and added other terms as well like 'multi-family household', 'household group' and 'cluster'. All researchers searched for an appropriate unit of analysis and struggled with definitions and the meaning of terms that could capture the different configurations. Wolf even found 64 different household configurations. Recently, the concept of household in Indonesia has been critically examined by many researchers (Koning et al., 2000).

Noteworthy is that writers about developing countries tend to use the concept of 'household', and writers about industrialised countries use the concept of 'family' by which they mean the nuclear family (see also Chant, 1997: 281). We prefer the concept of 'household'. In developing countries members of individual residential units are often embedded within strong networks of wider family and kin, and accordingly it makes little sense to confine 'family' only to the nuclear family. Besides, 'household' is more neutral and may be every type of living arrangement of which the members are either related by blood, or by marriage, or not related at all. Another reason for choosing the concept of 'household' is that it has a more active meaning implying people who apply available resources to perform household activities.

To study households we prefer a dynamic, functional approach, because household forms vary per culture and change over time. Even in one country the variation in household forms may be considerable. Rudie (1995: 230-234) uses vernacular concepts, which are important in Malaysia, relating to the house as a physical structure and to features of household organisation. A 'house' may contain social sub-units within which the members either 'eat together' and therefore at least share food expenses, or 'eat separately' which implies separate food budgets for which they may use one or two 'fireplaces'. This is based on the indigenous idiom *dapor* with a wide meaning of 'kitchen' and a more restricted meaning of 'fireplace'. Rudie applies the term 'food unit' for the group eating together at any time, which may be provided by more than one 'unit of support'. The composition of the unit of support does not have to be identical to the composition of the food unit.

Malaysian and Indonesian cultures have a common base, which for example becomes evident in Niehof's research in Madura (1985: 147-184). She describes the meaningful Madurese keywords in domestic organisation. Inside the basic residential unit not all the domestic activities are shared. Madurese people use the terms *apolong* (to unite) and *alaèn* (to be separate) to express whether they cook and eat with each other or with others. Niehof refers to the *apolong* group as the kitchen-unit. The relations between persons occupying one residential unit, which can consist of a compound with several houses or a building with separate private rooms, and a communal space, as well as those forming one kitchen-unit, are based on genealogical and marital ties.

For practical use in the field, we like to follow Rudie's description (1995: 228) of the household as a co-residential unit that is usually (but not necessarily) family-based in some way, which takes care of resource management and primary needs of its members. In a household perspective, we will focus on the household composition,

the economic position of all household members, and the care arrangements within and beyond the household. The interviewers were instructed to include in the elderly household:

- everyone who lives in the same house as the older respondent for the largest part of the year, and
- everyone who eats from the same kitchen, even if they live in another house (e.g. older persons and children), and
- someone who contributes financially or materially to the household for the largest part of her/his income (e.g. circulating migrants), and
- someone financially or materially supported (e.g. boarding students).

Although the arbitrariness of these household boundaries can be discussed again, the above definition came close to the emic definition of the respondents.

4.1.3 Other perspectives

Next to a household perspective, we also use an individual perspective in looking at older persons and their caregivers. Individual older persons receive and provide care and security through a range of relationships of which the primary caregiver in or out their own household may be one of a whole network. Of the older individuals, we focus especially on gender and age differences. Generally, older women outlive older men, and women are the major caregivers in most countries. It is therefore important to distinguish gender differences on both the demand and the supply side of care. We will study older persons of fifty-five years and above. They will have a different living arrangement, health situation, livelihood, care and support relationships. It is, therefore, also important to study the differences within the whole age group.

We focus on the power relationship between caregiver and caretaker to examine the different actors in care. Ungerson (1990: 14), quoting Wærness, asserts that there are three different kinds of care, which denote a different kind of relationship between caregiver and caretaker. First, there is 'personal service' care, which is characterised by an unequal relationship between caregiver and caretaker, where the caretaker is of superior social status to the caregiver. Second, there is the situation where the services provided by the caregiver are services, which the caretaker could provide her/himself and, if relations between them were symmetrical, would indeed do so. Women typically render such services for their husbands, older children and other adult family members. Third, there is 'care-giving work', which is characterised by a relationship between caregiver and caretaker, where the caretaker is incapable of self-care and hence is in a dependent and helpless position to his/her caregiver. This kind of care is particularly consistent and reliable. Examples of care-giving work are mothers caring for their own infants, adult siblings caring for their disabled parent(s) and professional nurses caring for sick patients. Additionally, there is 'spontaneous care' that is not consistent and reliable, but arises impulsively and spontaneously. This kind of care is especially found in communities where neighbours may spontaneously offer each other services without risking an expectation of continuity.

Rudie distinguishes between different caring relationships. When productive household members maintain those who are unproductive, this is a “non-negotiable relation of support that rests on a moral principle, and can only be ended through life-cycle events”. For example, when a child grows up, or an older person dies. On the other hand, when two persons pool their land resources or different skills there exist a kind of cooperation and both have access to the productive assets. This is a “negotiable relation of cooperation that contains a contractual element and can be ended by agreement” (Rudie, 1995: 233). The first relationship can also be described as a dependency relationship, the second one as a reciprocal relationship. Esterman and Andrews (1992: 277) describe different kinds of family support in Southeast Asia which generally involve substantial reciprocity. Older persons may care for grandchildren, do the shopping for multigenerational households, or can be a direct source of financial support to their children when they are still working in agriculture at old age.

There are indications that even when generations do live together, all might not be well. In his study of a Javanese village, White (1976) related two distressing examples of ‘living death’ for older people. “In the household of a relatively wealthy hamlet-head during a household survey, I enquired who was the old lady lying on a mat in a dark back corner of the house, coughing and obviously sick, who had not been mentioned as a household member. He replied: ‘Oh, that’s my mother, but she’s nothing at all’.” In another house, a similar story unfolded. The respondent said that he had not seen his mother (who lived in a shack fifty meters away) for months and that he could not remember her name (in Martin, 1988: 110). Many years later, Hugo found similar cases during fieldwork in West Java. He was struck by ‘the loneliness, poverty and deprivation of older widows and never married women who lived on their own and often had to rely on the charity of the community to survive’ (Hugo, 1992a: 214). These reports all concern women, coincidentally or not, and one wonders whether these are unique or quite common cases.

The growing concern about women and ageing seem to have received impetus from two major factors. The first factor is the differential mortality patterns of men and women that leave older women outnumbering older men. The predominance of females at an advanced age means that many of the problems of health, economics, and social relations in old age are, in fact, problems faced by women. Arber and Ginn (1995) call this ‘the feminisation of later life’. The second factor appears to evolve as part of the more general emergence of feminist studies in the social sciences. The impetus for such studies is provided by three areas of concern: gender differences, gender inequality, and gender oppression (Streib and Binstock, 1990). Our focus is on gender differences in living conditions, care arrangements, support relations and security in old age.

The residential pattern and economic status of older women appears to be quite different from that of older men. In general, women have a higher life expectancy than men. Besides, women are usually younger than their husbands and consequently, they are more likely to outlive their husbands. Hence, there are not

only more women than men in the older age groups, but older women also live alone more often. In a study about the city of Surakarta (Central Java) in the late eighties, Evans found that older men more often live with their spouses in nuclear households than do older women. Older women are more likely to live alone as a widows (1987). Moreover, Rudkin (1993) found in Java that (divorced or widowed) women tend to remarry less than men.

The study of Evans shows that in general the economic position of older women is worse than that of older men in rural Java. At the individual level, older men more often have an income of their own than older women, while older women far more often receive money transfers than older men. Additionally, women receive smaller amounts in total and more often nothing at all (1987). Rudkin also states that older women have lower levels of economic well-being than older men. Women have less control of resources because they are less likely to have an income from work, earn less when they do work, receive smaller remittances even when they are dependent on it, and have been less able to accumulate assets during adulthood (1993). Apparently, rural older women are in a more dependent position than rural older men.

Gender not only determines differences on the side of caretakers but also on the side of the caregivers. Women are the major caregivers to older persons in most societies (Kosberg, 1992a). However, rapid socio-demographic and economic change may cause shifts in care-giving roles. Emigration of men or their relocation to urban areas often leaves women behind (in impoverished conditions) to care for their children as well as their older parents and/or in-laws. It could also be the case that women participate increasingly in the workforce, which raises questions about their availability for taking care of older parents.

In the literature, several terms are used for the older part of the population. Some use 'the aged', more often 'old people' or 'persons of old age', but the term 'the elderly' is mostly applied. Nowadays, at least in Europe and the United States, these terms are considered stereotypical, characterising older persons as poor, dependent, frail and a burden for society (Knipscheer, 1995; Binstock, 1983 in Martin, 1988). Since the eighties, there is a shift to viewing them as individuals who are self-reliant as long as possible, responsible for themselves, and politically powerful in society. Older persons provide substantial instrumental, financial and emotional support for their children and thus are not always on the receiving side. Therefore, we adopt a perspective that is sensitive to the autonomy of 'older persons'.

But what exactly is old, and when is someone an older person? There is no consensus about this in the literature. Old age is defined not only biologically, but also culturally and socially. Rubinstein (1990) mentions a distinction between 'biological age' and 'social age'. Ginn and Arber (1995: 5-12) make distinctions for 'chronological age', 'social age' and 'physiological age'. Many researchers are just using the age at which people officially receive a pension. However, this is arbitrary especially for countries like Indonesia where most people do not receive a pension. The majority of the population does not have a formal job and certainly does not stop

working at the pension age, even when they do receive a pension. Based on intellectual awareness and physical ability, the gerontologist Neugarten distinguishes two strata of older people: the 'Young-Old' and the 'Old-Old'. In the Arabic language a similar distinction is made, and there are different words for a chronologically old man and a dependent old man. From cross-national observations one can generally conclude that there is a fair similarity in the processes and effects of old age in diverse cultures, although with varying chronological patterns of onset and deterioration, and also in the basic needs of the older person (Tout, 1989: 8-10).

We would not make the, already often criticised, error of considering 'the elderly' as a homogeneous group. We will study older persons of fifty-five years and above. It is obvious that persons aged fifty-five years and older will differ socially, economically, with regard to their health, living and care arrangements. Therefore, we also use an age perspective⁴. On the one hand, we will objectively examine differences between age groups (etic approach). On the other hand, we will examine the subjective meanings of becoming and being an older person (emic approach).

From the individual perspective, we will focus on the socio-demographic, health and economic characteristics of the older persons. Moreover, we will focus on the activities of self-care performed by older persons, and on the care that they arrange with caregivers when they cannot care for themselves anymore. From the gender perspective, we will compare the roles of men and women as both caretakers and caregivers. Finally, from the etic age perspective we will delineate certain age groups and from the emic age perspective we will examine the local concepts of old age.

4.1.4 A theory of care

Studies that focus on elder care are typically not driven by theory, but rather examine specific 'problems' in the care-giving environment. It has often been observed that many research studies on human ageing are weak in conceptualization and methodological rigor (Bury, 1995: 15; Dieck, 1984 in Streib and Binstock, 1990: 6; Dwyer and Coward, 1992: 151; Horowitz, 1992; Nolan et al., 1996: 4). Moreover, we did not find any record of theories of (elder) care in studies on older persons in developing countries. We only encountered the call for more detailed data and qualitative information, the construction of culturally 'transportable' items and the need for developing comparative theoretical approaches to ageing (Andrews, 1992; Hashimoto and Kendig, 1992a; Hashimoto et al., 1992b: 294, 303; Hugo, 1992a; Phillips, 1992: 18).

That theories of ageing and elder care are relatively undeveloped is perhaps because the field of care is fragmented and splintered. It has not even been systematically questioned in scientific analyses of modern society. The most important reason for this is that societal theories, which are the starting point for such analyses, do not

⁴ See also the interesting contributions on 'an anthropology of age' of Keith (1980: 352); Keith (1990); Myerhoff and Simic (1978); Myerhoff (1978) and Riley (1987).

view 'caring' as a dimension of human existence that cannot be subsumed under other types of social relationships. However, this requirement is necessary to give coherence to all forms of care. Besides, the gap in theory is symptomatic. 'Care' is not a central category in culture itself, not a basic idea in the legal system, and not a fundamental quality of human existence, comparable to freedom or independence (Manschot, 1997: 102).

Hence, we have to turn to theories of care that are described in studies of developed countries and see if they can be applied to Indonesia. Tronto attempts to develop a moral and political theory⁵ in which care is the most important relation between people themselves and between people and their environment. Tronto feels that a new theory is necessary. She criticises the political sciences and inadequate feminist theory, rejects care as 'women's morality', and ascertains a discrepancy between the daily experience of care and theory. She suggests a new theory in which "care is a central concern of human life" (Tronto, 1993: 180).

Tronto's theory starts from a broad definition of care: "On the most general level, we suggest that caring be viewed as a *species activity that includes everything that we do to maintain, continue, and repair our 'world' so that we can live in it as well as possible*. That world includes our bodies, our selves, and our environment, all of which we seek to interweave in a complex, life-sustaining web" (Tronto, 1993: 103; *author's italics*). Tronto considers 'care' to be an activity, a social practice. She insists that the activity of caring is largely defined culturally, and will vary among different cultures. In our opinion Tronto's views can be applied to Indonesia as well.

Tronto distinguishes four analytically separate, but interconnected, phases in the caring process. These are caring about, taking care of, care-giving and care-receiving (Tronto, 1993). 'Caring about' involves the recognition that care is necessary in the first place. Noticing the existence of a need and making an assessment that this need should be met. Caring about requires the moral element of 'attentiveness'. Only when people pay attention to the situation of others, can they address the needs of others. If they are concerned and care about the other's needs, then they can take care of them. Caring about others is culturally and individually shaped. Some people care about their neighbours, whom they almost consider family, while others do not even know their neighbours.

'Taking care of' involves assuming some responsibility for the identified need and determining how to respond to it. Recognising that one can act to address the unmet needs implies notions of agency and responsibility in the caring process. Taking care of requires the moral element of 'responsibility'. Responsibility is a term that is embedded in a set of implicit cultural practices, rather than in a set of formal rules or

⁵ Tronto often qualifies the ethic of care as a moral and political theory. 'Moral' refers to the value that should be developed in the attitude towards and activity of caring. 'Political' means that the dimension of caring should be the point of departure for the organisation of the society (Tronto, 1993).

promises (obligations). Ultimately, the responsibility for care rests on a number of factors. For example, being a member of a family might make one feel responsible for elder relatives. One might also assume responsibility because one recognises a need for caring, and there is no other way that the need will be met except by meeting it. In this way, one might feel responsible for taking care of a childless, elder neighbour, because s/he has no one else who could provide for him/her.

'Care-giving' involves the direct meeting of needs for care by physical work and face-to-face contact. Examples of care-giving are the child giving food to an older parent, the neighbour talking to a friend, the repair person fixing a broken thing and the nurse administering medication to a patient. Giving money is not a form of care-giving, because money does not solve human needs, though it provides the resources by which human needs can be satisfied. Care-giving requires the moral element of 'competence'. Failing to provide good care, means that in the end the need for care is not met and hence, care has not been given adequately. If a child has given money to the older parent to buy food and the parent does not succeed in actually buying the food because the money provided is not enough or the food is not available, then the problem is 'taken care of' but care has not been given competently.

'Care-receiving' implies that the object of care responds to the care received. For example, the parent seems content after being fed, the friend feels less worried after a talk, the problem is repaired and the patient looks better. It is important to include the perspective of the care-receiver as an element of the caring process, because it provides the only way to know that the needs for care have actually been met. Care-receiving requires the moral element of 'responsiveness' of the care-receiver to the care. Throughout our lives, all of us go through varying degrees of dependence and independence, of autonomy and vulnerability. However, to respond in a way that shows the given care is adequate, the care-receiver needs to be aware of his/her vulnerability and accept his/her dependency of the care-provider.

Care is a practice, which involves both thought and action. Good care requires that the four phases of the care process must fit together into a whole. Similarly, to act properly in accordance with an ethic of care requires that the four moral elements of care be integrated into an appropriate whole. However, care also involves conflict within each of the phases and between them. For example, the child may think that the older parent is given good care because the parent receives the food that s/he needs. However, the parent may rather receive other food or clothes instead. Besides, the child may experience a conflict between the time that s/he can spend on giving care to her/his parent and on giving care to her/his own children. This brings us to another aspect of good care. Good care requires a variety of adequate resources such as material goods, time and skills. Given the likelihood of conflict, of limited resources and of divisions within the caring process, the ideal of an integrated process of care will rarely be met. Nevertheless, this ideal can serve us analytically to determine whether care is being well provided. Conceptually care is both particular and universal. The construction of adequate care varies from one group to another and from culture to culture. Adequate care may vary, for example, for men and

women, for children and older persons, and for Dutch and Indonesian people. Care is nonetheless also a universal aspect of human life, because all humans have needs that others must help them meet (Tronto, 1993).

4.2 Studying ageing problems

Now we have presented our theoretical premises, we can describe the research problems, objectives and questions. The research problems are derived from a literature review of studies on older persons in Indonesia. In general, the research problems arise out of a lack of knowledge and a lack of theory about older person's lives, elder care and old-age security in Indonesia. Therefore, we have a descriptive objective and a theoretical objective. The research questions are based on the research problems.

4.2.1 Research problems

The literature on studies of older persons in Indonesia is limited. Table 4.1 presents an overview of the available literature published until 1997 on which we could have based our research objectives before we started the fieldwork. Most of the studies use the decennial national censuses and intercensal surveys of the Central Bureau of Statistics (*Biro Pusat Statistik*), or refer to other studies in the overview. A small number have carried out surveys themselves such as Sunarto (1978), Syryani et al. (1988), Kartari (1993) and Rahardjo et al. (1994b). Only a few case studies of older persons are available, such as Adi (1982), Evans (1987; 1988; 1990), Matulesy (1990) and Hugo (1972 in 1992b). The majority of the studies are about Java or the whole of Indonesia, usually not explicitly stating whether it also concerns (all of) the so-called Outer Islands. There is no extensive study especially focusing on older person's living circumstances and care arrangements in a rural area. Older persons are mostly defined as people aged sixty years and older.

Of the topics in the studies given in Table 4.1, mostly demographic ageing has been encountered (Adlakha and Rudolph, 1994; Hugo, 1992a, 1992b, 1994b; Naim, 1981; Niehof, 1995; Shinta, 1990; Wirakartakusumah et al., 1994e). Chapters 2.3 and 3.2 in this thesis describe the process of demographic ageing in detail. The ageing of a population is the result of demographic processes, such as decreasing fertility and increasing life expectancy. The elderly population has grown and is still growing very fast in Indonesia. The ageing process is usually concurrent with social changes such as improving health conditions, increasing educational attainment and urbanisation, resulting in a change of family structure from extended to nuclear family and a flow of young people from the rural to the urban areas. When persons live longer, we expect that they become more frequently frail and destitute and need more care in old age. However, when their children have left the village, it will become more difficult for them to comply with the obligation to give care to their older parents. Therefore, parents will be less certain that they will receive care from their children when they are old (Chen and Jones, 1989; Mason, 1992).

Table 4.1 Literature overview of studies on older persons in Indonesia (until 1997)

Year	Author(s)	Study field	Main subject(s)	Age of object	Source of data
1978	Sunarto	DIY: Bantul (rural)	Economic livelihood	60-79	1977 Questionnaires
1980	Shinta	DIY	Demographic ageing, Socio-economic conditions, Migration	55+	1980 Population Census
1981	Naim	Indonesia	Demographic ageing	-	Literature study
1982	Adi	Jakarta (urban)	Elderly homes	55+, 60+, 70+	Questionnaires, interviews
1985b	Evans	Indonesia	Handicap	55+	1982/3 SUSENAS Survey
1987, '88, '90	Evans	Solo (urban)	Old-age security, economic well-being, nutritional status	55+	1981-2 Household census, Old people survey, observations
1988	Boedhi-Darmojo	Indonesia	Disease patterns	-	Literature study
1988	Syryani et al.	Bali (rural)	Physical and mental health	65+	1986 Interviews, psychological measurements
1988	Sigit	Java	Socio-economic status	60+	1985 Intercensal Population Survey, 1986 ASEAN Survey of elderly households on Java
1989	Chen & Jones	Indonesia	Socio-economic status	60+	1984 ASEAN Population Project
[1990]	Matulesy et al.	DIY: Sleman, Kulon Progo (rural)	Nutritional status	60+	1989 interviews, observations, medical assessments
1992, '94	Hugo	Indonesia: (West) Java	Demographic ageing, migration, well-being	60+, 65+	1975 West-Java study, 1984 SUSENAS Survey, 1986 Intercensal Survey, Literature study
1992, '93, '94	Rudkin(-Minitot)	Java	Gender, (economic) well-being	60+	1986 ASEAN Survey of elderly on Java
1992	Soepardo	Indonesia	Social well-being	55+	1991 preliminary ESCAP country case study
1993	Jones	Indonesia	Fertility, old-age security	60+	1986 ASEAN Ageing Survey
1993	Kartari	Cempaka Putih (urban)	Health, age-associated diseases	30+ (50-59, 60-69, 70+)	Questionnaire, Physical examinations
1994	Adlakha & Rudolph	Indonesia	Demographic ageing	55+, 65+, 75+	Literature study, Census
1994	Rahardjo et al.	Lampung Tengah, Sukohardjo (rural); Bogor, Pasuruan (urban)	Health, quality of life	60-69	Survey
1994a	Rudkin	Java	Nursing homes, attitudes	60+	1986 ASEAN Survey of elderly on Java
1994	[<i>Warta Demografi</i>]	Indonesia	Special issue on Elderly (<i>Lansia</i>)	-	Literature study, Census
1994 ^e	Wirakartakusumah, Nurdin & Wongkaren	Indonesia	Demographic ageing, women, social policies	60+	Literature study, Census
1995	Niehof	Indonesia	Demographic ageing	-	Literature study
1996	Hugo	Indonesia	Social change, intergenerational wealth flows	-	Literature study, Census

- : age is not explicitly stated.

In the eighties and early nineties most of the studies in Table 4.1 are about the socio-economic conditions and well-being of older persons (Chen and Jones, 1989; Evans, 1987, 1988, 1990; Hugo, 1992a, 1996; Jones, 1993; Rudkin, 1993, 1994b; Rudkin-Miniot, 1992; Shinta, 1990; Sigit, 1988; Soepardo, 1992; Sunarto, 1978). The well-being of older persons is influenced by a complex set of interacting factors such as their living conditions and arrangements, income and social contacts. In Indonesia, the majority of older persons live with spouse and other kin. Few older persons live alone. Older women are more likely to live alone and be widowed, because many women outlive their husbands due to greater longevity and the tendency of being younger than their husbands (Hugo, 1992a). Since older women earn less and receive smaller amounts of financial support than older men, they have a higher risk of poverty especially when they live alone (Evans, 1987, 1988; Rudkin-Miniot, 1992). Most of the older persons who work are in agriculture. They usually continue to work until disability prevents them from doing so, although there are usually changes in both the type and intensity of work undertaken with increasing age. Notwithstanding, their income being the main source of support, many older persons still (additionally) rely on the (grand) children for economic and social support (Hugo, 1992a; Jones, 1993). Talking with friends and neighbours is the most important leisure time activity of older persons in Indonesia (Chen and Jones, 1989).

Some of the studies in Table 4.1 focus on nutrition or health (Evans, 1985b, 1990; Syryani et al. 1988; Boedhi-Darmojo, 1987; Matulesy, 1990; Kartari, 1993; Rahardjo et al., 1994b; *anon.* Warta Demografi, 1994). Syriani et al. (1988) found that older persons in a Balinese village were in relatively good physical health. Besides, the most prevalent mental disorders were anxiety, depression and early dementia, reported to be caused by - among others - loneliness and tension within families. Evans (1985b) investigated older persons with a handicap and concluded that they run an especially high risk of dying. Overall, very little is known about the health of older persons or morbidity in Indonesia. Only Kartari compared the health of older persons with that of younger persons and found that older persons experienced more illnesses due to the natural physiological process of ageing. The most common symptoms were headache, cough, eye and ear problems, joint pains and dental problems. The four most prevalent chronic conditions among older persons are arthritis, heart diseases, hypertension and diabetes mellitus (1993). Evans (1990) related the economic status of older persons to their nutritional status. He found that control of funds is a crucial determinant of the nutritional level of older persons in Javanese households. Food and nutrition are important for the quality of life of older persons. Matulesy (1990) reported that most of the elderly respondents were undernourished. The JEN-study compared a so-called Young-Old group in rural and urban areas. They found that older persons living in urban areas more often feel unhealthy compared to their counterparts living in rural areas (Rahardjo et al., 1994b). Increasing longevity will create more (health) problems.

The small number of studies on elderly homes also reflects the low availability of institutional care in Indonesia. The first study is a case study of older persons living in the three governmental and six private elderly homes in Jakarta by Adi (1982). He

found that inhabitants are usually poor and their living conditions improved after entering the homes. The major reason for living in a home is 'lack of harmony' between the older person and son- or daughter-in-law. In general the inhabitants feel happy and satisfied with the conditions in the homes. The second study uses secondary data from a survey to examine attitudes of older persons towards nursing homes. Rudkin (1994a) concludes that the small percentage of persons willing to consider the option of institutional care and the feeling of many respondents that the family is obligated to care for its older members make clear that the present system of reliance on family care-giving has much support. However, older persons who are childless, whose families live in poverty, or who have kin unwilling to provide support face serious problems.

The majority of the studies on older persons apply quantitative methods, which usually do not examine complex correlation and effects. The lives of older persons, arrangements of elder care and support relationships within and beyond the elderly household are yet little studied in Indonesia. The effects of socio-demographic, health and economic characteristics on care arrangements and support relations or the effects of care arrangements and support relations on old-age security are not yet studied at all. Moreover, to our knowledge there are no theoretical conceptualization of and widely accepted measuring instruments for types of care and support received by older persons in developing countries.

Although decreasing, population growth in Indonesia is still placing great strain on the provision of all types of public services and utilities (Hugo, 1992a). However, the government provides limited special services for particular groups of older persons, and relies on private and charitable groups to assist in providing for the needy. Social security programmes are typically limited to employed individuals with complementary special welfare programmes for the impoverished and the impaired (Chen and Jones, 1989; Jones, 1993). To be able to anticipate future needs of older persons and to formulate appropriate policies, it is important to know more about the living conditions of older persons and the care that they have (not) arranged with household members, kin, friends and neighbours. The Suharto government acknowledged the problem of their 'low priority' given to ageing and having 'inadequate information' about older persons and the problems they experience (Nardho Gunawan, Director of Family Health, Ministry of Health, in Hugo, 1994c: 74).

4.2.2 Research objectives and questions

The present research addresses the issue of inadequate information and knowledge, and the absence of theoretical conceptualization. Hence, the research objective has a descriptive and a theoretical component. This research aims to:

1. Gain insight into the lives of older persons, particularly regarding the care they provide themselves and receive from others at the micro-level (household-kin-community). Moreover, it aims to identify the transitions in elder care to be better able to anticipate the needs for elder care in Indonesia in the future.

2. Develop a theoretical framework for care that will be applicable in Indonesia and countries of similar socio-economic and cultural setting. The theoretical framework starts from the assumptions and concepts found in the literature, which are adapted to and tested in the local situation.

From the research problems described in sub-section 4.2.1, the central question can be formulated as follows:

HOW DOES SOCIAL CHANGE AFFECT OLDER PERSONS' LIVES, AND WHAT IS THE SIGNIFICANCE OF CARE ARRANGEMENTS AND SUPPORT RELATIONS FOR OLD-AGE SECURITY?

This general research question will be subdivided below. Before we can investigate the care practices and relationships of older persons, we first need to know more about the living conditions of older people. What are the socio-demographic, health and economic characteristics of the lives of older people? Or more generally stated:

1. HOW CAN THE LIVES OF OLDER PERSONS BE CHARACTERISED?

We are primarily interested in the care practices and support relations of older persons. The supporting activities that older persons provide for themselves, that people in their personal network can give to them, and that they can provide for others. What care arrangements do older persons have? What support relations do older persons have? The individual care arrangements and support network of an older person may lead to patterns of elder care. Hence, the second research question is:

2. WHAT PATTERNS OF ELDER CARE CAN BE DISTINGUISHED?

It will be useful to determine indicators of elder care to assess the needs and well-being of older persons. How secure do older persons feel and what are the factors that influence this feeling? With the relevant indicators it will be possible to assess, act on and prevent problems with care for older persons. Moreover, we assume that people have strategies to provide for a secure old age. This results in the following research questions:

3. WHAT FACTORS AFFECT OLD-AGE SECURITY?
4. WHAT LIVELIHOOD STRATEGIES ARE IMPORTANT FOR OLD-AGE SECURITY?

It is assumed that in the course of time elder care patterns are continuously changing under the influence of processes of cultural change, socio-economic transformations and demographic transitions. Cultural change will bring about changes in norms and values, including those concerning care. We can expect that there will be discrepancies between the norms and values of older parents and the norms and values of their children. For example, while the children traditionally have the obligation to provide care for their parents, changing circumstances will affect their

willingness and ability to do so. These circumstances can be demographic and socio-economic. Demographic change consists of the processes of ageing and dejuvenation of the population, which affect the dependency ratio and make it more unfavourable for older persons. Socio-economic change consists of the general improvement of living conditions such as increasing income, rising levels of education and improving health services. These conditions may change the need for elder care and resources of support. This leads us to the last research question.

5. HOW DO PROCESSES OF SOCIAL CHANGE AFFECT ELDER CARE AND OLD-AGE SECURITY?

We need to emphasise that this study does not aim to study the processes of social change themselves. The point is how processes of social change have affected and still are affecting practices of elder care by comparison of two villages. Of one village it was assumed that it is not much affected by social change and that the elder care still is much as it traditionally was. Of the other village it was assumed that it has been affected by social change. Therefore, elder care can be assumed to have changed as well. By comparing the practices of elder care in these villages, we intended to find out how processes of social change affect elder care.

4.3 Defining and assessing care for and security of older persons

In order to plan for adequate services and policies, we need to know more about the lives of older persons, their living conditions, sources of income and health situation. Against the background of social change, we study the care arrangements and support relationships, old-age security and livelihood strategies of older persons. The definitions and assessment of the main concepts are presented in this section.

4.3.1 Elder care and support

As mentioned before, we follow the broad definition of care by Tronto and Fisher: "Caring is viewed as a species activity that includes everything that we do to maintain, continue, and repair our 'world' so that we can live in it as well as possible. That world includes our bodies, our selves, and our environment, all of which we seek to interweave in a complex, life-sustaining web". Caring is an activity that as an ongoing process consists of the four analytically separate, but interconnected phases of caring about, taking care of, care-giving and care-receiving (Tronto, 1993: 101-24).

In general three types of care are distinguished: self-care, informal care and formal care. Self-care is the care that an individual provides for her/himself in response to her/his needs. The care provider and receiver is the same person. Informal care is provided on a the bases of emotional ties and often willingness to reciprocity within a small group, for instance a household, family, friends, neighbours or church members. In principle, every group member can be the care provider and receiver. Formal or professional care is given by a person who does this as a profession and

for which s/he is paid. The roles of care provider and receiver are not exchangeable for this type of care (Hattinga-Verschure, 1977). The focus of this thesis is on elder care. Elder care usually refers to the care that is provided for an older person and does not include the care that older persons themselves provide for others. However, the last type of care is also an important aspect of this research.

In the literature there is generally no explicit distinction made between the terms of 'care' and 'support'. Nevertheless, authors use these terms specifically for different types of aid activities. CARE usually concerns the personal aid, nursing practices, general daily and household activities. Besides medical care, these are often called the personal or physical activities of daily life (ADL) and include basic functions such as washing oneself, going to the toilet, getting dressed, eating, walking and sitting. Hashimoto and Kendig define SUPPORT as "aid rendered to meet specific needs in the categories of instrumental, financial and emotional support, and it includes aid provided as well as received by older people" (1992a: 10). Instrumental activities of daily life (IADL) include capabilities as shopping, cooking, doing the laundry and cleaning the house. FINANCIAL SUPPORT can consist of monetary support, which is the gift of money, and of material support, which is the gift of goods such as food or clothes. EMOTIONAL SUPPORT is defined as the "supportive interactions that include conversations in which one person shows understanding for the other person's situation" (Tilburg et al., 1995: 131). The often studied ADL and IADL concern standard activities (Esterman and Andrews, 1992; Klein Ikkink et al., 1995; Knipscheer et al., 1995), which make them suitable for comparative research.

To avoid a negative connotation we will use the term 'elder care' instead of 'elderly care', 'care for the elderly', or 'care for the aged' (see the discussion in sub-section 4.1.3). In this study, the starting point is the self-care that an older person provides for her/himself. It is assumed that other providers of care and support will only help when the older person cannot do it or does not want to do it her/himself anymore. The process of elder care is considered a continuum on which informal and professional care increasingly replace self-care practices, if available. We also study the care and support that older persons provide for others and the interaction between givers and receivers of care.

4.3.2 *Living and care arrangements*

The living arrangement of older persons strongly determines the opportunities and needs for engaging in social interaction. Many studies on older persons describe the living arrangement, but to our knowledge none of the studies defines the concept of living arrangement (Anh et al., 1997; Bond, 1993; Chan, 1997; Domingo and Casterline, 1992; Hiroshima, 1993; Knipscheer et al., 1995; Knodel and Chayovan, 1997; Knodel and Debavalya, 1997; Lawton, 1982; Liefbroer and Gierveld, 1995; Mehta et al., 1992; Natividad and Cruz, 1997; Tsuya and Martin, 1992; Vos and

Holden, 1988)⁶. It seems as if they use the terms 'living arrangement' and 'household' alternately, while we speak of 'household composition'. Knipscheer et al. (1995: 9) endorse this by saying that living arrangements pertain to forms of residence (in private home or institution) and to household composition.

However, we prefer to make a distinction between household composition and living arrangement. How we define the household is already described in sub-section 4.1.2. The household refers to the people who live or eat with or support for each other for the largest part of the member's income or for the largest part of the year. The household composition refers to what kind of people makeup the household. For us the concept of living arrangement consists of more than the people who live together and it consists of more than the dynamic and functional definition of household mentioned above. Living arrangement refers also to planning for, preparing of and agreeing on how people want to live together (or not). The household composition is the outcome of the living arrangement.

Additionally, we would like to distinguish 'living arrangement' from 'care arrangement'. We do not know of any study that applied the concept of care arrangement except for Luijkx (2001) and Branderhorst (1999). They both describe the care arrangement as the distribution of care among the different types of care providers such as self-care, informal and formal care. An older woman, for example, takes care of her own body and performs light household tasks herself, a daughter provides for the heavy household tasks once a week, and a professional service brings her warm meals daily. We think of a definition of the concept of care arrangement that is analogous to the definition of living arrangement. We emphasise the phases of negotiation, agreement, decision-making, planning and preparation about how a person wants, in this case, to organise the care and support for her/himself and by others, besides the realisation of the actual caring activities. The whole of all the settlements about the care and support activities between an older person and others is the care arrangement.

4.3.3 Support network relations

Older persons can receive care and support from different people, to whom they can provide aid in turn. The older person is linked to all these people by social ties and the complete set of such linkages forms the support network⁷. It is called a 'personal network' when one focuses on the ego-centred set of social linkages that

⁶ Vos and Holden (1988) wrote a valuable article on a classification of household arrangements by discussing four indicators. The indicators are headship rate, relationship of others to household head, coresidence of parents and children, and family household type. Although they emphasis the difference between 'household' and 'family', they do not distinguish between 'household' and 'living arrangement'.

⁷ 'Support networks' need to be distinguished from 'social networks'. Social or total networks comprise of all one's social contacts. Support networks are partial or purposive networks directed towards the fulfilment of specified purposes such as the provision of care (Nolan, Grant and Keady, 1996: 8-11).

respondents may have with significant others, and one does not look into the complex relationships between these others (Mugford and Kendig, 1986; Sokolovsky, 1986). "Many anthropologists take a network approach [...] to not only interpret the social behaviour of the persons involved (Mitchel, 1969), but to analyse the basis of strategic 'mobilisation of people for specific purposes under specific conditions' (Whitten and Wolfe, 1973). In this latter sense, personal networks are frequently discussed in practical terms as a 'support system' involving 'an enduring pattern of continuous or intermittent ties that play a significant part of maintaining the psychological and physical integrity of the individual over time' (Caplan, 1974 in Sokolovsky, 1986: 233-4).

Cantor has conceptualised the social support system of the older person as a series of concentric circles each containing a different type of support element or subsystem. In this model the older person is at the centre and the sources of support radiate outward according to the degree of social distance from the older person (i.e. nearest to the farthest) and the bureaucracy of the support element (i.e. informal to formal). The older person interacts with the subsystems, which in turn interact with each other. Closest to and the most involved in the daily life of the older person are the informal support relationships of kin, friends and neighbours. Older persons most frequently have interaction with these significant others. The most common caring interactions are the direct reciprocal exchanges between the older person and members of her/his informal network. Only among the frailest, most disabled older persons the pattern of assistance tends to be asymmetrical, flowing in only one direction or lesser in one direction than in the other. In the next ring are the quasi-formal service organisations, often mentioned as mediating structures, which include religious organisations, racial, cultural, social and neighbourhood groups, as well as individuals like the postman, shopkeeper and building superintendent. These groups or individuals often serve as a link between the individual and society, and they can also offer informal assistance. In the two outer rings of the system are the public and voluntary service organisations, which carry out the economic and social policies and programs mandated by public laws, and the political and economic institutions, which determine the basic entitlements available to older persons (Cantor and Little, 1985).

In the present study, the ties of the older person are narrowed to the four inner circles of Cantor's model of social support: the older person, kin, neighbours, friends and mediating structures. To fit our purposes, we modified the model by distinguishing between household members (first ring), other kin (second ring) and neighbours/friends (third ring) around the older person. If the older person does not live alone, her/his household will usually consist of kin like spouse, children, children-in-law and grandchildren, although s/he can also live with other kin or non-kin. The quasi-formal service organisations (fourth ring) are taken into account, because we expect that social organisations and neighbourhood groups will be firmly intertwined with the personal relationships of the older person. The formal, professional care organisations are not part of this study, because these are no alternatives in the rural areas of Indonesia (see Chapter 3.1.3). Outside the older person, the indirect ties between the members of her/his network fall beyond the scope of our research. We

are mainly interested in the support system or support network relations of the individual, older person.

4.3.4 Old-age security

The concept of social security in relation to old age is usually regarded as the statutory social security programme that provides an 'old-age benefit' for the demands of a particular contingency, in this case retirement, for the needs of a particular individual, the older person⁸. It indicates that the social security cash benefits (e.g. pension) and social services (e.g. health care, recreational programmes and institutional elder care) are two sides of one coin. This approach originates from the International Labour Office, which defines social security as "the protection which society provides for its members, through a series of public measures, against the economic and social distress that otherwise would be caused by the stoppage of substantial reduction of earnings resulting from sickness, maternity, employment injury, unemployment, invalidity, old age and death; the provision of medical care; and the provision of subsidies for families with children" (ILO, 1984: 1-10, 55-66).

However, we agree with Franz and Keebet von Benda-Beckman in their criticism of the limitations of such an 'institutional approach'. We favour their empirical definition of social security, which says that it refers to "efforts of individuals, groups of individuals and organisations to overcome insecurities related to their existence, that is concerning food and water, shelter, care and physical and mental health, education and income, to the extent that the contingencies are not considered a purely individual responsibility, as well as the intended and unintended consequences of these efforts" (Benda-Beckmann, 1994: 14).

Following the 'functional approach' suggested by Franz and Keebet von Benda-Beckman, we use the concept of old-age security to indicate the relative state of security of older persons, thus referring to their food security, health security, physical security, economic security and emotional security. Old-age security is influenced by the individual characteristics of socio-demographic status, nutritional-health status (including physical capabilities), and economic status of the older person. It is also influenced by the care arrangements of the older person through which personal care, and instrumental, financial and emotional support are transferred or appropriated to deal with insecurity, or through which plans are made to have them transferred in the future. Furthermore, it is influenced by the support network of the older person consisting of the social relationships between the older person and her/his household members, kin, neighbours, friends and community members who are the recipients and providers of old-age security. Finally, old-age security is studied through the individual perceptions of the older person about present and future situations of need and distress with regard to food, health, physical

⁸ See Soepardo (1992); Nugent (1990); Chen and Jones (1989); Jones (1988); Evans (1987); Esmara and Tjiptoherijanto (1986); Griffin (1986) and Ihromi (1989). Ihromi also acknowledges and briefly describes the 'non-statutory social security system' (1989: 140-2).

capabilities, economic sufficiency, and emotions. An older person is insecure when s/he is not feeling certain about her/his food supply, health situation, physical capabilities, financial situation or when s/he is emotionally unsatisfied. This is equal to what Cecora et al. describes as a person's "subjective perception of its situation ('subjective well-being')⁹, reflected in the degree of satisfaction with life in general and with its estimation of life's compatibility with socially prevalent values and attitudes" (1994: 163). Concepts similar to 'old-age security' that are used in other studies are 'well-being', 'quality of life', 'need', 'poverty' (Hughes, 1993), 'poverty' and 'inequality' (Walker, 1993), 'happiness' (Rudkin, 1994b) and 'standard of living'.

4.3.5 Livelihood strategies to secure old age

Some studies on older persons, (elder) care or old age apply the concept of 'coping strategies' (Apt, 1996; Degazon, 1987; Nieboer, 1997; Nolan et al., 1996; Slangen-De Kort, 1999). None of the studies on older persons that we are aware of apply the concept of 'livelihood strategies'. We would like to suggest a clear distinction between the definition of coping strategies and livelihood strategies, because especially the concept of coping strategies needs to be treated with caution. While strategy should be restricted to forward-looking approaches, coping is predominantly reactive towards a stressful event or situation (Pennartz and Niehof, 1999). Davies (1996: 45-59) describes the shortcomings of the concept of coping strategy extensively for the food security approach, which can easily be converted to old-age security. It seems as if such a discussion has just started among authors about family care since the majority still refers to it as the way individuals deal with difficult situations (Nolan et al., 1996: 58).

A livelihood is the material means whereby one lives. One needs to have (access to) enough assets and resources (including management and planning capabilities) to achieve a secure old age. In case one has not or will not have enough assets and resources, one needs to plan how one will be taken care of when one is too old to care for oneself. One has to arrange the care and support for one's old age. A livelihood strategy is thus defined as the ability to maintain and improve (old age) security while maintaining or enhancing the assets and resources on which households depend (after Niehof and Price, 2001).

Coping strategies are a particular kind of livelihood strategy employed by rural households that aim at dealing with recurrent, hence foreseeable, situations of stress. For example, lean months during the pre-harvest period, for which agricultural households are more or less prepared (Niehof and Price, 2001). An example concerning care is a person who suffers from a chronic disease that sets in with cold weather. Checking the weather forecasts (thinking) and dressing warmer (acting) to

⁹ As opposed to "objectively measurable circumstances, which are called 'living conditions' such as the quality of housing and infrastructure, the material level-of-living, and diverse opportunities" (Cecora, Claupein and Kaleta, 1994: 163).

take precautions and avoid becoming harmed by the recurring, stressful event of the disease are coping strategies.

Strategies, both livelihood and coping, are actions within a relatively long-term perspective. Coping strategies have to be distinguished from 'coping' itself. Coping can be described as a short-term response to an immediate and unusual stressful event, such as hunger after a natural disaster or handicap after a fall. When people or households are just coping, they try to manage and overcome a stressful event or situation for which they could not prepare. Coping is just a short-term reactive response, which has not been premeditated and, hence, does not have a strategic character (Davies, 1996; Niehof and Price, 2001). Consequently, the title of Apt's book: "Coping with old age" (1996) seems contradictory.

A secure elderly household has effective and viable livelihood strategies to avoid and resist stress and shocks in old age. Such a household is able to bounce back when affected and does not need coping strategies. A vulnerable elderly household needs effective coping strategies to bridge recurrent, hence foreseeable, difficult periods but are normally able to do so. An extremely vulnerable elderly household will break down in a situation of stress because of lack of assets and an inability to develop effective coping strategies (after Niehof and Price, 2001: 16-18).

Old age is not an unforeseen or unexpected event. Everybody knows that one will become old(er) at some point. Besides, we would not suggest that old age is a stressful situation, although typical old age problems can cause stress but not necessarily for every older person. Therefore, we are not interested in coping strategies and prefer to study livelihood strategies by which older persons plan for a secure and worry-free old age. Livelihood strategies are dynamic; they respond to changing pressures and opportunities and they adapt accordingly (Ellis, 2000). When processes of social change are affecting elder care and support, livelihood strategies to secure old age probably need to adapt too.

4.3.6 Analytical framework

To enable the assessment of Tronto's theory of care and to study the issues of care in practice, we make distinctions between the older person's individual attributes, care arrangements, support relations, old-age security and livelihood strategies. The individual attributes of an older person consist of:

- socio-demographic characteristics, such as age, gender, village, religion, educational attainment, marital status, household composition and size, (co-) residence and children;
- health characteristics, such as nutritional health, functional capacities of daily activities, physical and mental well-being, disease and illness;
- economic characteristics, such as work or retirement, individual and household income, food crops, trees and water (resources), house, land, livestock and household items (assets).

The care arrangements and support relations are characterised according to type of care activity and type of relationship, for which we focus on the situation in and outside the elderly household. The activities consist of the personal activities of daily life (ADL), instrumental activities of daily life (IADL), financial support of money and material, emotional and social support. The relationships of the older person are with household members, (other) kin, neighbours, friends and community members of social groups or organisations.

The security in old age consists of the older person's own perception of her/his food security, health security, economic security and emotional security. At the start of the fieldwork, we did not know more about livelihood strategies to secure old age other than some vague notions concerning remarriage after death of the spouse, rotating residence, house move nearer to children and delay of property transfer. Hence, this part of the study needed to be explored.

This chapter has introduced the primary concepts and research approaches in our study of older persons, elder care and old-age security. The analytical framework that relates the concepts was initially based on the simple schema of Kendig (1986: 15).

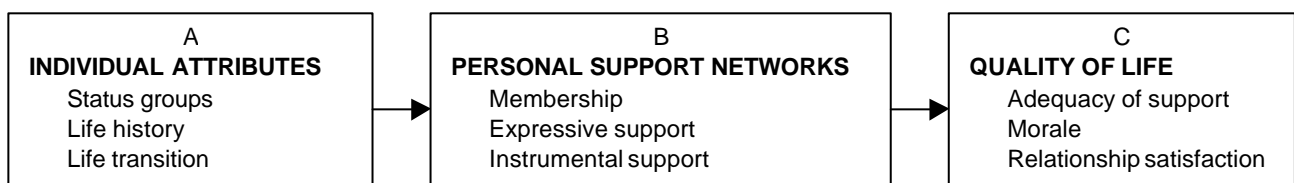


Figure 4.1 Schema of support networks perspective (Kendig, 1986; Gibson and Kendig, 1982).

Kendig's schema (Figure 4.1) shows the central attention given to the membership of personal networks and the kinds of support that flow through them (B). These ties are understood in terms of diverse experiences of individuals over the entire life course, and the status characteristics that situate them within the broader social structure (A). The importance of networks is assessed by the adequacy of support, and its impact on satisfaction with relationships and quality of life (C). Using Kendig's schema as a point of departure, we developed the analytical framework in Figure 4.2 to suit our research purposes.

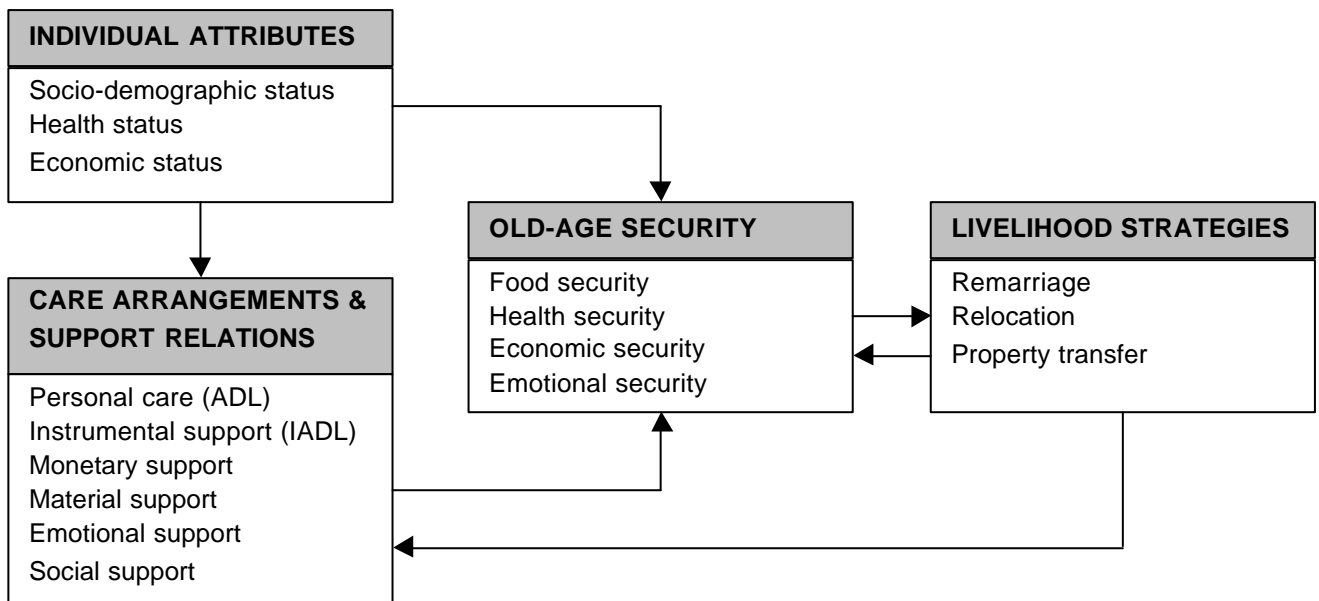


Figure 4.2 Analytical framework

The individual attributes affect the old-age security directly and indirectly through the care arrangements and support relations that an older person has. When a person is not secure in old age, s/he has to develop strategies to overcome the insecurity and become more secure again. We expect that important livelihood strategies are flowing through the care arrangements and support relations that an older person can employ to secure old age.

5. Methodology

This chapter presents the methodology of the research project. A methodology implies more than a description of the methods used. Therefore, the justification of why certain methodological decisions were made is also presented. The first section of this chapter describes the research design. The second through the fourth sections are about the selection of the research areas, survey respondents and respondents to the qualitative fieldwork. The last section describes the applied methods of data collection and analysis.

5.1 Research design

The research was descriptive and explorative. The descriptive character of the research is a consequence of the objective to gain insight into the lives of older people and the practices of elder care. We studied older people to observe their characteristics and daily activities, the kind of care and support they receive and provide, and the members of their support network. The research also had an explorative character, because we tried to identify the variables explaining why older people are socially secure or insecure with regard to their care arrangements, and what kind of strategies they have developed to cope with insecurity. Finally, we explored how and why elder care is changing.

The whole research project lasted from March 1995 until 2002. The research project consisted of three phases: the preliminary research, the fieldwork, and the data analysis and research reporting. For reasons elaborated below, the original set-up of the fieldwork was different from its actual implementation.

Figure 5.1 presents the research design with the different phases, time schedule and locations of the research project.

Preliminary research

After a short period in the Netherlands, preliminary research was carried out in Jakarta and Yogyakarta. The purpose was to collect additional data for the preparation of the research proposal, funds acquisition of research costs and development of field knowledge. I explored the existing knowledge about elder care, the experiences of Indonesian experts and the literature of Indonesian institutes. The possibilities for recruitment of an Indonesian counterpart, who would study the elder care in urban Yogyakarta, and a research assistant were investigated at the Population Studies Center of the Gadjah Mada University in Yogyakarta. I visited the rural area of the Special Region Yogyakarta to get a feel for the research area and population and used this period for an intensive course in the Indonesian language (*Bahasa Indonesia*).

Finally, in the Netherlands a research proposal was developed and the fieldwork was prepared.

Original set-up of fieldwork

Arrangements were made to have the Indonesian counterpart, the Population Studies Center of the Gadjah Mada University in Yogyakarta, start the project with a Household Inventory Survey. With this survey we intended to obtain a general insight into the composition of the population as the age structure, the socio-economic status of the households, the household composition and the health situation of older people.

We had planned to carry out the fieldwork in four stages:

1. Selection of research areas,
2. Qualitative data collection (key-informant interviews and focus group discussions),
3. Quantitative data collection (survey), and
4. Qualitative data collection (case studies).

The goal of the first stage of the fieldwork was to select the research areas based on the data of the Household Inventory Survey. The second stage had several goals: to obtain knowledge about indigenous concepts of old age and elder care, to obtain a general view of life for older people in the villages, and to establish rapport with the village population. These qualitative data were supposed to be incorporated into the questions of the survey on elder care in the third stage of fieldwork. The quantitative data gathered from the older respondents and their primary caregivers aimed at validation of the qualitative findings for the whole population. The fourth stage aimed to collect more detailed and sensitive qualitative data that is difficult to withdraw from older people or people in general. The case studies in this phase would provide the data with which we could interpret the survey results and investigate conditioning relationships and causative factors, processes and patterns.

Final research design

The original research design had to be adapted for several reasons. The research permit was issued much later than was expected, which delayed departure to Indonesia and forced me to start two months later in September 1996. Upon arrival in Yogyakarta the Household Inventory Survey had not been carried out by the Population Studies Center. It was argued that the data needed for the Household Inventory Survey could be extracted from available secondary data, but that proved to be unfeasible. The data collected from the statistical offices at provincial, regency and sub-district level were processed data. The desired cross-tabulations could not be made with these data, and most of the data were inappropriate for our purposes. Hence, the selection of the research areas demanded more time than was originally planned and the period until

the general elections in May 1997 consequently became shorter. To save time¹, the survey was carried out earlier. The fieldwork now had the following four stages:

1. Selection of research areas,
2. Quantitative data collection (Elderly Household Survey Part A-E),
3. Qualitative data collection (Elderly Case Studies),
4. Quantitative data collection (Elderly Household Survey Part F).

Actually, these stages were not mutually exclusive but overlapping, allowing the full-use of data. Here the stages are separately described for analytical purposes only.

The first stage of fieldwork consisted of the selection of the research areas. We made the selection on the basis of available secondary data complemented with oral information from officials of statistical bureaus, heads of regencies, sub-districts and villages, and with observations from field visits. Two villages were selected which had to be different with respect to migration, prosperity and rurality. We expected that these variables could help to reveal the transitions in elder care caused by migration, assuming that the decline in fertility would be similar in both villages. However, the necessary data concerning migration, prosperity and rural area were not directly available, and the selections were made as careful as possible considering the circumstances.

The second stage consisted of the Elderly Household Survey. The first part of the survey was carried out among older people to obtain a general idea of their socio-demographic status, nutritional-health status, economic status, care arrangements and support network in the two selected villages. The second part of the survey was carried out with a household member of the older respondent to gather more detailed information about the household composition and socio-economic situation of the whole elderly household.

The third stage of qualitative fieldwork started with observations and participation in relevant meetings and activities in a hamlet of each village after completion of the general elections. This resulted in an overall picture of the research setting and rapport with the village people. Case households were then selected from the data of the Elderly Household Survey for the in-depth interviews, structured daily observations, genealogical diagrams, life histories and social networks. Only after building a rapport with the respondents, our host family and direct neighbours was it possible to explore emic concepts of old age, norms and values, and notions of moral obligations and expectations, dependency and reciprocity. Through qualitative fieldwork, we tried to find explanations for patterns that we had found in the survey and to provide more in-depth information about the lives of older people.

¹ In Indonesia it is not allowed to carry out long surveys or qualitative research in the field during the period of two months before and two months after the elections. This period was used for preparing and processing the survey data in the city Yogyakarta.

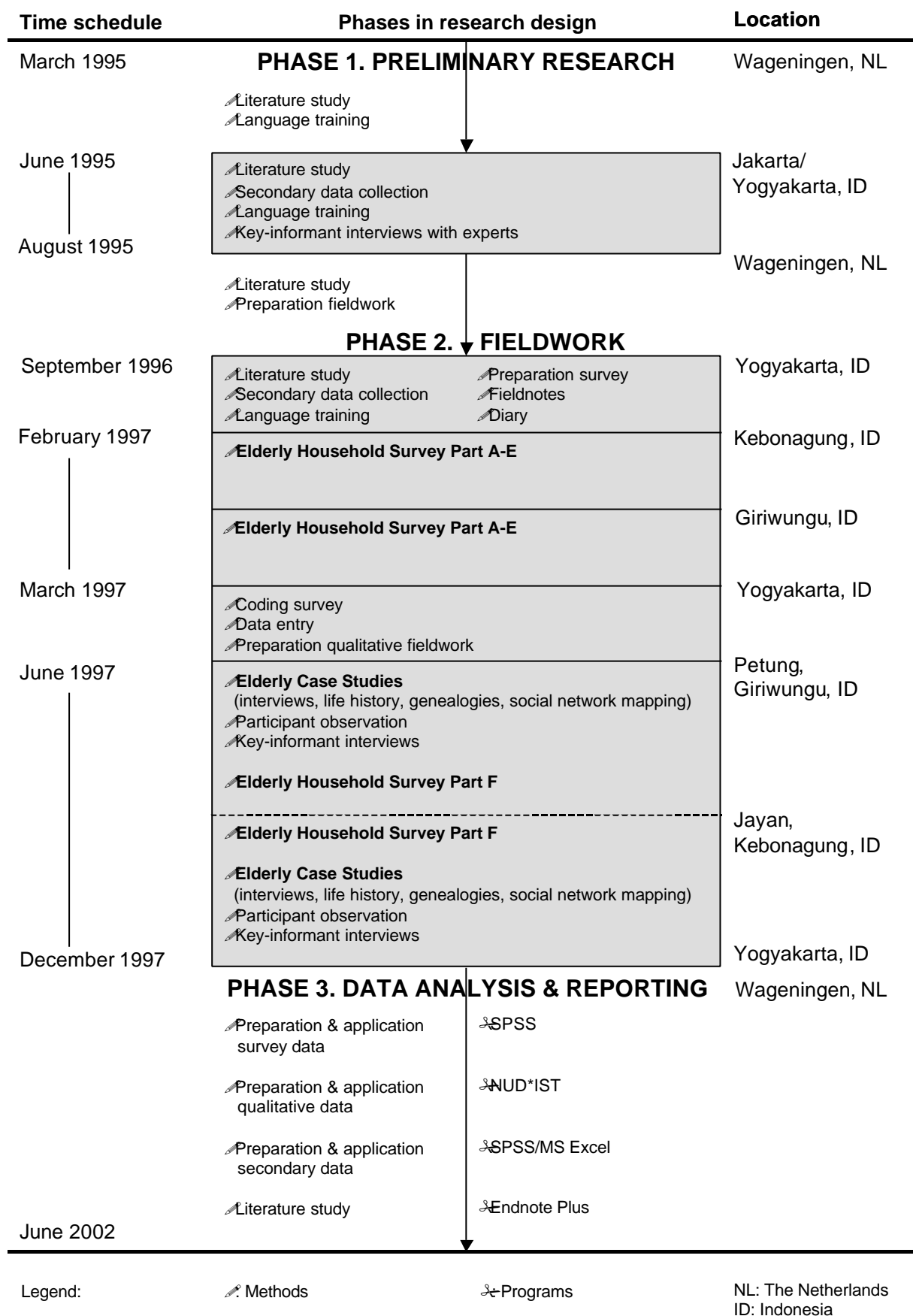


Figure 5.1 Research design

The fourth stage consisted of the Elderly Household Survey among the so-called non-communicative older people. These persons had not been able to respond to the former survey themselves and dropped out. However, they were interesting because they were in the final stage of becoming old in many cases. Therefore, we returned to these respondents during the qualitative fieldwork and asked another household member a short list of questions about the older person's health status; his/her general, personal and instrumental activities of daily life; and about primary caregivers.

Data analysis and research reporting

In the final phase of the research project, I structured and prepared the huge amount of quantitative and qualitative data for further analysis. Most of the data were made suitable for analysis by converting them into computer programs. Finally, the results were evaluated and reported in this dissertation.

5.2 Selection of the research areas

The research population consisted of older people who lived in the rural areas of the Special Region Yogyakarta. We hypothesised that transitions in care of the older people would be related to migration of the younger population. Our aim was to select two research areas in order to compare the different impact of migration on elder care and the role of the primary caregiver(s). One rural area with low or no out-migration had to be relatively prosperous though still mainly agricultural, and one rural area with high out-migration had to be poor with limited agricultural possibilities. It was assumed that the decline in fertility would be the same in both areas.

We expected that in rural areas with limited economic or agricultural possibilities the level of out-migration would be higher and that most of the children would have migrated to find work in urban areas. This would presumably have an effect on care practices and living arrangements of older persons since traditionally their children would have been their primary caregivers with whom they lived in an extended household or near to each other. Older people living in an area with high out-migration would be less able to rely on children living near by and therefore be more resigned to self-care.

We used the criteria of migration, prosperity and rurality to select the research areas because they could serve as indicators of the proximity of primary caregivers. However, it turned out to be very difficult - if not impossible - to find secondary data about these criteria. So, we had to use data that came closest to these criteria supplemented with oral information from officials of statistical bureaus and heads of the regencies, sub-districts and villages, and observations from field visits. We also looked at publications of other studies in the Special Region Yogyakarta to use that information for a longitudinal perspective. However, this was impossible to realise because the research was not registered in one place, the library of the Population Studies Center had not

computerised its publications before 1990, and had seldom filed titles according to the area. In the studies that we did find, the selection criteria of the area did not match ours.

Below we describe the selection of the research areas according to administrative levels. The administrative levels are province, regency or municipality, sub-district, village and hamlet. Figure 2.2 is a map of the area.

5.2.1 Level of regency

The province of the Special Region Yogyakarta (*Daerah Istimewa Yogyakarta*) consists of the municipality Yogyakarta and the regencies Kulon Progo, Bantul, Gunung Kidul and Sleman. The data are presented at the end of the section.

Migration

There were no data available on migration at regency level². Migrants who did not join a transmigration programme were seldom registered. Nevertheless, a negative net-population growth is a useful indicator of out-migration. Table 5.1a/b presents the figures for population size and growth per regency in the last decades for which the census data were available.

Kulon Progo and Gunung Kidul had a negative net-population growth, which was probably due to out-migration. Furthermore, these same regencies have a pronounced pillar-shaped population pyramid (see Annex 5.1) than the other regencies, which is typical for ageing societies. Sleman and the municipality Yogyakarta, on the other hand, have a bulge in the age range of 15-24 years, which was probably caused by in-migration of scholars and students. Sleman and the municipality were therefore not suitable for selection.

Prosperity

Several indicators can help to determine the prosperity of an area. The Indonesian government classifies villages into less developed (*desa tertinggal*³) or developed according to scores on eighteen variables. Some of these variables are types of main road, employment opportunities, education facilities, health facilities, means of communication, population density, sources of drinking water, percentage of households with electricity, ownership of television or motor, percentage of farming households, and socio-economic situation of the population (personal notes of Syarifah Nazir, head of the Statistical Bureau Province of the Special Region Yogyakarta, 1996).

² Migration is defined by the Central Bureau of Statistics as a move for at least six months outside the province (BPS, 1992a: xxxii) and not known for the lower administrative level of regencies.

³ Until 1990 the Indonesian government applied the term poor village or regency (*desa/kabupaten miskin*) with a different method of calculation (BPS, 1993d). *Desa tertinggal* literally means backward village.

Table 5.1c shows that regency Gunung Kidul had the highest number of less developed villages and was poorer than other regencies.

As an indicator of prosperity, we also considered the living standard with regard to the availability of cooking gas, electricity, piped drinking water, private toilet with septic tank, private bath, and possession of motorcycle (see Annex 5.2). Gunung Kidul had the lowest percentages of households owning these facilities except for piped drinking water. Sleman and the municipality Yogyakarta had the highest percentages of households owning these facilities with the exception of private bathing facilities. The score on private bathing facility was the highest in Bantul. The regency Gunung Kidul had the worst living conditions. Sleman and the municipality had the best.

Lack of education is another indicator of poverty (see Table 5.1d). Gunung Kidul had the highest rate of older people aged 60 years and older who did not attain any education and had the lowest rates of older people who achieved some education. The regency Gunung Kidul probably has the largest number of poorest older people of all regencies.

Rurality

The final selection criterion was that the research area had to be rural. We defined rural as main employment in agricultural activities. Both villages had to be rural but we assumed that in a village with limited agricultural possibilities more out-migration would occur. The Indonesian government recognises several classifications of rural or urban villages⁴ and of rural or urban less developed areas⁵. These classifications were not suited for this research because they are primarily administrative definitions and do not reveal the nature of the agricultural activities. Instead, we studied the figures for the population of ten years and older that worked in agriculture, forestry, hunting and fishery (sector 1) during the previous week (see Table 5.1e).

All regencies have the largest part of the working population in the primary sector. However, Gunung Kidul and Kulon Progo score highest, and Bantul and Sleman lowest. Urban Yogyakarta has its main industry in community, social and personal services and the primary sector is very small. The second best industrial sector of Sleman is also the services sector, and in Bantul the manufacturing industry. Because Sleman is more

⁴ The Indonesian government defines rurality on the basis of 1. a Decision Letter of the Minister of Home Affairs or the Governor released before October 1st, 1988; 2. the Unit of Residence Transmigration that usually consists of 100 household heads and has an administration separate from the main village; 3. the Area Residence of Isolated Ethnic Groups that are not yet united in one village (BPS, 1991b: xii,226).

⁵ The indicators for a rural area are the same as the eighteen variables of the less developed villages (*desa tertinggal*) mentioned above under the sub-heading prosperity. An urban area is indicated by seventeen (largely the same) variables (BPS, 1995c: 7-12). It is defined as urban when an area scores more than twenty, or between nineteen and twenty with a distance less than five km. from a city (Darwin and Tukiran, 1991: 70). (Other sources on this subject were (BPS, 1992b: 229-55) and personal comments of Sukamdi, secretary of the Population Studies Center, 1996.)

similar to the municipality, this may indicate that Sleman is more urbanised than Bantul and therefore was less suitable as research area. The proportion of agricultural households in Table 5.1f show the same results for the regencies as Table 5.1e. Regency Sleman only had a little more non-agricultural households than agricultural households. The regencies Gunung Kidul, Kulon Progo and Bantul had a majority of agricultural households.

Based on the criteria above, we decided that the regencies Bantul and Gunung Kidul were the best research areas. Bantul is a regency with low or no out-migration and is relatively more prosperous with the largest part of household employment in agriculture. Gunung Kidul is a regency with high out-migration and the poorest area with limited agricultural potentials. The limited agricultural opportunities did not show from the discussion above, where it looks as if Gunung Kidul has the best agricultural possibilities considering the largest size of population in farming. However, this is only the case because there are no other alternatives to farming in spite of the fact that the limestone mountain soil is very infertile.

Table 5.1 Selected variables by regency/municipality of Special Region Yogyakarta

Selected variables	Kulon Progo	Bantul	Gunung Kidul	Sleman	Mun. Yogyakarta	Total
a. Population size						
- 1971	370,629	568,618	620,085	588,304	340,908	2,488,544
- 1980	380,685	634,442	659,486	677,323	398,192	2,750,128
- 1990	372,309	696,905	651,004	780,334	412,059	2,912,611
b. Population growth (%)⁶						
- 1971-80	0.30	1.22	0.69	1.58	1.74	1.12
- 1980-90	-0.22	0.94	-0.13	1.43	0.34	0.58
c. Village development status						
- Less dev. villages	15	26	73	13	0	127
- Developed villages	73	49	71	73	45	311
- Total villages	88	75	144	86	45	438
d. Education of pop. 60+ (%)						
- No education	85.72	84.02	90.41	81.22	66.16	81.51
- Primary school	11.51	12.01	8.20	11.83	18.22	12.35
- Junior high-school	1.53	2.38	0.96	3.27	7.03	3.03
- ≥ Senior highschool	1.25	1.59	0.43	3.67	8.59	3.10
- Total	100.00	100.00	100.00	100.00	100.00	100.00
e. Employment in sector 1⁷						
- Population in sector 1	114,351	132,918	301,969	124,472	1,798	675,508
- % of total working pop.	54.96	35.92	76.07	35.19	1.16	45.53
f. Type of household						
- Agricultural households	71,788	103,478	150,114	101,641	6,368	433,389
- % of total households	79.1	59.0	90.9	45.9	5.5	56.5
- Total households	90,753	175,527	165,109	221,466	114,875	767,730

⁶ Population growth was measured as $(\text{population size}_n / \text{population size}_{n+1}) = (1 + \text{growth rate})^n$.

⁷ Population of 10 years and older that worked in agriculture, forestry, hunting and fishery during the previous week.

Sources of (crude) data: a. and b. BPS (1976: 9-26; 1981: 1-11; 1992c: 1-16); c. BPS (1995d: 1-18); d. BPS (1992b: 30); e. BPS (1992b: 210); f. BPS (1994: 32).

5.2.2 Levels of sub-district, village and hamlet

The selection of the research areas at the levels of sub-district, village and hamlet was even more difficult to make due to the absence of relevant data. We were looking for a sub-district that was representative of the rest of the regency based on the criteria of out-migration, prosperity and agricultural employment. These data were not available for the lowest administrative levels and we could only rely on indirect data such as the population distribution. A proportion of older persons compared to a relatively small proportion of young persons can be an indicator of out-migration.

Bantul

The regency Bantul consists of seventeen sub-districts. We distinguished the sub-districts with an elderly population at the middle range (10.6-12.6%). These were the sub-districts Dlingo, Piyungan, Imogiri, Pajangan, Jetis, Bantul, Sedayu and Pandak in order of increasing elderly population (see Annex 5.4). We expected that these sub-districts had not experienced a lot of out-migration or in-migration because they all had a moderate population growth between 0.01-0.99⁸ (see Annex 5.5).

The sub-districts Dlingo, Piyungan, Pajangan, Bantul and Pandak were not selected as research areas for the following reasons. Dlingo and Piyungan were mainly highlands and less prosperous agriculturally. Pajangan was different from the other sub-districts because it had a high percentage of households working in the construction of buildings and the highest percentage in mining. The sub-district Bantul harbours the capital city of the regency Bantul and is for a large part urban. Bantul and Pandak had less than half of the households earning a living in the agricultural sector (BPS, 1991a: 51).

The sub-district Sedayu appeared to be unsuitable after observation on the spot. There were at least five new real estate projects of houses for people who came mostly from the municipality Yogyakarta. Suharto, the president at the time, was born in Sedayu and his relatives still poured a lot of money into the area, for instance for a private university and a huge mosque. Finally, the Pertamina Oil Company was settled in Sedayu.

Imogiri and Jetis were the only sub-districts left for selection. Jetis was not chosen after inspection of the secondary data from the heads of the sub-districts and observation of the areas showing that none of the villages fitted our criteria. Thus, we selected sub-district Imogiri as research area.

⁸ It is assumed that areas with a negative population growth experience out-migration, and areas with a population growth larger than one percent per year experience in-migration (personal comments Tukiran, 1997). The correlation coefficient of population growth and proportion of elderly population is -0.71. Given the assumption of an equal fertility decline, large values of population growth (in-migration) are associated with small values of elderly population, and small values of population growth (out-migration) are associated with large values of elderly population.

In the sub-district Imogiri, we selected the village of Kebonagung as one research area for the survey because it had a moderate size of elderly population (see Table 5.2) and was not classified as a less developed village. Additionally, all the hamlets and three-quarters of the households had electricity in Kebonagung which indicate some prosperity. According to the head of the sub-district (*Kepala Kecamatan*) and secondary data, Kebonagung and Sriharjo are best suited for agriculture because their water supply is the best, their drainage good and they are not located in a hilly area. Kebonagung had the largest annual rice yield (BPS, 1995f: 80). Although previous research was done in Sriharjo (Penny and Singarimbun, 1973), we did not select it because it had many labour alternatives in small-scale industries (bamboo, stone, batik and wood industry). Kebonagung only has one stone company and four furniture and timber industries, which is few compared to the other villages in Imogiri.

Table 5.2 Population groups and dependency ratio's by village of sub-district Imogiri

Village	Children		Productive pop.		Elderly population		DRC ⁹	DRE ¹⁰
	(0-14 years)		(15-64 years)		(65+ years)			
	Number	%	Number	%	Number	%		
Selopamioro	3,851	31.1	7,723	62.4	799	6.5	49.9	10.4
Sriharjo	2,214	29.7	4,665	62.5	587	7.9	47.5	12.6
Kebonagung	836	27.9	1,927	64.3	233	7.8	43.4	12.1
Karangtengah	1,206	31.9	2,316	61.3	257	6.8	52.1	11.1
Girirejo	1,193	29.2	2,521	61.6	377	9.2	47.3	15.0
Karangtalun	716	26.8	1,761	66.0	192	7.2	40.7	10.9
Imogiri	963	28.9	2,071	62.2	296	8.9	46.5	14.3
Wukirsari	4,158	32.0	7,960	61.2	884	6.8	52.2	11.1
Total	15,137	28.8	30,944	61.3	3,625	7.5	49.5	12.1

Source of crude data: BPS (1992e: 39-47)

Table 5.3 Total and elderly population by hamlets of village Kebonagung

Hamlet	Total population	Elderly population (65+ years)	
		Number	Percent
Mandingan	589	63	10.7
Kanten	644	61	9.5
Jayan	753	89	11.8
Kalangan	621	56	9.0
Tlogo	650	44	6.7
Total	3,257	313	9.6

Sources: Kantor Kades Kebonagung (1996a); Kantor Kecamatan Imogiri (1996b).

⁹ Dependency Ratio of Children (DRC) was calculated as {(the population of children younger than fifteen years / the productive population aged 15-64 years)*100}.

¹⁰ Dependency Ratio of Elderly people (DRE) was calculated as {(the population of elderly people older than 64 years / the productive population aged 15-64 years)*100}.

In village Kebonagung we selected the hamlet Jayan as a research area for the qualitative fieldwork. Coincidentally, it had the highest rate of elderly population (see Table 5.3) and offered the only possibility for accommodation with an older person. According to the village head there were not many differences between the hamlets of his village.

Gunung Kidul

The regency Gunung Kidul consists of thirteen sub-districts. Annex 5.6 shows that the sub-districts Panggang, Rongkop, Ponjong, Tepus and Karangmojo experienced the highest negative net-population growth. Karangmojo, Panggang and Patuk had the largest elderly populations of these sub-districts (see Annex 5.4).

The sub-district Karangmojo had the highest percentage of elderly population in Gunung Kidul. Mantra and Kasai (1987) previously carried out research in the village Ngawis in Karangmojo. This village was our first choice, but after we had visited the area we found that Ngawis had developed a lot economically, and was not that poor anymore. There were many houses of stone, an asphalt road and roads solidified with gravel, and the fields were cultivated¹¹. Therefore, this village was not a good selection for a research area.

Next, we selected the sub-district Panggang because it had the second largest percentage of elderly population (see Annex 5.4). Panggang probably also experienced the highest out-migration based on the highest negative net-population growth (see Annex 5.6). During a field visit, we observed that Panggang is indeed a very poor area since there are still many houses of wood or bamboo; not everyone has electricity, and the villagers suffer from water shortage in the dry season. Furthermore, only one main road running through the sub-district is made of asphalt. Some roads to the villages are fortified with stones, but most of the roads to the houses in the hamlets are made only from soil which become impassable in the rainy season. In Panggang the main food crop is cassava. The limestone mountains without any water sources are difficult to access and to cultivate. Thus, rice fields are rare and the rain-fed rice variety is only cultivated once a year.

In sub-district Panggang we selected the village Giriwungu as the second research area for the survey because it had one of the largest elderly populations (see Table 5.4) and it was classified as one of the less developed villages¹². Only half of the village population had electricity, the village experienced water shortages in the dry season and the main

¹¹ The observation of cultivated fields could be influenced by the season but there were also more water sources available than in Panggang.

¹² Eight of the villages of Panggang were part of the Presidential Instruction Project of Less Developed Villages (*Proyek Inpres Desa Tertinggal*). The three villages of Girisekar, Giriharjo and Girijati were no longer a part of this Project.

employment was in agriculture. The village Giriwungu consisted mainly of hills and mountains and had a poor economic status.

Table 5.4 Population groups and dependency ratios per village of sub-district Panggang

Village	Children		Productive pop.		Elderly population		DRC ⁷	DRE ⁸
	(0-14 years)		(15-64 years)		(65+ years)			
	Number	%	Number	%	Number	%		
Girijati	437	23.5	1,187	63.8	236	12.7	36.8	19.9
Giriasih	421	25.9	1,038	63.8	169	10.4	40.6	16.3
Giricahyo	970	27.6	2,164	61.5	387	11.0	44.8	17.9
Giripurwo	2,018	28.2	4,484	62.5	668	9.3	45.0	14.9
Giritirto	1,036	29.7	2,116	60.6	342	9.8	49.0	16.2
Giriharjo	1,009	30.2	2,137	64.0	193	5.8	47.2	9.0
Giriwungu	588	26.1	1,400	62.1	268	11.9	42.0	19.1
Girimulyo	1,395	27.3	3,221	63.1	491	9.6	43.3	15.2
Girikarto	1,000	27.8	2,213	61.6	379	10.6	45.2	17.1
Girisekar	1,933	30.4	3,886	61.1	542	8.5	49.7	14.0
Girisuko	1,495	30.1	3,023	60.8	453	9.1	49.5	15.0
Total	12,302	30.0	26,869	60.0	4,128	10.1	49.9	16.8

Source crude data: BPS (1992d: 1-12)

Table 5.5 Total and elderly population by hamlets of village Giriwungu

Hamlet	Total population	Elderly population (65+ years)	
		Number	Percent
Jurug	271	25	9.2
Pudak	545	59	10.8
Pejaten	726	10	1.4
Klepu	440	12	2.7
Petung	507	75	14.8
Total	2,489	181	7.3

Sources: Kantor Kades Giriwungu (1996c); [Kantor Kecamatan Panggang, 1996d #908].

In the village Giriwungu we selected the hamlet Petung as research area for the qualitative fieldwork, because it had the highest rate of elderly population (see Table 5.5). Moreover, it was possible for us to stay with an elderly household in Petung.

5.2.3 Evaluation of the area selection

The aim was to select two different villages in order to compare the results and demonstrate the different impact on elder care. We assumed that a more prosperous village with low or no out-migration and main employment in agriculture could represent an area in which the elder care has not changed much. We assumed that a poor village with high out-migration and limited agricultural possibilities could represent an area in which the elder care has been altered or is in the process of alteration by social change. In other words, we assumed that the second village, Giriwungu, would be further in the

ageing process than the first village, Kebonagung. The selection was difficult to make because specific data on migration, prosperity and rurality were lacking. Nevertheless, we feel we made the best possible selection with the data at hand. In this sub-section, we evaluate the following assumptions:

- the selected villages are significantly different from each other, and
- Giriwungu experienced out-migration and Kebonagung did not.

Annex 5.3 presents the age and sex distribution of the total population in the villages Kebonagung and Giriwungu. We used a Chi-squared test¹³ to find out whether the differences between the age groups of the population in Kebonagung and Giriwungu are indeed significant. As it turned out, there are significant differences between these populations but it is difficult to discover which population groups caused these differences. Therefore, we converted the table in Annex 5.3 into Table 5.6.

Table 5.6 Populations of children, young and old adults in the villages of Giriwungu and Kebonagung

Agegroup	Kebonagung		Giriwungu	
	Number	Percent	Number	Percent
0-14	836	27.9	588	26.1
15-64	1,927	64.3	1,400	62.1
65+	233	7.8	268	11.9
Total	2,996	100	2,256	100 ¹⁴
Test scores	$\chi^2(2)=48.8^*$, p=0.00			

Sources crude data: BPS (1992d: 8; 1992e: 42).

The populations of children, young and old adults in village Kebonagung and Giriwungu are significantly different. Giriwungu had few children and young adults and more old adults than Kebonagung. This is typical for areas from which substantial numbers have emigrated. Therefore, we might say that Giriwungu experienced out-migration and its population is older on average than Kebonagung's population. This is also shown by the dependency ratio's of children (DRC) and elderly people (DRE). Giriwungu had a lower DRC (42.0) than Kebonagung (43.4) and a higher DRE (respectively 19.1 and 12.1). Fewer children and more elderly people depended on the young adults in Giriwungu than in Kebonagung. In conclusion, we may say that we succeeded in our aim to select research areas. Kebonagung may be seen as representing an area in which the traditions of elder care remain as they were before. Giriwungu may be seen as representing an ageing area in which the elder care is changing by processes of social change.

¹³ Chi-squared is calculated as follows: $\sum \{(\text{observed frequencies} - \text{expected frequencies})^2 / \text{expected frequencies}\}$. The expected frequencies are calculated based on the age distribution of elderly persons in the census data. *** refers to a reliability interval of 90%, ** to 95% and * to 99%. No asterisk means that there is no significant difference. df refers to the number of degrees of freedom.

¹⁴ Due to rounding, some totals may not correspond with the sum of the separate figures.

5.3 Selection of survey respondents

After selecting the research areas, we had to select the survey respondents. However, we have to elaborate on the unit of analysis before discussing the sample of the survey.

5.3.1 Unit of analysis

The older person with her/his household is the unit of analysis. We realise that becoming old, being an older person, or belonging to the aged population is not necessarily related to a fixed age (see Chapter 3.3.2 for emic definitions of 'old'). Nevertheless, at the start of the research an age boundary had to be selected. We used the age of 55 years as a boundary. The age boundary selected is an etic measurement of age and does not imply that all persons older than 55 regard themselves as old. We did not opt for the age of sixty, which is common for old-age research in Indonesia¹⁵ and the rest of Asia, because we wanted to study the whole range of older persons from healthy and becoming old to being aged and decrepit. The choice for the age of sixty is usually based on the formal pension age, but this is not a relevant criterion for our research area.

A person was included as a household member of the older person if they:

- lived in the same house as the older person for the largest part of the year, or
- ate from the same kitchen as the older person even if they lived in another house (e.g. in case the older person and her/his child each sleep in their own house but eat together), or
- contributed monetary or materially to the household for the largest part of their income (e.g. circulating labour migrants), or
- were monetary or materially dependent on the household (e.g. student living away from home).

5.3.2 Survey sample

The research population consisted of elderly people aged 55 years and older who lived in the rural areas of the Special Region Yogyakarta. As previously stated, Kebonagung in the sub-district Imogiri of regency Bantul, and Giriwungu in the sub-district Panggang of regency Gunung Kidul were the research villages. The list (*daftar pemilu*) for the parliamentary election of May 1997 provided the sample framework for the survey. The list contains the latest¹⁶ data of name, age, marital status, sex, occupation and address of all the inhabitants of seventeen years and older (the potential voters). A random sample was drawn from all the persons aged 55 years and older on the list. For each village a sample was drawn that was sufficient to get approximately two hundred completed questionnaires. Only one older person per household could enter the sample, because the questionnaire had questions about the household composition and income

¹⁵ See Table 4.1 in Chapter 4.2.1.

¹⁶ The lists of general elections are made by the village heads in May-June 1996.

of all the household members. In cooperation with the hamlets' heads (*kepala dusun*), we screened which respondents shared a household. In case of more than one older person in the same household, we randomly chose who could enter the sample.

The general election list contained many errors like the same persons mentioned twice, missing persons, names of persons who were already deceased or moved to another area, wrong names and addresses. The formal family names of the older persons were described in the list, but often people were not known by this name because an abbreviation, given name (*nama kecil*), or nickname was used in practice¹⁷. Although the hamlet heads had screened the sample, many households were approached two times - some even three and four times - for different older respondents of the same household. When we discovered this, usually one interview had already been completed and this one was used.

The interviewers were asked to try to meet the selected respondent a maximum of three times. Many older persons were still working outdoors and were not at home in the daytime. Then we tried to find out when the respondent would be back and left the message with a household member or a neighbour about when the interviewer would return. Sometimes the interviewers had to conduct the interview early in the morning before breakfast or in the evening with a torch if the respondent had no electricity. The circumstances to locate and meet the right respondent were difficult for the interviewers. Nevertheless, most of the older persons were willing to cooperate with the survey, which is in accordance with the Javanese culture of preserving harmony and avoiding conflict.

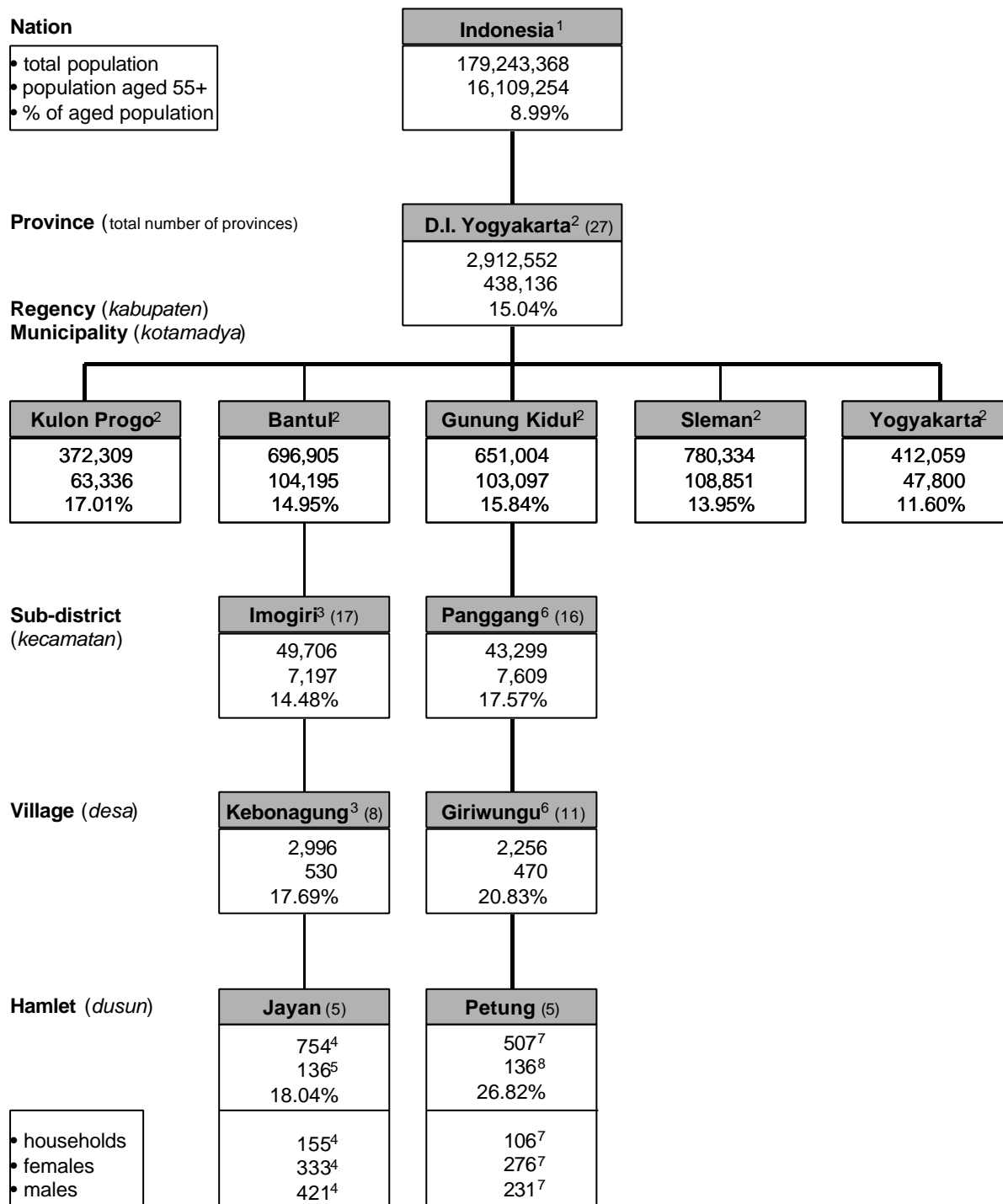
From the older people a total sample was drawn of 265 and 295 names and addresses in Kebonagung and Giriwungu, respectively. These were distributed at random over the male and female interviewers, making sure that the same interviewer would not interview both a respondent and her/his neighbours. Of the total 560 people approached, 163 persons did not or could not respond to the survey, which gives a non-response rate of 29.1%. At first sight, the non-response rate seems to be substantial, but was mainly caused by errors in the general election list, which we mentioned above.

From the people who were included in the survey sample, both the elderly respondent and the household member respondent completed 355 questionnaires. Fifteen older persons in Kebonagung and 27 older persons in Giriwungu could not answer the questions themselves because they were deaf, mute, demented or (temporarily) ill. We refer to them as the non-communicative elderly respondents. They did not complete the Elderly Questionnaire, but a primary caregiver completed the Household Member Questionnaire for them. The response of the communicative elderly and the non-communicative elderly resulted in a total sample size of 397 respondents (see Table 5.7).

¹⁷ In Java it is common that the parents give a child a completely new name at birth and marriage.

Table 5.7 Sample process

	Village Kebonagung, Sub-district Imogiri, Regency Bantul	Village Giriwungu, Sub-district Panggang, Regency Gunung Kidul	Total
Total sample drawn	265	295	560
Non-response and errors	71	92	163
Elderly respondents who completed the Elderly Questionnaire and the Household Member Questionnaire	179	176	355
Non-communicative elderly respondents for whom only the Household Member Questionnaire was done	15	27	42
Response	194	203	397



Sources of crude data:

1. BPS, 1992a: 3.
2. BPS, 1992c: 1-16.
3. BPS, 1992e: 39-47.
4. Kantor Kades Kebonagung, 1996a, not published.
5. Kantor Kecamatan Imogiri, 1996b, not published.
6. BPS, 1992d: 1-12.
7. Kantor Kades Giriwungu, 1996c, not published.
8. Kantor Kecamatan Panggang, 1996d, not published.

Figure 5.2 Population tree

5.3.3 Sample evaluation

Data on the total population and the elderly population are presented by administrative level in Figure 5.2. The survey was carried out in the villages of Kebonagung and Giriwungu. The qualitative fieldwork was carried out in the hamlets Jayan and Petung of these villages. The survey sample was taken from a small part of Indonesia, the Special Region Yogyakarta. The data are not representative of the rural population of Indonesia as a whole. The survey sample may have been biased. Therefore, some characteristics of the survey sample and non-response are described here. The data of our sample are compared with the data of the Census 1990, which are considered representative for the rural areas in the Special Region Yogyakarta. The census data for rural Indonesia as a whole are included for reasons of completeness.

Table 5.10a shows the age distribution of elderly people in the survey sample, the rural areas of Special Region Yogyakarta and rural Indonesia as a whole. It is clear that the youngest older persons are less and oldest older persons are more represented in the survey sample than in the census data. The differences between the survey sample and the census data are a little smaller for the Special Region Yogyakarta than for Indonesia. We used a Chi-square test to test whether the differences between the survey sample and the census data of Special Region Yogyakarta are significant. It appears that there are significant differences for the elderly people between the survey sample and the Special Region Yogyakarta. The age group 55-59 years is under-represented and the age group 75+ years is over-represented in our survey sample (see Table 5.10a).

We then checked the cases labeled as non-response or error in the general election list to find out the possible reason for these differences. Maybe the youngest elderly people were more economically active, more often not at home and therefore more difficult to contact. Or they could have said that they were younger than 55 years in order not to have to cooperate with the survey and lose valuable working time. Perhaps the oldest elderly people were less productive (in terms of labour), were more often at home and were therefore easier to contact. However, the figures could not disclose the possible reasons for the differences. Errors in the general election list by which we selected two or more older respondents (double) of the same household were the main cause of the non-response (see Table 5.8).

Table 5.8 Reasons for non-response

	Kebonagung		Giriwungu	
	Freq.	%	Freq.	%
Older person died already	8	11.3	7	7.6
Double older persons of the same household	37	52.1	74	80.4
Wrong address or older person had moved	4	5.6	1	1.1
Selected person was not yet 55 years	4	5.6	4	4.3
Older person was not home or had no time and the interviewer could not meet in 3 times	13	18.3	5	5.4
No reason	5	7.0	1	1.1
Total	71	100.0	92	100.0

Another possibility is that the non-response consisted of more people between 55-59 years and fewer people who were older than 75 years according to the general election list. Table 5.9 shows that is not the case either. The cases of non-response are evenly distributed over the age groups except for the age group of 70-74 years.

Table 5.9 Non-response by age groups and villages

Agegroups	Kebonagung		Giriwungu	
	Frequency	%	Frequency	%
55-59	16	22.5	22	23.9
60-64	15	21.1	27	29.3
65-69	16	22.5	16	17.4
70-74	9	12.7	9	9.8
75+	14	19.7	18	19.6
Missing	1	1.4	.	.
Total	71	100.0	92	100.0

It was also possible that labour out-migration of persons, who were still registered in their home village because their family lived there, had caused the under-representation in the age group of 55-59 years in the survey sample. People in this age group are the most likely of all older persons to migrate. Maybe one interviewer carried out the survey with an older elderly person while another interviewer was trying to approach a younger elderly member of the same household and this caused the over-representation of the age group 75+ years in the survey sample. Differences between the survey sample and the rural population of the Special Region Yogyakarta could also have been caused by the fact that we interviewed any old person aged 55 years or older in the household whereas the Bureau of Statistics (*Biro Pusat Statistik*) had only interviewed the head of the household. The differences between the survey sample and the Census population may have been caused by a bias of the Central Bureau of Statistics (*Biro Pusat Statistik*) favouring the productive population and over the very old population. Perhaps the *BPS* systematically undercounted the older persons because they are less

economically productive or socially active. Another, not very likely explanation could be that in six years time the ageing process developed so fast as to result in a larger population of very old people. Unfortunately, the *BPS* did not present the Population Survey (*Survei Penduduk Antar Sensus*) of 1995 by age groups, making it impossible to prove this supposition.

Table 5.10 Selected variables of older persons aged 55+ (%)

Selected variables	Survey sample (N=397)	Sensus 1990 ¹ rural D.I. Yogyakarta (N=266,836)	Sensus 1990 ² rural Indonesia (N=11,861,531)
a. Age distribution			
- 55-59	12.3	25.8	29.5
- 60-64	24.9	24.8	28.1
- 65-69	14.9	18.3	17.0
- 70-74	16.1	13.9	12.9
- 75+	31.7	17.2	12.5
- Total	100.0	100.0	100.0
Test scores		$\chi^2(4)=81.2^{***}$, p=0.00	$\chi^2(4)=160.8^{***}$, p=0.00
b. Sex distribution			
- Male	41.1	45.4	48.0
- Female	58.9	54.6	52.0
- Total	100.0	100.0	100.0
Test scores		$\chi^2(1)=3.3$, p=0.07	$\chi^2(1)=8.5$, p=0.004
c. Marital status			
	3		4
- Single	1.4	1.9	2.7
- Married	63.7	66.7	63.3
- Divorced	3.1	3.2	3.4
- Widowed	31.8	28.2	30.5
- Total	100.0	100.0	100.0
Test scores		$\chi^2(3)=2.8$, p=0.43	$\chi^2(3)=2.8$, p=0.42
d. Educational attainment			
	3		5
- No schooling / less than primary school	91.6	87.6	85.0
- Graduated primary school	5.6	9.9	12.5
- Graduated Junior high-school or higher	2.8	2.5	2.5
- Total	100.0	100.0	100.0
Test scores		$\chi^2(2)=7.2^{**}$, p=0.03	$\chi^2(2)=15.0^{***}$, p=0.001

Sources of (crude) data: ¹ BPS (1992b: 3, 5, 21); ² BPS (1992a: 3, 5, 18).

³ N=355, because these data were not obtained for the non-communicative elderly.

⁴ N=12,082,614. It cannot be correct that the rural population aged 55 years and older was larger in Table 03.2 about the marital status (N=12,082,614) than in Table 02 about the population size (N=11,861,531). However, these (crude) data were derived from the *Sensus 1990* and that is what we had to use for our calculations.

⁵ The educational attainment data in the *Sensus* of DIY concerned the whole population above the age of 10 and of Indonesia concerned the population over ten years of age ever attending school. The column 'never/not yet attended school' was not included for Indonesia and is calculated here with the figure of the total rural population aged 55+ (N=11,861,531).

Table 5.10b shows the sex distribution of older persons in the survey sample, the rural areas of Special Region Yogyakarta and rural Indonesia as a whole. The differences between the percentages of males and females in the survey sample and the census data of the Special Region Yogyakarta are not significant. The survey sample is representative of the sex distribution in the rural areas of the Special Region

Yogyakarta. It seems that the sample was not biased for sex. There were no significant differences found between data from the survey sample and census data of rural Indonesia either.

Table 5.10c shows the marital status of older persons in the survey sample, the rural areas of Special Region Yogyakarta and rural Indonesia as a whole. The differences relating to the marital status between the survey sample and the census data of Special Region Yogyakarta are not significant. The survey sample is representative for the marital status in the rural areas of the Special Region Yogyakarta. Apparently, the sample is not biased for marital status.

Table 5.10d shows the level of education for older persons in the survey sample, the rural areas of the Special Region Yogyakarta and rural Indonesia as a whole. In the survey sample relatively more older persons had no schooling at all or did not finish the primary school than in the census data. This could partly be attributed to the older age structure in the survey sample. Although the proportions seemed similar, significantly less older persons graduated from the primary school in the survey sample than in the census data. The survey sample is not representative of the level of educational attainment in the rural areas of the Special Region Yogyakarta. It seems that the sample is somewhat biased with respect to the educational level attained.

Summarising, some characteristics of the survey sample were compared with data, which are considered as representative for the rural areas of the Special Region Yogyakarta, to study whether the sample could have been biased. We established that the distributions of sex and marital status of the older persons do not differ from that in the Census figures of the Special Region Yogyakarta. This is not established for the level of educational attainment and age distribution of the older persons. Several reasons for the bias of the survey sample were discussed. However, the main goal of this research was to explore the lives of elderly people especially for elder care and not to give statistically representative descriptions of elder care. If we had aimed for that we would have drawn from a national random sample of households with older members and not a regional sample.

5.4 Selection of respondents for the qualitative fieldwork

After the selection of the villages, we had to find a place to stay and select respondents for the household cases.

5.4.1 Houses and landladies

The houses had to be large because accommodation was needed for a team consisting of the researcher, one assistant and eleven interviewers for carrying out the survey. Besides, it was important to live together with and near to older persons, especially for

conducting the participant observation during the qualitative research. It took some time and polite persuasiveness to convince the village heads of this.

When the appropriate host family was found the houses were adapted to make us more comfortable and allow the use of extra electrical appliances. For this, we paid the material costs, which was a windfall for the house owners. In the house in Kebonagung more wall outlets were made to enable us to work in the evenings. A door was added to the bathroom, huge wasps nests were removed and the landlady bought an electric waterpump for the well because she thought that people from the city could not pull up water with a bucket. In the house in Giriwungu a complete new bathroom and toilet were built because the old ones were out in the open. An extra bedroom of plywood in the large living room was constructed so that we could have a little more privacy.

We also needed people to do the shopping and cook for us. We brought coffee, tea and lemonade powder and in Giriwungu we ordered five thousand litres of water by tanker. The water still had to be boiled for drinking purposes. We had to organise separate sleeping places for the male and female interviewers, beds, sleeping mats, a petrol cooking stove, thermos jugs, plastic buckets, drying lines for the laundry, etcetera.

Simbah Joyo, the landlady in Jayan (Kebonagung)

Simbah Joyo was a woman of about 58 years old. She lived alone in a large house in the hamlet Jayan in Kebonagung although her husband was still alive and they had three children. Joyo's husband lived alone in a house in the neighbouring village Sriharjo. A daughter also lived with her husband and children in Sriharjo. Until five years ago, Joyo had lived with the other daughter's family in the same house where she lives now. The daughter got cancer and passed away. The son-in-law wanted to live alone with his daughters again and took up residence in another house belonging to Joyo. Joyo said she stayed in her house to guard the inheritance for her granddaughters. Neighbours gossiped that she did not live with her husband because they always quarrelled. Joyo's son lived with his family in the city of Yogyakarta.

Simbah Joyo's economic situation was above average. She and her husband owned houses in Kebonagung and Sriharjo. She also owned irrigated rice-land from which the yield was more than she needed. Until five years ago, Joyo still worked as a saleswoman selling rice, oil and cooking spices at the market of Legundi. At the time, she also cultivated her own rice fields. Then she became weaker and had to rent out the land and now the tenants do the work for fifty percent of the yield (*bagi hasil*). She had a bicycle, a small television and several good sarongs. When we asked *simbah* Joyo why she was not participating in a new credit system (*simpan pinjam*), she only replied: "Borrow for what?" As a neighbour said: "*Simbah* Joyo does not have to borrow money because she is rich!"

During the survey period *simbah* Joyo was not in the house because she stayed with her daughter, who had to have an operation in the hospital in Yogyakarta. A granddaughter and a neighbour cooked for us instead, and we had the whole house to ourselves during this period. *Simbah* Joyo was a taciturn woman and very reluctant to talk about personal matters. We did not select her as a case household for the qualitative research because of her closed character and also because she was wealthier than the average villager. We did consider her daily activities for the participant observations but kept a more hidden researcher's role towards her. This meant that we never interviewed her with a list of items or wrote down her answers in her presence. This was certainly the case after we noticed that she was less open if we were taking notes. The more *simbah* Joyo learned to know us, the more she trusted us. She became less shy, more warm-hearted and turned out to be an old woman who was lonely and eager to care for us. We heard the story of Joyo's life by bits and pieces.

Keluarga Kretorejo, the landlady in Petung (Giriwungu)

In the hamlet Petung in Giriwungu we stayed with a family (*keluarga*) that consisted of the grandfather Kretorejo (71 years), grandmother Ngatinem (61 years), daughter Rupinem (40 years), son-in-law Marjo (45 years) and granddaughter Martini (16 years). They lived in a large wooden house with the typical local roof. They were farmers of their dry fields on the mountain slopes where they mostly cultivated cassava, and they also bred water buffaloes, goats and chickens. Martini went to a senior high school and rented a room in Wonosari during the week.

The family Kretorejo was relatively poor, and usually ate sober meals of cassava, watery soup with some leaves and a piece of fermented soybean cake (*tempe*), rarely rice or meat. Their best clothes were simple and they did not own any rice field (*sawah*). They were not very poor because they could still afford the very high expenses for the education and boarding of Martini and help with the high hospital costs for Rupinem's sister.

For the qualitative research, we selected *simbah* Ngatinem as the main respondent for this case household. This meant that we chose her for the in-depth interviews, daily observation, life history, genealogical diagram and activity fields relationships. When things were not clear or Ngatinem could not help us, we asked for additional information from the other household members. For the participant observation, we observed everyone of the family Kretorejo including the neighbours and other family members who were living close by or regularly visiting the house.

Table 5.11 Selected respondents of elderly case households

Name	Age	Sex	Household composition ^a	Occupation/Activity status
Jayan, Kebonagung				
1. Muh	58	male	2-generation's household: - <u>husband</u> , wife, - daughter	palm sugar collector (<i>nderes</i>)
2. Kromo	± 62	female	1-generation's household: - husband, <u>wife</u>	small market vendor (<i>bakul</i>)
3. Yoso	65	male	3-generation's household: - <u>husband</u> , wife, - daughter, - granddaughter	works less, cow and chicken keeper, little farming
4. Rejo	± 72	female	1-person's household: - <u>single person</u>	retired, collects leaves
Petung, Giriwungu				
5. Ngatinem	61	female	3-generation's household: - husband, <u>wife</u> , - daughter, son-in-law, - granddaughter	farmer
6. Dwijo	64	male	1-generation's household: - <u>husband</u> , wife	petty trader (<i>dagang</i>), agricultural labourer, former teacher
7. Marto	± 65	female	1-person's household: - <u>single person</u>	retired, pension, little farming
8. Niti	±90+	female	4-generation's hhd. extended: - <u>(grand)mother</u> , - daughter, son-in-law, - granddaughter, grandson-in-law, - great-grandson, - great-granddaughter of grandson (Jakarta)	retired

^a The position of the older respondent in the household is underlined.

5.4.2 Case households

For the qualitative research methods, we tried to select different, older respondents based on the criteria of age, sex, household composition and occupation or activity status. The respondents also had to be willing to cooperate and able to talk to us about their lives. Table 5.11 shows what type of respondents participated in the research. In addition to the case households we interviewed and observed other people on a less frequent base. Usually these were neighbours or family members of the case households and people who attracted our attention because they liked to talk to us or practised a specific activity.

At a later stage in the fieldwork, we realised that older persons who were frail or could not communicate with us could not be selected as respondents although we also wanted to know more about their lives. Therefore, we carried out a brief survey among the so-

called non-communicative elderly people and interviewed some of the household members more in-depth. Table 5.12 shows the non-communicative elderly persons who were part of the qualitative fieldwork by name, age, sex, household composition, health and activity status (as described by the respondents).

Table 5.12 Selected cases of non-communicative elderly persons and respondents

Name	Age	Sex	Household composition ^a	Health and activity status
Jayan, Kebonagung				
Harjo	± 70	female	1-person's household: - <u>single</u> (son and daughter-in-law lived next his mother)	healthy but deaf, still cash income from production and sale of palm sugar, income-in-kind from her fields that son cultivated
Amat	± 80+	female	3-generation's hhd. extended: - <u>wife</u> , husband, - <u>sister</u> , - nephew, niece-in-law, - grandnephew/nieces (non-household <i>nephew-in-law</i> was also respondent)	decrepit (<i>jompo</i>), walked with stick, sight and hearing problem, poor and miserable (<i>krepo</i>)
Petung, Giriwungu				
Suto	±100	female	4-generation's household: - <u>mother</u> , - <i>daughter</i> , son-in-law, - granddaughters, - great-grandson	decrepit (<i>jompo</i>), senile (<i>pikun</i>)
Oyot	unknown, died at the end of fieldwork (October '97)	female	3-generation's household: - <u>mother</u> , - <i>son, daughter -in-law</i> , - grandchildren, - great-grandchildren	not normal (<i>tidak normal</i>), forgetful and did not talk anymore

^a The respondents are in italic. The non-communicative elderly persons to which the respondents referred to are underlined.

5.4.3 Evaluation of the selection of respondents

In the qualitative fieldwork we aimed to select a diversity of respondents in order to obtain as broad as possible view of the lives of elderly people. We succeeded in this aim because we lived with a single older woman in Kebonagung and a three-generation elderly household in Giriwungu. The older landladies were not related to the head of the village and lived in the neighbourhood of other older persons.

The respondents of the case households that we selected were as diverse as practically possible concerning their age, sex, household composition and occupation or activity status. It was difficult to achieve a regular age distribution among the respondents because their ages appeared to be different than on the list of general election (*Daftar Pemilihan*). Besides, very old persons were often not suitable because they did not want to or could not participate in the in-depth interviews. We purposefully selected five

female and three male older respondents, because there are more females in the elderly population. With respect to the household composition, we selected one-, two-, three- and four-generation households and single-person households. At a certain moment, it occurred to us that we did not select a three-generation household in which the grandchild was still very young. We assumed that grandparents would be giving support to their children by providing a babysitting function. In fact we never saw any older person walking around with a baby or toddler in a sling cloth (*gendong*). When we screened the survey respondents of the hamlets in which we carried out the qualitative fieldwork, we realised that there were no older persons living in a household with children younger than four years. The youngest household member of the older people in our survey was four years and these people were not suitable to participate in the in-depth interviews. With respect to the occupation or activity status of the older respondents, we selected farmers, but also a cattle breeder, traders, a palm sugar collector, and persons who were not working anymore. In addition, we selected some respondents who answered for the usually very old non-communicative elderly people.

5.5 Methods of data collection and analysis

Triangulation was important because of the complexity of the research problem, which calls for a holistic approach. Quantitative methods were used to measure accurately the living conditions, the care practices, the support providers and social security of the elderly people. Qualitative methods were used to capture accurately actual behaviour, motivations and feelings of the older persons and their carers. Qualitative methods produced detailed information about the patterns of care, old age security, livelihood strategies and affects of social change. Moreover, qualitative methods and literature research produced insights for the interpretation of quantitative data.

5.5.1 Preliminary research

In this sub-section we describe the methods of data collection and analysis that we used in the preliminary phase of the research project.

Literature research

The literature research was focused on the following topics:

- (elder) care, living and care arrangements, support network relations, coping and livelihood strategies, and social security;
- elderly people in the Special Region Yogyakarta, Java, Indonesia in particular and other areas like Asia and the Netherlands if the subject was interesting;
- the process of social change in general, in theory and in particular for Indonesia;
- the ageing process and relating subjects like fertility, mortality and migration in general and Indonesia in particular;
- background information of the Special Region Yogyakarta, Java and Indonesia.

The literature was gathered mainly from libraries like the Population Studies Center at the Gadjah Mada University in Yogyakarta, the Royal Institute of Linguistics and Anthropology (KITLV) in Leiden, and the Dreijenborch Library at the Wageningen (Agricultural) University in Wageningen. The literature references were processed with the computer program Endnote Plus.

Secondary data collection

A list of the secondary data, mostly consisting of statistical and demographic data, is presented in Annex 5.7. These data were collected from the libraries described above, and from governmental bureaus of the Special Region Yogyakarta, regencies Bantul and Gunung Kidul, sub-districts Imogiri and Panggang, villages Kebonagung and Giriwungu, and ten hamlets. Most of the census data of the Central Bureau of Statistics (*Biro Pusat Statistik*) were one-way cross-tables of crude frequencies only. We used the spreadsheet program Microsoft Excel, and sometimes the Statistical Products and Service Solutions (SPSS) program to make these data suitable for our purposes. We used the following statistical procedures: one-way and two-way frequencies, and Chi-Square tests. (See the sub-section on preparation and application of survey data in Chapter 5.5.2 for a short description of these procedures.)

Language training

I took a beginner's course in the Indonesian language (*bahasa Indonesia*) that focused much attention on grammar at the Language Centre of the Wageningen (Agricultural) University in the Netherlands. After that I took an intermediate course at the *Wisma Bahasa*, Yogyakarta Indonesian Language Centre in Yogyakarta. There, more attention is paid to oral skills and practice. At the beginning of the second phase of the research project, I took an advanced course at the same centre in Yogyakarta.

I also considered learning Javanese because the interviews had to be conducted in Javanese since most of the elderly people in rural areas only speak this language. However, the Javanese language consists of three levels. *Kromo-inggil* is spoken to noble persons or aristocrats. *Kromo maya* is spoken if one wants to express oneself politely usually to an older person or a person with a higher status. *Kromo-ngoko* is the informal spoken language of every day usually to persons of the same age or lower status. There are significant differences between each of these levels and it would have taken too long to master the language adequately. Therefore, I worked with an assistant who translated the Javanese of the older persons into Indonesian for me. During the fieldwork, I learned some basic expressions in Javanese, which usually broke the ice in the contact with still unfamiliar people. In the end, I could reasonably follow the conversations.

Key-informant interviews with experts

I talked to experts¹⁸ in Jakarta and Yogyakarta to make the study subject of elder care in Indonesia more explicit, and to find out what research had already been done. The Population Studies Center (*Pusat Penelitian Kependudukan, PPK*) of the Gadjah Mada University (*Universitas Gadjah Mada, UGM*) in Yogyakarta offered the use of the library, facilities and expertise. In addition, I discussed the research subject with international colleagues at workshops and congresses.

5.5.2 Quantitative fieldwork

For the quantitative fieldwork a questionnaire was made in English. An interpreter translated the questions into Javanese, and the directions for the interviewers into Indonesian. Another interpreter translated the questionnaire back into English which enabled us to remove some remaining errors.

The interviewers were carefully recruited and tested on the criteria of interview experience with large samples, ability to speak the Javanese language and empathy with elderly people. We preferred students from the social sciences and we aimed to create a research team that was equally balanced according to sex. The interviewers consisted of six female and five male graduates (*S1*) in anthropology and human geography. My personal assistant was a female graduate (*S1*) in human geography. Her role in the research is discussed further in the next section.

The interviewers were trained in using the questionnaires. In a village near Kebonagung, the questionnaires were pre-tested on elderly people by the interviewers in three rounds after which errors and ambiguities were removed. The eleven interviewers carried out the Elderly Household Survey; my assistant and I coordinated the whole process in the villages of Kebonagung and Giriwungu. During these surveys we all stayed in the field and travelled on foot or by scooter. The first part of the Elderly Household Survey with the older respondent lasted one hour on average and the second part with the household member half an hour. The interviewers completed and corrected their (short) notes in the questionnaire after each survey interview. Out of the group of interviewers three coordinators were chosen to be responsible for the results of three to four interviewers. (Each coordinator was accountable for her/his own results to another coordinator.) The coordinators had to check each questionnaire, and had to report important cases and the results to me and my assistant. Every day the whole research team discussed the results and target of the interviews, the problems experienced and interesting stories of the fieldwork.

¹⁸ Examples of visited institutions are the Indonesian Institute of Sciences (*Lembaga Ilmu Pengetahuan Indonesia, LIPI*), the Center for Health Research (*Lembaga Penelitian*) and the Demographic Institute (*Lembaga Demografi*) of the Indonesian University (*Universitas Indonesia*) in Jakarta, and the protestant Elderly Home 'Hanna' (*Panti Jompo Wreda 'Hanna'*) in Yogyakarta, and the governmental Elderly Home Abiyoso' (*Panti Sosial Tresna Werdha 'Abiyoso'*) in the village Pakem near Yogyakarta.

Elderly Household Survey

The survey used a questionnaire and a face-to-face interview method. Annex 5.8 presents the questionnaire in English. Although the questionnaire held some structured answer categories, we asked all questions in an open way because little as yet was known about the subject.

The interviewers were given a set of cards with instructions (see Annex 5.8). For example, one of the cards contained information on the local and national historic events and some guidelines to estimate the age of the older respondent. The village heads and some hamlet heads informed us about the date of events. We had to use the so-called event-calendar method¹⁹ because respondents often did not know their exact age. We also used the life-events method, like the births of children, marriage or moves and counted back to the respondent's own year of birth. Although birth dates on official documents were usually not very accurate, we used these if the respondent had such documents.

The questionnaire included a Mini Mental Test (MMT) (Folstein et al., 1975 316) which was adapted to the local situation. The MMT was included to give the interviewers a tool to determine if the mental or health status of the respondent was good enough to understand and answer the questions. We did not want to rely on the information of the household member, because they tend to be protective of their old parents and underestimate their parents' capabilities. The MMT was only conducted in doubtful cases and usually at the beginning of the interview but sometimes after the interview had begun. It was conducted in 44 cases. Of those 42 elderly respondents could not answer the questions themselves and two were admitted again as respondents.

The Elderly Household questionnaire consisted of three parts. For the first part the older person was the respondent. It consisted of questions about (A) the socio-demographic status, (B) the health status, (C) the economic status, and (D) the care arrangements of the older person. Some questions related to the respondent's own perceptions of (in)security with regard to food, health, economic situation and care arrangements. For the second part an adult household member of the older person was the respondent. We assumed that more detailed questions, for instance about the specific ages of all the household members, would be too difficult for the older person to answer. The second part consisted of questions about (E) the household composition and socio-economic status of the whole household. The third part concerned the 42 non-communicative elderly people, who failed the Mini Mental Test because they were deaf, mute, (temporary) ill or demented. This part was a succinct version of the first part and consisted of questions about the health status; general, personal and instrumental activities of daily life; and the primary caregiver of the older person. The first and second parts of the questionnaire occurred during the same period of the fieldwork. The third

¹⁹ Howell (1986) reviewed the techniques of collection and analysis of age data.

part occurred during a later stage of the fieldwork, because it followed from the analysis of part one and two.

Preparation and application survey data

After collecting the survey data my assistant and I examined the answers and coded them. A codebook was made in Javanese and English in order to process and analyse the data with the computer. Three assistants of the Population Studies Center were trained in coding and entry of the data. The assistants cross-checked each other's coding and I randomly checked the assistants. The coding of the answers to the open questions was extensively discussed. Annex 5.9 presents the main concepts of the research with the corresponding numbers of the survey questions and the names of variables.

The data analysis was carried out with SPSS. An assistant screened the frequency outputs for errors in coding or data-entry first in Indonesia. I screened it for the second time in the Netherlands. We used the following statistical procedures:

- One-way and two-way frequencies to investigate the frequencies between one or two variables;
- Chi-Square tests to investigate statistical significant differences for variables measured at a nominal level;
- Nonparametric Mann-Whitney test for variables measured at an ordinal level in case the sub-sample was too small for the Chi-Square test;
- Correlation analysis to investigate a linear correlation between two or more variables measured at an interval or ratio level;
- Ordinary Least Squares Regressions (OLSR) analysis to investigate a causal relation between two (bivariate) or more variables (multi-variate) measured at an interval or ratio level.

These procedures are described with more detail in the sections that discuss the results (see especially Chapter 11.2.1 and Annex 11.1 for the OLSR analysis).

5.5.3 Qualitative fieldwork

Together with my assistant I lived temporarily in the hamlets where the qualitative fieldwork was carried out. We participated in social gatherings to obtain a general idea of the research setting and to build up rapport with the village people. For instance, by going to the saving-and-credit group meetings (*arisan/simpan pinjam*) for women, and the ritual meals (*kenduren*) for men. We were invited to weddings, visited sick persons, paid our respect to the family of a stillborn baby and just sat outside talking to the neighbours. In Petung we drove to the weekly market in the back of the truck and helped to produce fermented soybean packages (*industri kecil tempe*) for an income generating project. In Jayan we accompanied the landlady to the mill to have her rice husked. We also went to the construction of the dam, watched and discussed the activities with the spectators.

We made photographs to record observations of settings, daily practices and special events. This helped to recall specific little things after having left the field. Besides, it offered a way to observe the people's reactions when they saw the photographs and discuss specific issues. Finally, the respondents and other village people appreciated the photographs as a gift in return for their participation in the research.

The presence of my assistant, my husband and myself in the village probably influenced the behaviour and response of the people that we studied. However, by living in the village and observing the daily practices of the people, I became more aware of what was different from normal and by crosscheck, I could judge the results.

An advantage of having an assistant who was not from the village is that she could observe objectively and discuss this with me. Respondents were not so much tempted to let the assistant answer the question. A disadvantage was that the respondents also regarded the assistant as a stranger with whom they were not directly familiar. When we tried to discuss confidential subjects with the respondent, being a stranger was an advantage again because we could more easily guarantee secrecy. Another disadvantage was that the assistant lacked authority. I needed her to assist me with managing the interviewers of the survey. Since these interviewers were male, older or female fellow students this was probably asking too much of her. Only after the survey was finished, did she tell me about the incidents that had occurred. These problems were one reason why we did not carry out focus group discussions²⁰. Nevertheless, the assistant stayed stoic under my frustrations and was a great help during the entire fieldwork period.

Fieldnotes and diary

In the beginning of the fieldwork, I started with a logbook, diary and jotter in book form. I also made fieldnotes on the laptop computer. These were subdivided into methodological notes, descriptive notes and analytic notes. This resulted in the following kind of documents:

- The log, a running account on time planned and spent;
- The diary for personal thoughts of happiness and distress. A place to run or hide when things got tough. It chronicled how I felt or perceived my relations with others.
- The jotter was a little pad to jot down observations on the spot, informal talks on the street, striking situations or amazing events, to be worked out in fieldnotes;

²⁰ Other reasons were that it was difficult to invite a homogenous group of older persons at a site that provided sufficient privacy at an appropriate time. Privacy was a rare asset anyway. The older people worked in the field most of the day and were tired when they came home. Besides, I foresaw problems because the assistant could not moderate the discussion, translate from Javanese to Indonesian for me and take notes at the same time. See Kitzinger (1994); Knodel, Sittitrai and Brown (1990) and Krueger (1988) for a detailed description of the focus group technique and requirements.

- Methodological fieldnotes on method and techniques, in collecting data, documenting the learning experience of fieldwork;
- Descriptive fieldnotes, ethnographic notes resulting from watching, listening and observations to capture the details of people's behaviour and the environment;
- Analytic notes that reflect on social situations²¹.

However, after a while I kept my notes in three places: the log and jot book in book form, and all the other fieldnotes in one computer file. The field notes were processed with Word Perfect and later converted into an ASCII file to be imported into the qualitative data analysis program QSR NUD*IST.

Elderly case studies

We used the following methods for each of the eight selected elderly case studies: participant observation, in-depth interviews, life history, genealogical diagram and social network mapping. We had on average four to five meetings with each respondent, which lasted anywhere from an hour to a whole day. We usually started with a short meeting in which we introduced ourselves and explained our intentions. We asked for their cooperation and permission to observe their daily activities.

The in-depth interviews were open interviews dealing with the following topics:

1. Daily observation:
 - activities during one day.
2. Life history:
 - important life events (birth, youth, school, work, marriage, children, divorce/widowhood/remarriage etc.), transitions;
 - household size, house movings, household members;
 - main activities with the emphasis on care for/by others and power (moment of take-over), head of the household.
3. Care arrangements:
 - care situation now/before/future, care practices (ADL, IADL);
 - care providers/takers, reciprocity → list of activity fields, network mapping;
 - relationships with others → genealogical diagram;
 - resource flows (money, inheritance house/land/livestock, yield/food, material, energy, emotional, information).
4. Social security:
 - feelings/worries/assurance for care now/future when they become more frail;
 - power/independence versus take over/give over/dependence;
 - indicators for the older persons, ingredients for a secure (cared for) old age;
 - indicators for insecurity in old age.
5. Social change:

²¹ The method for taking and managing field notes was elaborately described by Bernard (1988: 180-202).

- personally for older persons (with regard to the subjects below): "What was life like before? What was different? When was life better, now or before when you were young? Why?";
- life in general: (natural) environment, living conditions, village/community relationships;
- changes in elder care.

During dull moments of the daily observation, we tried to let the respondent describe her/his life history. For the retrospective life history, we regarded the exact dates as less important than the chronological order of the events. The life histories were used as insight into the lives of elderly people and the way life had changed for them. To talk about their life in the past also offered starting-points for a discussion about changes in care and power.

In the framework of the life history method, a genealogy had to be done to understand the kinship linkages. It was also useful for mapping the social support network of the respondent. We checked the genealogical information by comparing statements of the respondent and sometimes household members on different occasions. The subjective genealogies usually reflected the situation as perceived by the older respondent. This meant that for example for *bapak* Dwijo, who left his place of birth after marriage and moved into the house of his parents-in-law, we made a genealogy that consisted mainly of his wife's family relationships. For *simbah* Rejo, who had moved to her husband's village after marriage, we made a genealogy that consisted mainly of her late husband's family relationships. In addition to the concrete genealogical symbols, the names of the persons and place of residence of the households were entered in the model. The genealogy and social network together made the important kinship relations of an older person visible.

We used a method based on Sokolovsky's cross-cultural network profile (1986) to collect data on the older respondent's activities, support network and social interaction. There was a list of activities (see Annex 5.10) for which we checked whether the respondent received or provided support, from who or to whom, how often and whether that relationship was reciprocal or not (among other things). Annex 5.11 shows the form in which the answers were documented. We planned to combine this method with asking the respondents to make a Chappati diagram (Vishwakiran, 1990: 918) of all the social connections that existed between the people they listed. Although the method of Chappati diagram worked very well among farmers in the Philippines (Keasberry, 1993), we could not use it with our older respondents in Indonesia. The method was inappropriate because older persons were not used to working with paper, often could not read or write and did not understand the symbols in the diagram.

Key-informant interviews

We interviewed the following key-informants about their general activities and specific programs for the elderly people in the area:

- the heads of the hamlet (*Kadus*) and village (*Kades*); the officials of the Social Community (*Petugas Sosial Masyarakat, PSM*) and Family Welfare (*Pertemuan Kelompok Keluarga Sejahtera, PKK*) at the Village Office (*Balai Desa*); and the officials of the local government clinic (*Pusat Kesehatan Masyarakat, Puskesmas*);
- the officials of the Social Department (*Departemen Sosial, Depsos*) and the Sub-sections Social Welfare (*Kesejahteraan Sosial*), Safety and Order (*Ketentraman dan Ketertiban*), Education of Family Welfare (*Pendidikan Kesejahteraan Keluarga, PKK*), Family Planning (*Badan Koordinasi Keluarga Berencana Nasional, BKKBN*), Development of Elderly Families (*Bina Keluarga Lansia, BKL*) at the Sub-district's Office (*Kantor Kecamatan*);
- the officials of the Social Department (*Departemen Sosial, Depsos*) and Health Department (*Dinas Kesehatan*) at the Regency's Office (*Kantor Kabupaten*).

Preparation and application qualitative data

Most of the qualitative data were converted into an ASCII file and processed with the QSR NUD*IST program²² in the Netherlands. Each text unit in the documents was coded and linked to a node in the index system. While searching either document text or coding at nodes, patterns and themes were discovered and explored, and theories were constructed.

5.5.4 Evaluation of research methods

Most of the research on elderly people in Indonesia use quantitative methods and are based on an etic (outsider) perspective. However, with respect to the social aspects of ageing a creative combination of quantitative data and narrative reviews is required (Streib and Binstock, 1990). By using different sources of information and data, the conclusions drawn from the research situation become more valid and reliable. Therefore, a combination of quantitative and qualitative methods was used in order to understand the processes studied in culturally appropriate terms, to obtain accurate information on behaviour, and to interpret the meanings behind the behaviours from the emic (insider) perspective of the older persons themselves. This thesis intends to weave the results of all these methods together. Survey findings will be illustrated with concrete examples, discrepancies between what people say they do and what they actually do will be pointed out, interrelationships will be explored, and survey data will be validated with qualitative findings.

²² QSR NUD*IST stands for the 'Qualitative Solutions and Research' software development company which designed the 'Non-numerical and Unstructured Data Indexing Searching and Theorising' computer package.

6. Older people in focus¹

In this chapter we focus on characteristics of older people that indicate their socio-demographic status. The socio-demographic indicators consist of the independent variables: age, sex, religion, education, marital status, household composition, household size, (co-) residence and children. Case studies are presented of a farmer and a retiring farm labourer to obtain more insight into the different lives of older people. Additionally, we place their lives against the background of social change and add some historical depth to the cases. An overview of the characteristics that indicate the socio-demographic status is presented in the conclusion.

6.1 Socio-demographic characteristics

6.1.1 Age

The question of how to establish the age of the respondents was a very difficult one and could only be answered by estimation. Developing countries like Indonesia have only recently begun to keep statistical records and in the rural areas these are usually not very accurately kept. Different official documents gave different ages for the same person. So, we could not rely on the age data from the sample framework, the General Election List. Older people did not have official documents like a passport or identity card most of the time. Therefore, we tried to estimate the age with the event calendar method of life-events, local or national historic events (see Chapter 5.5.2) when age proved to be difficult to establish.

The following cases illustrate the problems that we experienced with recording the age of the respondents. For instance, different official sources gave different years of birth for the same person.

Simbah Harjo's age was 66 years in the General Election List (*Daftar Pemilu*), 67 years in the Population Records (*Buku Penduduk*), 70 years according to her son who responded to our survey question and 83 years on her identity card (*Surat Keterangan*).

Simbah Harjo (± 70, female, palm sugar producer), Kebonagung.

Trying to estimate the relative age of the respondent in comparison with contemporary family members and friends did not work very well either.

¹ Parts of this chapter, in particular the sub-sections 6.1.6 and 6.1.7, have been published in Keasberry (2001)

According to her daughter, *simbah* Suto was already about a hundred years old², because all her friends had already been dead for a long time and the children of those friends said that the age of *simbah* Suto was already about a hundred years. Suto's relatives of the same generation had all already died with the exception of *simbah* Karso, the midwife, but *simbah* Karso is a younger sister (of the same father and a different mother).

Simbah Suto (± 100, female, retired, demented), Giriwungu.

Sometimes the age of a particular respondent could be estimated by counting the years between special life-events. Like *simbah* Muh who together with his wife gave a fairly accurate estimation by adding the following events.

Muh was 22 years old when he married. After one year their first child Espangati was born. Espangati married at the age of 16 and became pregnant after four years. At the time of the interview Muh's first grandchild Agus went to class two of the upper secondary school (SMP) and was probably about 15 years old. So *simbah* Muh was 58 years old and born in 1939.

Simbah Muh (58, male, palm sugar collector), Kebonagung.

To estimate the age with reference to historical events was often difficult because people in the village did not have much understanding of the years of the events or of their age at the time.

Simbah Kromo was very confused about her age: "I do not know my age. More than forty years, fifty years have passed." She did not know when she was born or by how many years she differed from her siblings. During the Big Earthquake (*Lindu Ageng*), in 1942, she was still young. She could not yet walk and was still carried around in a cloth sling (*gendong*) by her mother. She could not remember it herself but her older sister Tukinem remembered it. *Simbah* Kromo did not remember her age at the time of the Ash Rain (*Udan Awu*) in 1951. She only knew that she asked her mother what it was. She did not remember the First Elections (*Pemilu I*) in 1955 either. These memories did not fit well with the birth year of 1935 on her Residence Identification Card (*Kartu Tanda Penduduk*) which indicated that she was 62 years.

Simbah Kromo (±62, female, small market vendor), Kebonagung.

It is obvious that the exact age and years of events were not very important for the respondents. They did not celebrate their birthdays. So, years went by without noticing, and some years more or less did not matter much.

² This pattern of age misstatement is known as age vanity (Howell, 1986) or age shifting (Newell, 1988), the tendency to report oneself considerably older than one actually is. This is also observed for friends or relatives of the old person who might be expressing surprise that the person has survived so long.

Only *Pak Dwijo* was very certain about most years because he carved important years, for example the birth years of his sons, in a balk of his house. Otherwise he would forget them, he said.

Bapak Dwijo (male, 64, petty trader and labourer), Giriwungu.

Using a combination of different methods and different sources we tried to estimate the respondent's exact age as closely as possible. When we believed that it was a good estimation, the age of the respondent is presented as such. When we suspected that it was not a very exact estimation or when different sources were contradicting, we chose the most likely age and present it with a plus minus sign (\pm) in front.

Apart from the observed patterns of age misstatement that we described above, we also observed the pattern of age heaping or digit preference³ in the survey data. Recoding the age data into five-year or ten-year categories eliminated the effects of age heaping. It is obvious that estimating the age of respondents was difficult and that some of the results were not reliable. See Annex 6.1 for a more detailed description of how we tested the reliability and an explanation of why we still believe that the analysis will not be significantly affected by using the variable age.

The average age of the male respondents is 68 years and of the female respondents 70 years. The age distribution is not significantly different for sex. The average ages for the villages of Kebonagung (68 years) and Giriwungu (70 years) were also not much different.

Table 6.1 Age distribution by village

Age groups	Kebonagung		Giriwungu		Total	
	Freq.	%	Freq.	%	Freq.	%
55-59	32	16.5	17	8.4	49	12.3
60-64	49	25.3	50	24.6	99	24.9
65-69	26	13.4	33	16.3	59	14.9
70-74	31	16.0	33	16.3	64	16.1
75+	56	28.9	70	34.5	126	31.7
Total	194	100.0	203	100.0	397	100.0
Test scores	$\chi^2(4)=6.9, p=0.144$					

³ Age heaping is the pattern of finding more people at certain ages and fewer at others than expected. The most common form of age heaping is digit preference, a preference for ages ending in noughts and fives (Howell, 1986).

Table 6.1 presents the results of the Elderly Household Survey with regard to the age distribution per village. The age distribution of the older population in Kebonagung is not significantly different from the age distribution in Giriwungu. Although Giriwungu had fewer respondents in the youngest age group and more respondents in the oldest age group, this difference was not significant. Therefore, we cannot yet confirm the hypothesis that the ageing process would be in a more advanced stage in the poor village with high out-migration and limited agricultural opportunities than in the relatively more prosperous village with low or no out-migration and still the main employment in agriculture. Giriwungu was selected as the poor village with high out-migration and Kebonagung as the more prosperous village with low out-migration. When we consider the total survey sample we see the same pattern of age distribution; fewer young people aged less than 60 years and more oldest people aged more than 75 years.

6.1.2 Sex

Most of the older people (N=355) responded to the survey questions themselves. The 42 non-communicative respondents could not answer the questions themselves because they were either deaf, mute, demented or (temporarily) ill. In these cases a household member responded to a shorter list of questions about the older person. The answers to the questions that were posed in both parts of the questionnaire were combined, although we realise that the different type of respondents could have answered differently.

Table 6.2 Age and sex distribution

Age group	Communicative respondents				Non-communicative respondents				Total			
	M	F	Total	%	M	F	Total	%	M	F	Total	%
55-59	21	27	48	13.5	1	.	1	2.4	22	27	49	12.3
60-64	42	55	97	27.3	.	2	2	4.8	42	57	99	24.9
65-69	24	33	57	16.1	1	1	2	4.8	25	34	59	14.9
70-74	29	29	58	16.3	2	4	6	14.3	31	33	64	16.1
75-79	18	27	45	12.7	1	2	3	7.1	19	29	48	12.1
80-84	12	14	26	7.3	6	10	16	38.1	18	24	42	10.6
85-89	4	13	17	4.8	1	1	2	4.8	5	14	19	4.8
90+	.	7	7	2.0	1	9	10	23.8	1	16	17	4.3
Total	150	205	355	100.0	13	29	42	100.0	163	234	397	100.0

M: male, F: female

As expected, the sample of non-communicative respondents consisted of relatively more very old persons (mean age is 79.4) than the sample of communicative respondents (mean age is 67.9). Of the non-communicative respondents 88.1 percent were older than 70 years. The age groups of 80-84 years and older than 90 years were large among them.

The respondents consisted of 150 men (42.3%) and 205 women (57.7%). The non-communicative respondents consisted of 13 men (31%) and 29 women (69%).

Among the very old persons there is usually a higher proportion of non-communicative persons. As women have a higher life expectancy, it is understandable that the category of non-communicative respondents consisted of an even larger percentage of women than the communicative respondents. The total survey sample consisted also of more female (58.9%) than male (41.1%) respondents.

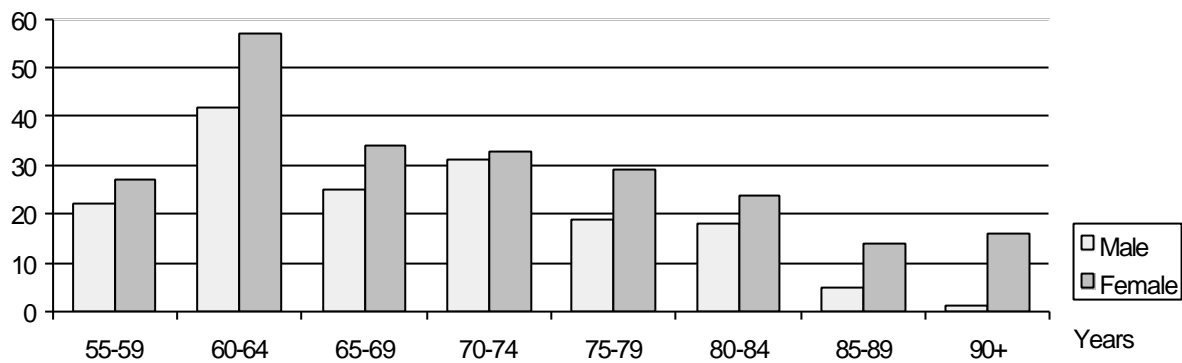


Figure 6.1 Sex by age group⁴ (N=397)

The distribution according to age and sex of the total population in the Elderly Household Survey is illustrated in Figure 6.1. There were more women than men in the total population. This skewed sex distribution affected most of the age groups. It only differed for the age group of 70-74 years, which had an almost equal amount of men and women. The sex distribution of the very old age groups 85-89 and 90+ years was even more skewed. Women older than 90 years did not have any male companions of the same age group or female contemporaries living in the neighbourhood. The next case illustrates this point. The sample did not show a significant difference between the sexes for the different age groups.

"Friends of the same age as me already died. Friends who are younger than me are still many."

Simbah Niti (±90+, female, retired), Giriwungu.

⁴ One would expect the age group of 55-59 years to be larger than the age group of 60-64 years. This result can be caused by a preference of the respondents for being 60 rather than 55-59, since 60 is generally considered as the beginning of old age. Other possible reasons are discussed in detail in Chapter 5.3.3.

6.1.3 Religion and slametan

In Indonesia every person is supposed to have a religion, because the New Order government assumed a person without a religion to be a Communist. Consequently, questions about religion cannot be asked without the chance of receiving a socially desirable answer. Therefore, the answers to the survey question probably are not very trustworthy. We noticed a certain hesitation when we asked about religion.

The respondents often answered cautiously:

"... Like the religion Islam",
"My children are Muslim" or
"The usual, Miss, ... Islam"

(Fieldnotes, 11 March 1997).

The survey (N=355) counted 93.8% Muslims, 3.7% Buddhists (possibly including *Agama Buda*, pre-islamic religion), 2.0% Roman Catholics and 0.6% Christians (meaning Protestants). The majority in both villages answered that they were Muslims. However, we observed that most of the respondents did not actively practice their religion. Especially in Giriwungu, where we lived opposite the mosque, we observed that only schoolchildren went to the mosque because their teacher told them to. In Kebonagung more respondents went to the mosque. During the daily observations of the eight older respondents only one man, *simbah* Yoso, performed ritual ablutions and prayed at home five times a day (see Annex 6.5).

In the mountain area of Giriwungu some respondents said that they were Buddhists. According to a village official, a Buddhist monk from a monastery in Wonosari brought Buddhism to the area in the eighties. They followed him because people did not practise another religion. Others said that people followed him because he could heal people. In the village Kebonagung nearer to the city Yogyakarta some respondents said that they were Roman Catholics or Christians.

As said before, the majority of the population adheres to Islam, while the village religious system commonly consists of a complex of animistic, Hinduistic and Islamic elements. The religious practices are described in Chapters 2.4.3 and 3.3.1. The *slametan*, a religious and ceremonial meal that is offered to the spirits, occupies a central place in these practices. We expected that respected, old persons would have special roles in the Javanese *slametans*. *Kyai* Niti led the prayers at *slametans* in Giriwungu, but he was a religious leader (*kaum*) and a traditional healer (*dukun*), who are usually older men. When we counted the participants in the *sedekahan* for the birthday of Prophet Mohammed, less than forty percent of the persons present was old. Most of the participants were middle-aged and certainly not the oldest male in their household. My landlord (45 years) participated in the village *slametans* and led the small *slametans* at home, although his father-in-law (71 years) was seen as the head of the household. Women, including the older ones, prepare and cook the

typical food products for the *slametans*. Women usually do not participate in the *slametan* ritual itself.

6.1.4 Education

Educational attainment is divided into nine categories according to the Bureau of Statistics (BPS, 1992a) (see Annex 5.8 Card 4). Most of the respondents (91.5%) in the Elderly Household Survey did not receive any schooling or went only to some classes of the primary school. The rest graduated from primary school, general junior/senior high school, vocational senior high school or Diploma I/II. The interviews uncovered why older persons had no education: there was no school in the village Giriwungu, parents could not spare the money for the education and children had to work or help at home. Children became ill or a parent, who was a breadwinner, died which made the children drop out before graduation.

Mitro was not allowed to go to school because he had to take care of his younger siblings, carry them around in a cloth sling and herd the ducks. Meanwhile his parents were producing palm sugar. Together they could make twenty-five trees per day. His parents always told him: "There are no proceeds from going to school, only playing". So [the oldest child] Mitro and [child number four] Ngadiyo never went to school.

Bapak Mitro (54, male, son of simbah Harjo), Kebonagung.

In the past it was a privilege to go to school. Later some respondents went to the special school for illiterates (*sekolah buta huruf*) to learn to read and write.

"In the old days only children of rich people could go to school. But now they can go to school even though they are the children of poor people."

Simbah Marto (65, female, retired), Giriwungu.

"In the past only *Pak Kadus* went to school. His father was also *Kadus* (Hamlet Head) but he did not go to school."

Simbah Ngatinem (61, female, farmer), Giriwungu

In their stories respondents often talked about the situations in which they feel the lack of education such as the inability to read and write, count, tell time, talk in the Indonesian national language, understand time-reckoning, and geography.

"I do not know how to tell the time. Ten years ago, before I could tell the time there were people who asked: 'What time is it?' I answered: 'The most often [*sic.*], fifteen o'clock'. But that

is not possible! In the past there was no school. I did not go to school. There are two relatives [of the same generation] who did not go to school either. Nowadays all the children go to school. Because I never went to school I feel like a backward person." [...]

"For my children and grandchildren life is better. All my children went to school. Elementary school (*SD*), lower secondary school (*SMP*)... If my children had never gone to school, I would never have known of Jakarta. But when I joined my son and visited Jakarta, I felt stupid (*bodoh*) because they use written text for everything. Even for the toilet! When young people want to go to the toilet, they can read it. When I wanted to go to the toilet, I had to ask. I can only hoe. Like Miss Iris [researcher] can use a pencil and computer and peel cassava too. I hoe and am dressed in this. [Points at her sarong and blouse.] Miss Iris uses a pencil and dresses in trousers and T-shirt. Martini [granddaughter] already goes to the upper secondary school (*SMA*). She has already had three teachers! I could not have afforded that for my children, because the expenses were too high."

Simbah Ngatinem (61, female, farmer), Giriwungu.

Since the majority of the respondents had a poor education, the variable education does not have much distinctive value for further analysis.

6.1.5 Marital status

Table 6.3 presents the marital status by sex of the respondents. Most of the respondents were married and, according to their statements, still with their first spouse (84.2%). Of the people who were married, 10.7% were married for the second time and 3.7% were married for the third and up to sixth time. About a third was widowed or had lost their spouse in the war and did not know what had happened to him/her. Only a few respondents were divorced or had never been married. Of the whole sample more men (35.5%) were married than women (28.2%), and many more women (27.0%) were widowed than men (4.8%). Women are more likely to live without a husband when they become old.

Table 6.3 Marital status by sex

Marital status	Male	%	Female	%	Total	%
Not (yet) married	1	0.7	4	1.9	5	1.4
Married	126	84.6	100	48.5	226	63.7
Divorced	6	4.0	5	2.4	11	3.1
Widowed, lost spouse in war ⁵	17	10.7	96	47.1	113	31.8
Total	150	100.0	205	100.0	355	100.0
Test scores ⁶ : married status	$\chi^2(1)=48.5^{***}$, p=0.000					
widowed status	$\chi^2(1)=52.6^{***}$, p=0.000					

⁵ 'Lost spouse in war' (*garwa hilang di peperangan*) was expressed by respondents, who did not want to say or did not consider themselves as widowed, when their spouse had not come back after the war and so were uncertain about his fate. The war was not specified and could be any war or hunger period (*kelaparan*).

⁶ The married and widowed status were tested separately because the cells of the table of marital status by sex were too small to allow a Chi-square test.

The married respondents were asked in what year their current marriage had begun. Combined with the year of birth we tried to establish the duration of the marriage and the age of the respondent at the time. The marriages of the respondents had a mean duration of 41.7 years. Respondents told us that people used to marry at a high age in the past. Our results indicate that they married at an age of 28 years on average. However, this seems very unlikely since Jones (1994), in his comprehensive study, found an age at marriage between 17.2 and 18.4 years for the birth cohorts before 1906 till 1941-5 for rural Indonesia. After 1945, the age at marriage began to increase. Compared to other regions, Java showed a pattern of very early marriage in which Special Region Yogyakarta showed a pattern of later marriage. Nevertheless, the age at marriage never became as high as we found. Jones found a mean age of 24.1 years for women in 1990. Although people in rural Java used to marry at a very early age, child-marriages generally involved a delay in consummation and sometimes also a delay in the marriage rituals (Jones, 1994: 75-84). A possible explanation for the high average age at marriage in our research is that the respondent's present marriage is not their first marriage in spite of the fact that they said it was.

Table 6.4 presents the marital status by age group. We discovered highly significant differences for the married and widowed status among the age groups. As expected, younger respondents had married more frequently and older respondents were more frequently widowed.

Table 6.4 Marital status by age (N=355)

Marital status	55-64		65-74		75+	
	Freq.	%	Freq.	%	Freq.	%
Not (yet) married	1	0.7	3	2.6	1	1.1
Married	108	74.5	76	66.1	42	44.2
Divorced	5	3.4	6	5.2	.	.
Widowed	31	21.4	30	26.1	52	54.7
Total	145	100.0	115	100.0	95	100.0
Test scores: married status	$\chi^2(2)=23.2^{***}$, p=0.000					
widowed status	$\chi^2(2)=32.0^{***}$, p=0.000					

In the life histories (N=8) we found that the parents had arranged the marriage. The parents usually did not have to look very far for a suitable marriage candidate for their child. In many cases they were "just neighbours" or acquaintances, and in one case the spouses were cousins.

In 1957 *simbah* Yoso married at age 25 Giyem from Jiwan (a hamlet in an adjoining village). They laughed when we asked how they knew each other. They had not known each other themselves, but the older people of both families knew each other from herding ducks. Tomo [Yoso's uncle who had cared for him since his parents died when he was very young] and Giyem's parents said to them that they should marry and had the wedding arranged for them.

Simbah Yoso (65, male, retiring farmer), Kebonagung.

Usually, practical and economic reasons were given for an arranged marriage. Marriage was a condition to join a transmigration program from Panggang to Sumatra. Marriage was also a means to secure an income.

When Marto married [estimated between 1943-55] she was still very young [\pm 15-20 years] and her husband *Pak Guru* (Teacher) was already very old [\pm 64-76 years]. They were cousins (*anak siwo/sepupu*). He already had 16 wives, because he moved a lot as a teacher and got himself a wife in every place. Her parents and his older family members told them to marry. She married him because her parents had said: "He will not live much longer. Later you will have his pension." Marto thought: "I wanted to marry him because he was a very clever person. Despite his age, he was such a man that many women would have wanted to step only on his shadow to come near to him [...] I myself do not know why I wanted to marry him." [laughs] It was arranged that she would be his last wife who would be able to live from his pension after his death. He ordered her on his death-bed in 1982: "I am already called by The Master [God]. You have to stay here to guard the inheritance. Although you are still young, when you are asked to marry another person do not say yes because the pension will be lost." *Simbah* Marto: "That is why, when there were retired friends who tried to ask me [to marry them], I did not want to." [laughs]

Simbah Marto (\pm 65, female, retired with pension), Giriwungu.

In one case the respondent did not know her husband's name anymore. It was not clear whether she did not remember his name because he had died such a long time ago or because her memory was not that good anymore at her high age.

Interviewer: "What was the name of your husband, *simbah*?" Niti: "I do not remember my husband but he was from the village of Gondang." Interviewer: "You do not remember his name, *simbah*?" Niti: "No. ... Husband died when the children were still very young." Interviewer: "Where did he die?" Niti: "He died when the mother of Ngatini [granddaughter] could just take care of a baby. Take care of a younger brother (*adik*) who lives in the house over there. ... He [Niti's husband] died in the Japanese period [1942-45]." Interviewer: "Here? ... How long were you married before he died?" Niti: "My younger brother also died in the Japanese period."

Simbah Niti (\pm 90+, female, retired), Giriwungu.

6.1.6 Household composition and size

Table 6.5 presents the results with regard to the household composition by sex, age and residence of the respondents. Only a very small proportion of them lived alone and ten percent lived together with only their spouse. Almost half of the sample lived with a spouse and 'other(s)', and about a third only lived with 'other(s)'. 'Other(s)' could be parents, siblings, nephews/nieces, great-grandchildren and child's parents-in-law (*besan*), but they usually were their own children, a child-in-law and/or grandchildren. The population statistics of the villages showed that most households consist of two generations when there are no older people, and of at least three generations with older people⁷.

Table 6.5 Composition of elderly household by sex, age and residence (%)

Composition of elderly household	Sex		Age group			Village		Total N=397	
	Male N=162	Female N=235	55-64 N=148	65-74 N=123	75+ N=126	KA N=194	GW N=203		
Alone	0.6	6.0	2.7	4.1	4.8	6.2	1.5	3.8	
With spouse	11.7	9.8	12.8	8.1	10.3	11.9	9.4	10.6	
With spouse, other(s)	70.4	32.8	61.5	50.4	30.2	49.5	46.8	48.1	
With other(s)	17.3	51.5	23.0	37.4	54.8	32.5	42.4	37.5	
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	
Test scores ^a	$\chi^2(3)=65.7^{***}$ p=0.000		$\chi^2(6)=34.6^{***}$ p=0.000			$\chi^2(3)=9.1^{**}$ p=0.028			

The few people who lived alone (N=15) were mainly women in the highest age group of seventy-five years and older, living in Kebonagung. Forty percent of them had no children (anymore) and were really in need of care that could be provided by a co-residing child. Sixty percent had only non-coresiding children, the majority of whom were still living in the same village as their parent.

The variables sex, age and residence have a strong significant effect on the household composition of the respondents. Men are more likely to live in a household with their spouse and other(s) than women do. This can be accounted for by the fact that men are almost twice as often married and that women are almost four times as often widowed. The prevalence of the household type 'elderly, spouse and other(s)' declines significantly with age, while the prevalence of the household type 'elderly and other(s)' increases with age. The explanation may be that achieving a higher age is accompanied by the loss of a spouse. The strongest effects of the variable residence are on the household types 'elderly living alone', which we already discussed, and 'elderly and other(s)'. In Giriwungu a higher percentage of respondents live only with other(s) than in Kebonagung, which is because fewer respondents were married and more respondents were widowed in Giriwungu.

The household size ranges from one to eleven persons with a mean size of 4.6. This is in accordance with the average household size in the secondary data of 4.5 and

⁷ See Annex 3.2 for the household compositions by hamlet.

4.7 for Giriwungu in Kebonagung⁸ respectively. The elderly households in the survey are a little larger than the households in the rural areas of the whole Special Region Yogyakarta (average 4.1 persons per household) (BPS, 1991b: 392).

We distinguished five categories of household size in order to test the reliability for sex, age and residence. (In Table 6.9 the average household sizes for these variables are presented.) The categories consist of one to two persons, three persons, four persons, five persons and six to eleven persons. Household size differs significantly according to age and residence. The smallest and the largest household sizes are most frequently found among the oldest respondents of 75 years and older. When a person becomes very old s/he is more likely to live either alone or with only one household member, or with a very large number of household members. Moderate household sizes of three to five persons are found more frequently among the age groups of 55 to 74 years. In Kebonagung we most often found household sizes of four persons or less. In Giriwungu we most often found household sizes of five persons or more. The reason for these differences is perhaps that in Kebonagung the nuclear family is more prevalent than in Giriwungu where the extended family is more prevalent.

6.1.7 (Co-)residence and children

This subsection compares the respondents' place of residence with their place of birth. Furthermore, the number of children and coresidence with their older parents is described.

Table 6.6 Place of residence compared to place of birth

Place of residence ⁹	Kebonagung		Giriwungu		Total	
	Frequency	%	Frequency	%	Frequency	%
Same hamlet as born	99	55.3	126	71.6	225	63.4
Same village as born	19	10.6	20	11.4	39	11.0
Same regency and further away as born ¹⁰	61	34.1	30	17.0	91	25.6
Total	179	100.0	176	100.0	355	100.0
Test scores	$\chi^2(2) = 13.8^{***}$, $p = 0.001$					

The majority of the respondents (98.3%) still live in the hamlet, village or regency where they were born. Respondents in Giriwungu lived more often in the same hamlet than respondents of Kebonagung. This is probably because the respondents

⁸ See Annex 3.1 for the household sizes by hamlet.

⁹ The questions "Where do you live now (place of residence)?" and "Where were you born (place of birth)?" were asked. The names of hamlet, village, sub-district and regency were given. None of the respondents lived in the same sub-district where s/he was born. Therefore this answer category was left out of Table 6.6.

¹⁰ The original answer categories 'Same regency as born', 'Other regency in DIY', 'Other area in Java', 'Other area in Indonesia' were recoded into 'Same regency and further away as born' in order to meet the maximum condition of 20% cell filling of less than five for the Chi-squared test.

of Giriwungu lived in a remote and isolated area in the mountains of the sub-district of Panggang. In Kebonagung almost a third of the respondents do not live in the same village but still live in the regency where they were born, in contrast with much fewer respondents in Giriwungu. People in the sub-district of Bantul at large are probably more exposed to influences from outside and more used to commuting to work in the city Yogyakarta.

Most older men (80.6%) and women (69.9%) still live in the same hamlet or village where they were born. The rest live in the same regency or farther away from their birthplace. Women, with a significantly higher frequency, live farther from their birthplace than men, which means that women are more likely to live farther away from their own families.

When the respondent did not live in the hamlet where s/he was born (N=130), the question was asked why s/he had moved to the present place of residence. Most of them (78.3%) answered that they had followed their spouse. The mean duration of their residence place was 41.24 years, which is almost equal to the mean duration of the married status (41.69).

Table 6.7 Elderly households with number of (non-)coresiding children and total number of children still alive

Number of children	Number of coresiding children		Number of non-coresiding children		Total number of children still alive	
	Frequency	%	Frequency	%	Frequency	%
0	95	23.9	65	16.4	17	4.3
1	222	55.9	70	17.6	42	10.6
2	58	14.6	90	22.7	68	17.1
3	16	4.0	81	20.4	96	24.2
4	4	1.0	45	11.3	69	17.4
5	1	0.3	27	6.8	63	15.9
6	1	0.3	12	3.0	22	5.5
7	.	.	2	0.5	9	2.3
8	.	.	3	0.8	5	1.3
9	.	.	1	0.3	4	1.0
10	.	.	1	0.3	.	.
11	.	.	.	.	2	0.5
Total	397	100.0	397	100.0	397	100.0

Of the whole sample almost a quarter of the older parents (95 cases) do not live together with a child, and more than half live together with one child (222 cases). The rest of the parents live together with two to six children. If we consider the parents who live with only daughter(s) or son(s) (N=257), and not with a combination, it appears that they live significantly more often with a daughter (55.3%) than with a son (44.7%)¹¹. This could be taken as a support for the hypothesis that parents have

¹¹ Ninety-five elderly parents did not coreside with a child and forty-five elderly parents coresided with a combination of daughter(s) and son(s). Test scores of elderly parents who lived with only daughter(s) or son(s) were $\chi^2(1)=2.8^*$, $p=0.092$.

a preference for coresidence with a daughter. This matter will be further discussed in Chapter 9.1.2.

Most respondents also have children with whom they do not share the household. More than three-quarters of the respondents (286 cases) have one to four non-coresiding children. Still 65 respondents (16.4%) have no children outside their own household. Only 4.3% of the respondents have no children (anymore). These persons are probably more vulnerable when care is needed. Most respondents have between two and five children who are still alive with a mean of 3.4 children. The two largest families have eleven children.

Table 6.8 Number of children coresiding with older parent by village

Number of coresiding children	Kebonagung		Giriwungu		Total	
	Freq.	%	Freq.	%	Freq.	%
0 child	62	32.0	33	16.3	95	23.9
1 child	89	45.9	133	65.5	222	55.9
2-6 children	43	22.2	37	18.2	80	20.2
Total	194	100.0	203	100.0	397	100.0
Test scores	$\chi^2(2) = 17.8^{***}$, $p = 0.000$					

In the village of Kebonagung almost two times as many respondents do not coreside with a child than in Giriwungu. If this was caused by more migration of children from Kebonagung, then this would refute our hypothesis. However, we probably cannot draw this conclusion because our sample had significantly more respondents of 55 to 59 years in Kebonagung, and more respondents of 75 years and older in Giriwungu. The young respondents are more likely to be in the 'empty nest' life-stage. The old respondents are more likely to be dependent on others and therefore coreside with children. The fact that respondents live significantly more frequent with at least one child in Giriwungu is consistent with this hypothesis.

6.2 Case studies

In this section case studies are presented of a farmer in Giriwungu and a retiring farm labourer in Kebonagung. These cases show how different the lives of older people can be, and also that life for older people has changed in many aspects.

6.2.1 *The life of a subsistence farmer: 'In the past I worked hard, today I work hard too!'*

Simbah Ngatinem (61) lives together with her husband Radiyo (71), daughter Rupinem (40), son-in-law Marjo (45) and granddaughter Martini (16) in the hamlet of Petung in the village of Giriwungu. She and her family are farmers, who mainly cultivate rice and cassava for their own subsistence, and peanuts for the market.

Ngatinem was born in the hamlet of Salak in Giriwungu in 1936. When she was young she lived with her parents, three older siblings and one younger sibling (see the genealogy in Annex 6.2). She did not know her grandparents who were probably already dead. The whole day Ngatinem only played and did not go to school. Therefore she cannot read or write.

At the age of ten Ngatinem started to tend goats. At that time, the goats were still kept near the house, not in the present stables in the fields. Everyday she walked the goats to the farmland (*tega*) to let them graze. She said, "In former times, we did not know about manure" to indicate that they did not yet use it as fertiliser. From the age of twelve she herded three cows. Every day she took them out with friends, who did the same, to the lake. Previously, the lake was near the shop at entrance of the hamlet Petung, but it is not there anymore because it dried out. She brought the cows to the lake to let them drink. It was not to bathe them because they were cows, not water buffaloes.

In 1951, when Ngatinem was fifteen years old, she married Radiyo and they got a new family name¹². Radiyo was twenty-five years old then. They lived together with her parents-in-law and a younger sibling of Radiyo in the same house where she still lives now. Ngatinem's daily activities consisted of cooking in the morning and afternoon, and working together with her mother-in-law in the fields. Everybody washed his own clothes and dishes. Who ever had the time swept the house and yard.

When Ngatinem was twenty years old, she had her first child. It was a daughter, who was named Rupinem. At that moment her mother-in-law did not go to the field anymore, but stayed at home to take care of the baby and the household. When Rupinem was nine years old and in the third class of the elementary school, Ngatinem's mother-in-law died. Ngatinem still remembers it because she gave a *Slametan Nyewu* (a traditional offering made one thousand days or approximately three years after a death) when Rupinem graduated elementary school.

Rupinem married at the age of eighteen (1974) after which the newly weds followed her parents Ngatinem and Radiyo. Rupinem was only married for fifteen months. Then her husband became sick and died (1976). Rupinem remarried with Marjo at the age of twenty (1977). Three-and-a-half years later a daughter, Martini, was born (1981). For the first five years Rupinem stayed at home and took care of Martini. Ngatinem, Radiyo and Marjo worked in the field. After that Ngatinem stayed at home and took care of Martini for three years. Martini went to school and could play by herself when she was not in school. Then Ngatinem and Rupinem went together to the field.

Ngatinem and Radiyo had a second child five years after the first was born (1961), another daughter, who was called Karyati. Karyati graduated from elementary school and did three years of the secondary school until she married at the age of fourteen (1975). She followed her husband's family. But she was divorced from him within six months, because she did not like it and went home again. Five years later she married again and followed her parents-in-law, who live close by her parents. Karyati has two daughters; Risnyanti (nine years) and Estaramawati (three years).

¹² From then on they both used the same family name. A distinction is only made by the use of *mbak* (miss/young woman) and *mas* (son/young man) when they were young, or *ibu* (Mrs) and *bapak* (Mr) when they had children, or *nyai* (grandmother/older woman) and *kyai* (grandfather/older man) when they had grandchildren. In this research we use the birth names or shorter nick names, which were still used by their contemporaries, instead of the marital names to be clear which person is being addressed and for reasons of privacy.

Five years after the birth of Karyati (1966), Ngatinem and Radiyo had their third and last child. It was a son, who was named Sugi. Ngatinem does not 'know' why it took about five years before the first child came. It was not by planning and she never had miscarriages. She does not 'know' why there were no more children after the third child. It is not that she did not want another child. Ngatinem's mother-in-law took care of all her children. When Sugi was seven months old, her mother-in-law died. After this Rupinem cared for her younger siblings Karyati and Sugi when she came home from school, enabling Ngatinem to go to the field. At the age of fifteen, Sugi graduated from secondary school and immediately went to live with relatives in Jakarta. In 1996 he married a girl from Yogyakarta, but they still live in Jakarta. He is a street sweeper (*buruh nyapu*) and they have one son.

Ngatinem usually works in the fields every day (see Annex 6.3 for a daily observation of her activities). When she is tired she takes a day off, but not very often. It is almost one hour hiking over small paths through the mountains to the Tompakbonan fields ($\pm 540 \text{ m}^2$) near the sea. The size of the plot was difficult to estimate, because of the terraces, the large rocks and the irregular shape. They cultivate cassava the whole year through, peanuts twice a year, rice and corn once a year. There are also coconut and teak trees in addition to fodder for the cows. There is a stable with two cows and another stable with seven goats. The whole day Ngatinem performs heavy agricultural activities such as hoeing, planting, weeding, harvesting and carrying heavy loads home. Her husband Radiyo "has a small body and is not strong anymore". He looks for fodder and feeds the animals. In former times, he could gather fodder three times a day, but now only two times a day.

According to Ngatinem life has not changed. She said: "What is different? It is the same! In the past I worked hard, today I work hard too!" When we continue to ask questions, however, she acknowledged several changes. When Ngatinem's children were young there was only a little rice. Everyday they had a handful of rice for the whole family that consisted of seven persons at the time. So, the adults suffered. They let the children eat rice and ate steamed cassava (*tiwul*) or only vegetable soup (*sayur*) themselves. There was so little rice, because they did not use manure or artificial fertiliser. Therefore, the yield was small and the rats also consumed part of the harvest in the field. The cassava roots were small. Nowadays they use manure from the cow in the dry season, and urea or a fertiliser called TS for the rice and mung beans in the rainy season. Then, the children were still too young to help with work. When they were about eight years old, they started to work in the field. Since 1971 there have been teak, mahogany and acacia trees from a governmental reforestation program (*reboasasi*). The wood from these trees can be sold. Before, there were just bare mountains. The village has changed too; only two years ago electricity was installed.

6.2.2 The life of a retiring farmer: 'When I work hard, I am quickly out of breath'

Simbah Yoso (65) lives with his wife Giyem (± 55), daughter Sumarni (35) and granddaughter Anisa (6) in the hamlet of Jayan in the village of Kebonagung. Two or three years ago, Yoso decreased his work activities. He does not work as a farm labourer anymore but still takes care of his own cow and chickens.

Yoso was born in the hamlet of Jayang in Kebonagung in 1932. He was the second child and lived together with his father, mother, older brother (three or four years older) and later his younger brother. See the genealogy in Annex 6.4. They lived in the house that stood on the place where Yoso's present house is now. Yoso's father Jordiryo earned money with the

production of palm sugar. He climbed in palm trees and made sugar from the sap he had tapped. Jordiryo also worked at the rice-field of his parents, took care of two cows and worked as a farm labourer (*buruh tani*). Yoso's mother, Paikem, produced the palm sugar and sold it at the market every day. First she sold it at the Tosoran market (Kebonagung), which does not exist anymore, and later at the Gayam market (Sriharjo). She also worked at the rice-field during the rainy season. At age nine or ten Yoso started to gather fodder for the cows.

Yoso's father died of a stomach disease during the Japanese Occupation (*Perang Jepang*) in 1942/43. He does not know what disease it was, only that his faeces were bloodied at that time. Yoso was "more or less twelve years old". At the age of thirteen Yoso taught himself to collect sap from palms and make palm sugar by asking people whom already knew how to do it.

When Yoso was about fifteen years old, his mother also died of a stomach disease after the Revolution (*klash londo, Perang Kemerdekaan, 1946-49*). From that time Yoso and his brothers were taken care of by their Uncle and Aunt Tomorejo, who lived at the back of their house. They ate at their own house, but sometimes slept here and sometimes there. "I followed Pak Tomo. I carried out the tasks of Pak Tomo like hoeing the rice-field, herding the ducks, and collecting palm tree sap (*nderes*) to make palm sugar (*gula Jawa*). I was the one who worked, the yield was for Pak Tomo. Tomo took care of my family. When there were any daily need my aunt saw to it for me and my younger brother. Earlier, my two brothers and I had gone to live with my aunt. After marriage we separated and worked alone."

Kariyorejo, Yoso's grandparents from father's side, also lived with their youngest son Tomorejo. Yoso's grandfather died after the "*klash londo*" (a year after his mother). His grandmother died soon after that, but before the Ash Rain (*Hujan Abu*) from the big eruption of the volcano Kelud (East Java) in 1951. They died because they were old. After their deaths the inheritance was not immediately divided. Soon there was nothing left of the money and they had to sell the two cows left by the grandparents, to be able to provide for their daily needs and pay for the expenses of all the memorial rituals (*peringatan kematian*) of 40 days, 100 days, 1 year, 2 years and 1000 days (*nyewu*) after a family member has died. Of the inheritance nothing else was left except the 2,640 m² of rice-field. As the eldest living male, Yoso's uncle Tomorejo divided the pieces among the five families (springing off from Kariyorejo). Each household cultivated the land for itself and kept the yield.

Long before Yoso married, maybe ten years earlier, his older brother Hardisutomo had married. Hardisutomo, his wife Poniym and the younger brothers Yoso and Srimadiyono lived together for about two years. In that period Poniym gave birth to a child who immediately died in the Bethesda hospital (Yogyakarta). After that Hardisutomo and Poniym moved to Kiringan (Canden village) to follow her parents. The two boys lived alone.

In 1957, Yoso married Giyem from Jiwan (Canden village, sub-district Jetis) at the age of twenty-five. The older persons of both families knew each other from herding the ducks, and had the marriage arranged. Giyem is now in her fifties. After the marriage they lived on their own with Yoso's younger brother Srimadiyono. A year later they had their first son, who was stillborn. After another year Giyem gave birth to a second son, who died after thirty-five days. In 1962 a daughter Sumarni was born and two years later another daughter Temu was born, who fortunately were healthy.

The rice-fields were formally inherited from Yoso's grandparents in 1963. Tomorejo decided that each son (Yoso's uncles) would receive 1/4 (660 m²) and each daughter (Yoso's aunts) 1/8 (330 m²). They called the village officials, who wrote it down in the village record book (*Buku Catatan Desa*). Yoso and his brothers each inherited 220 m² directly from their grandparents, because their father was already dead. This is still the same piece that Yoso owns now. He did not experience any increase or decrease of the size of land.

Around 1968/69 Yoso's younger brother Srimadiyono married. For two years they lived with Yoso's family and had their first child there. Then they moved to Srimadiyono's wife's hamlet of Sungapan in the village Sriharjo to take care of her remaining parent, who lived alone because the other children had gone to live with their in-laws. "There was room and here [the house in Jayan] it was small."

In 1969 Yoso's daughter Sumarni went to the elementary school at the age of seven. At that time Yoso bought twenty-five ducks with the money he earned from the sale of palm sugar and the work as a farm labourer. He raised the ducks until they were old, sold them and bought new ones. He also nursed them from the eggs until they were big enough to be sold and so on. The ducks were herded alternately. Sumarni herded them in the early morning until she had to go to school. Then Yoso stopped with collecting palm juice and took over the ducks from her. He bought a cow with the proceeds of the ducks. Until approximately 1972/77, Yoso made a living mainly with the production of palm sugar. Then he had to stop, because "electricity entered the village and all the trees had to be cut down to make the fences for the street (*proyek pagar bumi*)". Suddenly he had lost a source of income and had to work as a labourer (*buruh nderes*) for the neighbours, who still had their palm trees. In this way they could manage.

Sumarni finished elementary school in 1975. After school, she herded the ducks. This continued until she reached the age of sixteen. In 1978 people started to use pesticides for the paddy and twenty out of twenty-five ducks died. Then Yoso decided to stop raising ducks, in part because Sumarni went to Bandung to work as a domestic servant for a neighbour friend. After a year she came back to Jayan and left again to work for a sewing teacher in Jakarta. She did a sewing course and wanted to work for a clothing factory, but was not allowed by her boss, *Ibu Guru*. When the latter went to the United States, Sumarni stayed behind alone and guarded her house.

Sumarni married Sanukman in Jakarta in 1990, and a year later a daughter Anisa was born. After another year the rental contract expired and Sumarni's money was gone, so Sumarni and Anisa returned to Jayan. After another year they moved to South Jakarta again, because they could now live in the house of Sanukman's boss, who was a contractor for elevator doors. They did not have to pay rent at that time. A year later the work contract ended, and Sumarni and Anisa moved to Jayan. Sanukman stayed in Jakarta all the time and only visited them occasionally. In Jakarta, Anisa had just been in kindergarten for a month and thus went directly to the kindergarten on arrival in Jayan. Now Anisa is doing the first class of the elementary school. Since then (1994) Sumarni crochets little bags for which she earns an unstable income of about Rp 6,000 per month. Recently, she also works as a construction labourer at the dam.

Yoso's daughter Temu followed her sister Sumarni in herding the ducks from a very young age. Temu went to the elementary school until class 5, when she had to repeat a year. She was so embarrassed that she quit school and followed a sewing course in Demi Singosaren (Imogiri town). After that she sewed small things like hems and buttons for the boss/teacher until she married with the neighbour's boy Kahanan in approximately 1982. Temu followed her parents-in-law. After two years she gave birth to a son Beni, who is now thirteen years old and in the first class of the secondary school. Six years later Bayu was born, who is now eight years old and in the second class of elementary school. At a certain moment Temu's mother-in-law left and never came back. They still live with Temu's father-in-law. Temu and Kahanan work as tailors.

Yoso only inherited the land on which the house stands. His younger brother owns the yard, extending from the house to the concrete fence. His older brother owns the land at the back of the house, where the old stable and well are. Nevertheless, Yoso's household make use of

this area in practice. They "borrow" it, they say. In the eighties Yoso built the present house, because his parents' house had fallen apart. They could afford to build the house by saving the money that Sumarni sent from Jakarta and from all the little bits earned as a farm labourer. Every time that they had some money Yoso bought some bricks from the neighbours, or timber or mortar until they had saved enough to build a house. He made the walls himself and the roof was made with the help of the neighbours, according to the tradition of mutual assistance. They did not have to pay them, but only provide a meal. They had also sold a cow for Rp 200,000 (which would have cost one million now) to buy timber.

Yoso and Giyem bought their first cow from the proceeds of the ducks. Bit by bit, they could buy another cow. They sold a cow for the wedding of each daughter, and one to build their present house. For the past two or three years, Yoso has not been managing the money anymore. He stopped working as a labourer, because his body is not strong enough anymore to do the hard work of ploughing by hand. Nowadays he only ploughs a little in their own rice-field. "When I work hard, I am already out of breath fast". Yoso spends most of his time on taking care of the cow and chickens (see Annex 6.5 for a daily observation of his activities). Giyem still works on the rice-field of other people and harvests soybeans for which she is paid with a part of the yield. Giyem usually cooks (Sumarni sometimes). Every one, including Yoso, who has time does the laundry. The daughter Sumarni manages the money. Sumarni never works in the field.

6.3 Conclusion

Table 6.9 at the end of this sub-section presents selected indicators of the socio-demographic status of older persons in rural Special Region Yogyakarta. The variables are sex, age, marital status, household composition, household size, coresidence with children, and place of residence compared to place of birth. Special attention is given to the effects of sex, age and residence on the socio-demographic status.

The sex ratio is 69.7, which means that there were about 70 older men per 100 older women. Surprisingly, the effect of sex on age was not significant. We expected a significant difference, because there are almost twice as many females as males aged 75 and older in the sample. Being a woman has a significant effect on the marital status. Fewer women than men report to be married and much more women than men are widowed. Older women are therefore more likely to be alone, meaning without children and/or without a spouse. Accordingly, the male respondents live significantly more often with spouse or spouse and other(s), and the female respondents live significantly more often alone or only with other(s). These other kind of household members are usually own child(ren), a child-in-law and/or grandchild(ren). The most common household composition consists of the nuclear, two-generation household and the extended, three-generation household. Sex also has a significant effect on similarity of birthplace and place of residence. Men more frequently live in the hamlet or village where they were born. Women more frequently live in the regency where they were born, which means that they moved over a larger distance during their life than men did. This is because women tend to follow their husbands rather than the other way around. Consequently, although most men and

women still live in the same hamlet or village, women are more likely to live farther away from their own families.

The average age of the respondents is 69.2 years. Although becoming older meant fewer males per hundred females, the effect of age on sex is not significant. Since there are more women among the respondents aged 75 years and older, significantly less married and more widowed respondents are among this age group. Being older has a significant negative effect on the presence of the spouse. People younger than 75 years most often live with spouse and other(s). People older than 75 years are more likely to live alone or only with other(s). Consequently, age also has a significant effect on the household size. The smallest households of one to two persons and largest households of six to eleven people are most often recorded for the respondents aged 75 and older. The moderate households of three to five persons are most often recorded for the respondents aged younger than 75 years. The average size of the elderly households is 4.6 persons. Older persons have an average of 3.4 children who are still alive of which 1.0 child live together with their parent(s) and 2.4 children do not.

Residence did not appear to have a significant effect on sex, age or marital status. Older persons of both villages most frequently live with their spouse and other(s). However, respondents in Kebonagung significantly more often live alone or with only a spouse, and had households of less than five persons, and do not coreside with a child. Respondents in Giriwungu significantly more often live without a spouse and only with other(s) meaning at least one child, and have households of more than five persons. This pattern is contrary to our hypothesis of Giriwungu as the poor village with high out-migration of the young generations and Kebonagung as the more prosperous village with low out-migration. Most respondents live in the hamlet or village where they were born, although this is the case significantly more often for people in Giriwungu than for people in Kebonagung. This confirmed our expectation that the respondents in Giriwungu live in a remote and isolated area and are probably more traditional than the respondents in Kebonagung who are more exposed to influences from the city Yogyakarta.

The large majority of respondents said that they are Muslims. In fact only some respondents are actively practising Islam, and mostly in Kebonagung. Most respondents practise the so-called *abangan* variant, some the *santri* variant of religious practice. Religion is not a very distinctive indicator for the socio-demographic status of older people in Indonesia, because most people will be reluctant to admit not to adhere to a religion. The large majority of respondents do not have any formal education, because in the past schools were not available and school was a privilege only preserved for some individuals. Thus formal education is also not a distinctive indicator for the socio-demographic status of older people in Indonesia. The variables of religion and education are not further taken into account in the analysis.

The case study of *simbah* Ngatinem shows that the daily activities of a farmer largely consist of heavy labour. These activities can slowly be decreased when they become too heavy a burden in old age, provided that there are other household members who take over the necessary activities or that there are other sources of income. The case study of *simbah* Yoso shows that older persons can retire without having to stop working completely and still be busy the whole day. Although the life of *simbah* Ngatinem seems not to have changed much since she was young, she still works hard now but the living conditions have certainly changed. Most older persons did not go to school whereas their children and grandchildren usually have graduated from at least elementary school. In agriculture things have changed as well. The harvests have increased by using fertiliser and pesticides, thus providing more food of which the surplus can be sold. Many respondents now have electricity. Nevertheless, there are also negative effects of these developments. Children or grandchildren often do not know how to farm anymore, while it is also difficult for them to earn a proper income from non-agricultural work in the village. *Simbah* Yoso also experienced that his sources of livelihood were hindered by processes of social change. His palm trees were cut down when the village got electricity and fences were made along the street. His ducks died because of pesticides ending up in the water. Their lives are certainly not easy but they still seem to be able to cope, or at least, they seem to have resigned themselves to their fate.

Table 6.9 Selected indicators for socio-demographic status according to sex, age and residence (means or percentages)

Socio-demographic indicators	Sex		Sign. ^a	Age group			Sign. ^a	Village		Sign. ^a
	Male (N=162)	Female (N=235)		55-64 (N=148)	65-74 (N=123)	75+ (N=126)		Kebonagung (N=194)	Giriwungu (N=203)	
- Sex ratio ^b	69.7		n.a.	76.2	83.6	51.8	n.s.	64.4	73.5	n.s.
- Age	67.9	70.0	n.s.	n.a.	n.a.	n.a.	n.a.	68.4	69.9	n.s.
Marital status (N=355):										
- married	84.6%	48.5%	***	74.5%	66.1%	44.2%	***	65.4%	61.9%	n.s.
- widowed	10.7%	47.1%	***	21.4%	26.1%	54.7%	***	28.5%	35.2%	n.s.
- Household composition ^c	3) 70.4%	4) 51.5%	***	3) 61.5%	3) 50.4%	4) 54.8%	***	3) 49.5%	3) 46.8%	**
- Household size	4.7	4.5	n.s.	4.4	4.5	4.8	**	4.2	4.9	***
- Not coresiding with children	19.0%	27.4%	**	24.3%	23.4%	24.0%	**	32.0%	16.3%	***
- Place of residence same as birth hamlet/village (N=355)	80.6%	69.9%	**	71.8%	76.5%	75.8	n.s.	65.9%	83.0%	***

^a Chi-square test: *** p<0.01; ** p< 0.05; * p<0.10; n.s. no significant difference; n.a. not applicable.

^b Sex ratio is the number of males per 100 females.

^c The type of household composition was coded as 1) elderly alone; 2) elderly and spouse; 3) elderly, spouse and others; 4) elderly and others. Here is presented the highest percentage of the column variable.

7. Health

In this chapter we describe the health status of older persons with the aid of certain indicators, and health-related case studies. The indicators are: nutritional health, functional capacity of daily activities (ADL/IADL), physical and mental well-being, disease and illness. Two cases are presented to illustrate the impact of health problems on older people's lives. In the conclusion we give an overview of the characteristics that indicate the health status.

7.1 Health characteristics

Health is not a concept that can be defined or measured unambiguously. Numerous definitions are found in the literature. The definition of the World Health Organisation (1948) is most often used. The WHO defines health as a state of complete physical, mental and social well-being and not merely the absence of disease and infirmity. In Strain's (1993) study of good health, several aspects were taken into account. Some examples of these are: definitions of health by older persons and younger age groups, socio-demographic characteristics, one's own health status, life satisfaction, service utilisation, health beliefs, and situational information. He argued that the multidimensional nature of the concept of health must be taken into account and further explored. Strain defines health as the ability to do usual activities, a general feeling of well-being, and the absence of symptoms (1993: 339).

In this section we describe many aspects which are important for the health status of older people. We tried to indicate the health status of the respondents by their nutritional health state, functional capacity to perform daily activities, the physical and mental well-being, disease and illness. Anthropologists often make analytical distinctions between disease, illness and sickness in order to stress the different perspectives of the various actors. Disease is the definition of a health problem by a medical expert, illness refers to the experience of the problem by the patient. Sickness is the social role attached to a health problem by the society at large (Hardon *et al.*, 1995: 12). In this research, we looked at indicators of ill health and reported illnesses, and tried to translate these into diseases. We did not study sickness.

7.1.1 Nutritional health

The questions in the survey about the nutritional state of the respondents were based on the Australian Nutrition Screening Initiative (ANSI) (Lipski, 1996) and adapted to the local situation. According to the ANSI criteria, only 5.3% of their respondents had good nutritional health (score less than 3), 12.7% were at moderate nutritional risk (score 4-5) and 82.0% were at high nutritional risk (score 6 or more).

The ANSI checklist was designed to alert people to potential problems, but was not intended to diagnose malnutrition. If the general nutritional advice of the ANSI is applied to the survey results, older people would need to improve their eating habits and lifestyle in rural Yogyakarta. They would have to eat at least three meals a day, to drink milk, not to eat alone but with other people, and not to smoke tobacco or chew betel nut. However, this nutritional advice would probably be too much based on western ideals, whereas the food behaviour of people also needs to be seen within the context of their own culture and local situation. The respondents in our research were, for example, not used to drinking milk. But they had a larger protein intake from eating fermented soybean products (e.g. *tempeh*) than could be measured by the ANSI checklist.

Most of the respondents scored positively on the following items: not having an illness or condition that made them change the kind or amount of food; eating fruit or vegetables most days; drinking more than three cups of fluid every day; not having tooth, mouth or swallowing problems; not taking three or more different medicines per day; and not having lost or gained a lot of weight without wanting it in the last six months. Although the ANSI checklist criteria are not appropriate for Indonesia, and probably developing countries in general, it is possible to define other criteria and use the mean scores to compare them for the different sexes, age groups and villages. These are presented in Table 7.7. We divided the total scores into three equal categories of less than eight (bad nutritional health), between nine and sixteen (moderate nutritional health), and between seventeen and twenty-four (good nutritional health). All mean scores indicate a moderate nutritional health status, not good but considering the local standards certainly not bad either, for the variables sex, age and residence. Older men and women did not report a different health status. These findings do not tally with those found in an urban study in Indonesia (Kartari, 1993) in which it is reported that older men had better nutritional status than older women.

Being older did have a significant negative effect on the nutritional health status. The respondents aged between 55 and 64 years had most frequently good health, the respondents aged between 65 and 74 years had most frequently moderate health and the respondents aged older than 75 years had most frequently bad health. Although the average nutritional health of the respondents was still moderate in both villages, the respondents in Kebonagung had a significant better nutritional health status than in Giriwungu.

We observed that many older persons are used to eating only twice a day and often skip meals when they are too busy. Especially persons, who live alone or are alone in the daytime when the other household members are working in the field, do not take the time to cook and eat at noon.

Simbah Rejo does not have fixed eating times. She eats twice a day when she is hungry. Sometimes she even forgets it. Like yesterday when she cooked rice and vegetables in the morning but did not eat it. Now is drying that rice in the sun for the chickens of the neighbours. She does not have chickens herself.

Simbah Rejo (±72, female, retired), Kebonagung.

Most respondents did not lose much weight. It was only mentioned when a stressful event had occurred.

Simbah Gina lost a lot of weight because her husband died three months ago and she is now concerned about her son. She worries all the time. She says that her son is not 'normal', but we wonder whether he is not 'just' epileptic and could function normally with the right medicines.

Simbah Gina (60, female, farmer), Giriwungu.

For a non-nutritionist it is difficult to make a good assessment of the respondent's diet. The ANSI-checklist was not useful but from observations we know that many respondents eat meals with low nutritional value and little variation in ingredients or taste. They often eat cassava or rice with a side-dish of watery soup with some leaves and a piece of fermented soybean cake. They rarely eat meat, fruit, spices, or oil.

We follow *simbah* Marto who buys ingredients for our lunch during the daily observation session. At the small shop *simbah* buys string beans which are already yellow, fermented soya bean cake packages (*tempeh*) that is completely covered with white fungus and quite old, a bag of small chilli peppers (*cabe rawit*) and palm sugar (*gula Jawa*). *Simbah* peels a coconut from its skin at the house of the neighbours. She scrapes the white coconut flesh and makes *santen* (milk squeezed from coconut) for the vegetable soup (*sayur*). My assistant and I break the string beans into small pieces. The *petai* beans, which *simbah* gets from a box in her sleeping room, are decayed and mouldy. There is a huge amount of rice and *simbah* wants us to eat everything. We eat it with rice crackers (*lempeng*) and sweetened tea. It is a meagre meal with almost no nutritional value and I wonder if *simbah* always eats like this. This is probably a more extensive meal than usual.

Simbah Marto (65, female, retired with pension), Giriwungu.

A large majority (89%) of the respondents never worry about having enough food. The rest worries sometimes (9%) or often (2%). The most common reasons (59.8%) for never worrying being that either the agricultural yield was enough, or the cash income was enough, or that when they ran out of rice they would eat whatever there was available like cassava. Other respondents (27.0%) do not worry because their

children or 'people' provide food. The rest (13.2%) said to trust in God saying, '*Ada hari, ada beras*' (When there is a day, there is rice). The respondents who did worry gave as reasons that their yield or income was not enough (36.8%), that they were poor and did not have enough money to buy food (36.8%), that they had run out of food before the next harvest began (15.8%) and that no one took care of them financially (10.5%).

The concept of 'worrying' could be influenced by socially desirable answers. Among Javanese people it is the norm not to show your problems and keep your inner self in harmony. As the following interview text shows, it is believed that if you do not have a peaceful life, you will become ill.

Simbah Amat lives with her second husband (±80) who is mute, her younger sister *simbah* Arjo (±65) and the family of Arjo's son Heri. During the interview Arjo's oldest son Sismanto is present. He feels responsible for the care of the three older relatives.

Simbah Arjo: "I do not worry because what is there to worry about? However, she is my sister. If there is [food], ya give. If there is none, ya search. If I worry, I will become sick myself later."
Sismanto: "She is still alive, and cannot look for money. She still wants to eat, but is not strong enough anymore to work...."

Simbah Arjo: "Problems with money! Shortage... Sometimes there are days with not enough food...." [...] "Sometimes there are problems. For example, if there is shortage because there is no food, she cannot eat until she is full. So, she becomes angry. But after she is angry: over! It is no problem anymore."

Simbah Amat (±89, female, retired, decrepit), Kebonagung

Most older persons appeared to have enough to eat and a moderate nutritional health. Having more variation in and adding more nutritional value to their meals would improve their health. Especially older persons living alone, persons aged 75 and older and older inhabitants in the village of Giriwungu need to pay more attention to their nutritional health.

7.1.2 Functional capacity of daily activities

How the respondents spend most of their time gives a fair indication of their strength. We asked about their daily activities in general. Table 7.1 presents the results. The respondents spend most of their time on working either in agriculture, hunting, forestry or fishery, outside farming or in housekeeping. Only a few were babysitting for their grandchildren. As expected, most of the non-communicative respondents¹ do not work and stay at home. Being mostly farmers, there is usually no retirement for older people in the rural areas. One respondent expressed it as follows: "If you, as a farmer, take time off there will be no yield and thus no food."

¹ Respondents who could not be interviewed themselves (see section 5.3.2).

Table 7.1 General daily activity

General daily activity	Communicative respondents		Non-communicative respondents		Total	
	Freq.	%	Freq.	%	Freq.	%
Farming	163	45.9	4	9.5	167	42.0
Non-farming work	48	13.5	4	9.5	52	13.0
Housekeeping	75	21.1	7	16.7	82	20.7
Being at home	59	16.6	25	59.5	84	21.2
Babysitting/childminding	5	1.4	.	.	5	1.3
Socialising	3	0.8	2	4.8	5	1.3
Other	2	0.6	.	.	2	0.5
Total	355	100.0	42	100.0	397	100.0

The functional capacities of the respondents were assessed by two types of indicators. The respondents were asked to what extent they could perform personal activities of daily life (ADL) and instrumental activities of daily life (IADL). The five response categories and scores for each item were '1 not at all', '2 only with help', '3 with a great deal of difficulty', '4 with some difficulty, and '5 without difficulty'. The questions were posed in an open way and the interviewer selected the appropriate category, because the respondents themselves were not able to handle a five-point scale. See the questionnaire in Annex 5.8 for a complete description of the questions.

Five questions were asked about the following personal activities of daily life: Can you wash yourself; use the toilet; dress and undress (including doing up zippers, fastening buttons, putting on shoes); stand up from and sit down in a chair; walk outdoors for five minutes without resting. The five ADL items formed a homogeneous scale (Cronbach's $\alpha=0.87$). The item mean was 4.94, which implies that on average older people can perform the personal activities of daily life without difficulty. The total score on the ADL scale ranged from five to twenty-five, and the scale mean was 24.69. We divided the range into three categories of ADL scores: 5-12 (low), 13-19 (moderate) and 20-25 (high). Surprisingly, most respondents had a very high ADL score and only six respondents had low or moderate ADL scores (N=396).

Ten questions were asked about the following instrumental activities of daily life: Can you shop for daily groceries by yourself; cut fire wood; fetch water; boil water; cook meals; change the bed sheets; do the laundry; sweep the yard; clean the house; feed the livestock. One question that was overlooked in the pre-test was included in the IADL instrument. The question 'Can you change the bed sheets?' was not asked, because people do not change the bed sheets, as they sleep on a wooden or bamboo platform (*amben*) and use a sarong or batik cloth.

Both men and women should have answered all the IADL questions as if they could perform the activities despite the fact that some people never performed them. This led to another problem because it proved impossible for many respondents to answer a hypothetical question. Therefore, the answer category 'not common to do it or not applicable' (score 0) was added to the five answer categories described above. The

extra category could have been answered when the respondent was not used to performing the activity or had never performed it. It had nothing to do with (the absence of) the capacity to perform the specific activity.

As an effect of the scale adaptation, the nought scores distorted the total scores per respondent because they pulled the results to the negative side of 'cannot do it at all'. Too many respondents seemed to have little strength, whereas they could perform the instrumental activities that they actually did and just did not perform some activities. To be able to use the IADL scale we recoded the noughts into the mean scores per respondent. We assumed a correlation between the capacities to perform the different kind of activities. This seemed to be right when we studied the sub-sample of respondents who scored higher than a nought on all the IADL items (N=120). The IADL items were strongly positively correlated and formed a homogeneous scale (Cronbach's alpha=0.94). Thus, we may assume that if a person was not used to performing a certain activity but was able to perform other activities, that person should also be able to perform it. We removed the respondents who scored noughts on all the items (N=393). The recoded IADL scale of nine items formed a homogeneous scale (Cronbach's alpha=0.96). The item mean was 4.59, which implies that on average older people could perform the instrumental activities of daily life without difficulty.

The total score on the IADL scale ranged from nine to forty-five and the scale mean was 41.32. We divided the range into three categories of IADL scores: 9-20 (low), 21-32 (moderate) and 33-45 (high). The IADL categories differed significantly for the variables age and residence. The youngest people could still perform the instrumental activities of daily life without difficulty while the oldest people aged 75 and older could not or only with help. The difference in total IADL score between the villages was weakly significant. The respondents in Giriwungu suffer from bad health or have less strength a little more often than the respondents in Kebonagung.

It is difficult to interpret our observations of how the older people looked in terms of their health.

We observed *pak* Dwijo who walked to the field. He was dressed in a t-shirt, short trousers, casual shoes made of rubber tire and an old school cap. He walked slower and with more difficulty than I expected. His health seemed not as good as we thought.

Bapak Dwijo (64, male, petty trader and labourer), Giriwungu.

Older persons could be recognised from their physical appearance as well as from what they were wearing. They were often dressed in traditional clothes, which younger people did not wear anymore.

Simbah Niti is very small and short. She walks bent forward, crooked (*bunguk*) and barefooted. She wears traditional clothes like a blouse that is pinned together in front (*kebaya*), a cotton top (*kutang*), waistband (*setagen*), and sarong (*jarit*). When she sweeps the floor her flat breasts dangle out of her top. Her hair is knotted in a small bun and she wears a ring on both little fingers. One is reddish gold and one is silver.

Simbah Niti (±90+, female, retired) Giriwungu.

There were also other signs, which revealed the old age of women like large earlobe holes and red mouths from chewing betel (*sirih*).

“Older women have big holes in their earlobes because they used to make bigger holes since they wore big earrings in the past. These heavy earrings pulled the hole bigger and bigger. It is a mark of people from the past.”

Simbah Marto (±65, female, retired with pension), Giriwungu.

Simbah Ngatinem shows me the practice of *ngingan*. The ingredients are betel vine leaves (*daun sirih*), betel plum (*gambir*), limestone paste (*injet*) and black chewing tobacco. *Simbah* puts a little piece of betel plum and a fingertip of limestone paste on a leaf, folds it together and puts it in her mouth. Chewing on it gives red saliva that is caused by the betel plum. She spits the red saliva in a can when she is in 'my' part of the house and on the soil floor when she is in the kitchen or outside. She wipes her lips and teeth with a big knot of tobacco (*susur*) and after that holds it between her lips. *Simbah* said: “If I do not *ngingan* I feel sleepy”. This implies that the effect of a stimulant is still present.

At another moment I was helping *simbah* Ngatinem and her granddaughter Martini who were podding beans in the kitchen. In the meantime we were discussing the habit of chewing betel (*ngingan*). *Simbah* Ngatinem started to do it when she was of Martini's age [who was 16 years old]. Martini said that women do not do it so often anymore because there is toothpaste now. Before, they chewed *sirih* to remove the dirty taste from their mouths and used a *susur* of tobacco to wipe their teeth clean.

Simbah Ngatinem (61, female, farmer, Giriwungu).

Most older persons were capable of performing the personal and instrumental activities of daily life and were even strong enough to work. Only the persons older than 75 years needed help with the instrumental activities. Older inhabitants had poorer health in Giriwungu than in Kebonagung.

7.1.3 Physical and mental well-being

Physical well-being

Three different health measures were used, which were based on the respondent's subjective assessment of their own health. Respondents were asked to assess their health in general, their health compared to age peers, and their health now compared to ten years ago. These measures were taken from Liefbroer and Jong Gierveld (1995) who used a five-point scale. That appeared to be too difficult for the respondents in the villages, and questions were subsequently asked in an open way. The answers about the health comparisons were recoded to a three-point scale.

Almost three-quarters of the respondents felt positively about their health condition in general; 42.9% had good health, 28.8% had ordinary or adequate health. The rest felt more negatively and said that they were already old, not so strong or less healthy (11.6%); that they were often sick or suffered from a disease (8.2%); that they were sick sometimes (7.1%); or that they had difficulty with walking (1.4%). The proportion that reported having good health is considerably lower than was found by other self-assessment health studies in Indonesia. In the 1980 Census, about 70% reported themselves as being healthy (Adlakha and Rudolph, 1994: 104). In the 1986 ASEAN survey about 65% reported themselves with a good to very good health (Chen and Jones, 1989: 78). The differences may have been partly caused by the fact that these studies were carried out among the whole Indonesian population. Subjective health is generally reported better in urban areas than in rural areas. Sigit reported 69% persons with good to very good health in urban areas and 62% in rural areas of Java (Sigit, 1988: 74). The urban study reported 71% persons with good health in the municipality of Yogyakarta (Population Studies Center, 1999: 50). The respondents of all these studies were even older (60 years and over) than ours (55 years and over), from which one would expect lower proportions of good health since health declines with age. Hence, the self-assessed general health of the respondents is worse in our study areas than what is usually found in Indonesia.

Table 7.2 Health comparisons (N=355)

	Health compared to contemporaries	Health compared to 10 years ago
	%	%
Better health	56.7	9.6
Same health	29.3	22.3
Lesser health	14.0	68.1
Total	100.0	100.0

When the respondents compared their health to people of the same age more than half reported that they were in better health, also because many of their friends had already died. About a third of the respondents had the same average health condition and the rest were in poorer health than their contemporaries.

The respondents experienced their own health compared with ten years ago more negatively. A majority felt that they were already less healthy because they were weaker, although some of them added that they could still work. Very few felt that they were healthier because they were not sick anymore, had a better life, or did not have to worry about work anymore.

If we look at the means of the three comparative health indicators in Table 7.7, we see that, generally, when comparing themselves to peers of the same age, older people consider their health to be good, but the same or worse, in comparison to ten years ago. Age had the strongest effect on the subjective assessment of health in general and compared to ten years ago. Being older had a significant negative effect on the physical well-being.

A large majority of the respondents (83.7%) never worried about their health. The reasons for not worrying by most (44.0%) were that they trusted in or surrendered to God (*Pasrah*), or felt peaceful (*tentrem*) or never worried about anything. Corresponding reactions were: "Sickness accepted, health also accepted." (*sakit mau, sehat juga mau*) and "[I am] already old. If I die, I die." (*Sudah tua. Kalau mau mati, mau*).

Other old people never worried (40.5%) because they were still healthy or seldom sick, could still guard their health or felt protected by drinking traditional medical tonics (*jamu*). The rest never worried (15.5%) because their (grand) children would care for them in case of sickness; or they trusted that the doctor('s assistant), the local governmental clinic (*Puskesmas*) or modern medicines would help. The respondents who did worry about their health (16.3%) were often sick (55.2%), were afraid to die or worried about the many diseases for which there are no medicines (19.0%). Some said that they were already old (13.8%) or that no one would take care of them if they became sick (10.3%).

Mental well-being

The mental well-being of the respondents was difficult to assess. We could not ask who suffered from dementia, because that was not a familiar concept in the rural areas of Indonesia. Besides, we had only applied the Mini Mental Test (MMT) to the respondents whom we suspected of not being capable of answering the survey questions, which yielded a very limited sample. As said, the household members of the 42 people who failed the MMT were asked how the health condition was of the so-called non-communicative respondents.

Table 7.3 Health condition of the non-communicative respondents

Health condition	Male		Female		Total	
	Freq.	%	Freq.	%	Freq.	%
Healthy but old	1	7.7	2	6.9	3	7.1
Physical disability	9	69.2	18	62.1	27	64.3
Mental disability	3	23.1	9	31.0	12	28.6
Total	13	100.0	29	100.0	42	100.0
Test scores	Z-value=-0.5, p=0.628					

Three older persons were "still healthy (*sehat*) but already old (*sudah tua*)", as respondents used to say it. They explained "already being old" as having a high age or many grandchildren. Being healthy but old was not the reason for not passing the MMT, but it implied that the respondents were too ill (at the time of the survey), blind and mute, or demented to answer the survey questions. The next citation describes the different stages of becoming old.

"The condition of the older household member is still healthy. She is not yet senile (*pikun*) because she can still understand the use of money. She can still count. She is not yet frail (*jompo*) because she still likes to clean (for herself only). She always changes her clothes in the morning and afternoon. I never experienced that she urinated or defecated in bed."

Bapak Sugiri (±71, son of *simbah* Poniem aged ±105), Kebonagung.

Two-thirds of the non-communicative respondents suffered from one or more of the following physical disabilities:

- frailty (*jompo*) meaning an infirm body, no real physical disability yet but cannot work anymore.
- deaf (*tuli*) and/or mute (*bisu*).
- bad sight or blindness (*buta*).
- bent (*bengkak*) meaning that the body is bent over and sometimes a walking aid is necessary.
- temporary or chronic disease as headache, cough, fever, asthma, itch, rheumatism, partly paralysed or disabled by fall, etcetera.

Only one third of the 42 non-communicative respondents reported the following mental disabilities:

- partly demented (*pikun kadang-kadang*), meaning being forgetful or confused sometimes.
- completely demented (*pikun terus*) meaning not understanding other people and forgetting everything, often also called not being normal (*tidak normal*) or acting crazy (*gila*).

The health condition of the respondents classified as the worst stage when the respondents reported a combination of disabilities. If a physical disability was reported in combination with a mental disability it was recoded as a mental disability.

We did not have any respondents in the last stage of becoming old(er) in our survey sample. This stage was described as:

- being ill and bedridden (*tidur terus*), not able to do anything her/himself anymore, staying in bed most of the time, and not communicating anymore.

We wondered why we found so few cases of dementia and no bedridden or needy cases at all in our survey sample. During the qualitative fieldwork we paid special attention to this subject and found some cases of what we thought were demented persons. Subsection 7.2.2 describes a case study of a demented respondent in the final stage of her life. We hypothesised four possible reasons for the lesser prevalence of dementia in the rural Special Region Yogyakarta compared to industrialised Western countries. Firstly, people become less old and therefore seldom achieve the (st)age of dependency and dementia. Secondly, people do not have a fixed moment in time for retirement after which they abruptly stop working. They keep on working as long as they are physically capable. Moreover, ordinary agricultural work can be slowed down and there are always small but useful activities to do around the farm and house. Older persons retain their capability of performing instrumental activities, because they are still active every day (Caldock and Wenger, 1992). Thirdly, people stay in their own houses and may not become estranged from their neighbourhood as they would if moved to an institution. They stay mentally engaged by the contact with (grand)children and friends. Fourthly, medical facilities are restricted. People probably die after a relatively short sickbed and are not kept alive by medical technology.

We have no knowledge of studies on diseases related to old age that have been carried out in Indonesia which describe dementia (Rahardjo, 1994a; Rahardjo et al., 1994b; Kartari, 1993; Matulesy et al., 1990; Boedhi-Darmojo, 1987). The reflections about dementia in the above paragraph are derived from our subjective observations and it is difficult to present any definite conclusions. One study of a specialist reports that there is no reason to believe that the incidence of dementia of the Alzheimer type will be any lower in Indonesia than in Australia (Mykyta, 1994), but no empirical data are presented. Obviously, more research on this subject is necessary.

Although we found more cases with mental disabilities among the female respondents, oldest respondents and respondents living in Giriwungu, it did not concern significant differences. Mental well-being will not be used for further (quantitative) analysis, because the sample of the mentally disabled respondents is too small.

7.1.4 Disease and illness

In the survey we investigated if the respondents could still use their sense organs. The respondents experienced problems with sight (26.3%), hearing (17.2%), smell (5.9%), taste (6.8%) or touch (5.4%). Although the percentages on sight and hearing problems are relatively large, these results are small compared to a study by Matulesy et al. (1990) among respondents aged 60 years and older who lived in

rural communities of the regencies Sleman and Kulon Progo in the Special Region Yogyakarta. They found 85.5% respondents with bad eyesight, 45.4% with impaired auditory acuity, 12.5% with a decreased sense of smell, 21.1% with decreased taste sensitivity and only 7.9% with still normal senses. The differences in findings may be clarified by the use of different methods. Matulesy used biomedical methods and we asked for the respondent's own perceptions.

We only found significant differences between age groups for the capacity of sight and hearing and between villages for the capacity of smell and touch. People aged 75 years and older experienced most problems with sight and hearing. But people of age 65-74 years experienced fewer problems than those of younger age. We expected a gradual loss of sight and hearing since these are typical old age problems. The older respondents have probably adjusted the evaluation standards of their own health and do not complain about health problems that are normal for their age.

That impairment of the senses comes with old age is generally accepted, is reflected in the following citation.

When we asked *simbah* Kromo if she joined the preparation activities for a funeral (*kelompok layatan*), she answered: "The young people make the flower offers. The old people cannot because they cannot longer see it."

Simbah Kromo (±62, female, small market vendor), Kebonagung.

We asked the respondents what minor and chronic illnesses they experienced. The illnesses, which were reported by the respondents themselves, are presented in the right-hand columns of Tables 7.4 and 7.5. In the left-hand columns we give the corresponding categories. Sometimes the same diseases were categorised as a minor illness and as a chronic illness by the respondents. An illness was usually considered as minor when the respondents suffered from it for a short and limited period, and chronic when the respondents suffered from it every day.

Less than one-fifth of the communicative respondents (19.4%) said they did not experience any minor illness. A large majority of the respondents (80.6%) suffered from at least one minor illness of which the infectious diseases cough, fever and flu were the most frequently mentioned. Headaches and toothaches also hindered the daily activities of older people. We only found one significant difference in the prevalence of minor illnesses between the villages (see Table 7.7). Respondents who live in Kebonagung (86.0%) reported significantly more frequently a minor illness than respondents in Giriwungu (75.0%). We did not expect this difference since climatological and hygienic circumstances are worse in Giriwungu.

Table 7.4 Prevalence of minor illnesses in old age (N=355)

Medical distinction	%	Self-reported minor illnesses	%
Respiratory tract infections	41.7	- Cough	40.3
		- Breathing problem	1.4
Other infectious and parasitic diseases	63.1	- Fever/flu	60.6
		- Rash/skin disease	1.7
		- (Scab over a) sore/ulcer/pus	0.8
Miscellaneous	69.4	- Headache	53.2
		- Toothache	11.0
		- Vomiting	3.7
		- Smarting/shooting pain (<i>keju/linu</i>)	0.6
		- Stiffness/painful muscles/body overload	0.6
		- Stomach pain	0.3

Table 7.5 Prevalence of chronic illnesses in old age (N=355)

Medical distinction	%	Self-reported chronic illnesses	%
Degenerative	45.8		
Arthritis and rheumatism	32.1	- Rheumatism	32.1
Cardiovascular disorders	11.0	- High blood pressure	9.3
		- Heart problems	1.7
Musculoskeletal and connective tissue disorders	0.9	- Hernia	0.6
		- Cramp	0.3
Nervous system diseases	0.9	- Paralysis	0.6
		- Sleeping/numb body parts	0.3
Neoplasm	0.3	- Cancer	0.3
Other degenerative diseases	0.6	- Becoming/being decrepit or old	0.6
(Internal) organs	13.4		
Respiratory tract disorders	5.4	- Asthma	3.1
		- Lung disease	2.0
		- Cough (every night)	0.3
Gastro intestinal disorders	4.0	- Stomach pain	3.7
		- Haemorrhoids (<i>ambej</i>)	0.3
Urogenital disorders	0.9	- Kidney disease	0.6
		- Prostate	0.3
Sense organ disorders	0.6	- Eye disease	0.3
		- Ear infection	0.3
Skin	2.5	- Itching	1.1
		- Skin disease	0.8
		- Skin tumor	0.6
Endocrinal/metabolic	1.1	- Diabetes	1.1
Miscellaneous	4.0	- Anaemia	3.1
		- Typhus (symptoms)	0.3
		- Beriberi	0.3
		- Headache	0.3

Almost half of the communicative respondents (47.3%) said they did not experience any chronic illness (see Table 7.7). The respondents who did suffer from a chronic illness (52.7%) most often mentioned degenerative illnesses, which are typically illnesses of the aged. Apparently, respondents suffered mostly from rheumatism and

cardiovascular disorders. We only found one significant difference in the prevalence of chronic illnesses between the age groups². As expected the people in the youngest age group of 55-64 years reported the lowest prevalence of chronic illnesses (44.8%). However, we did not expect that the people in the middle age group of 65-74 years would report the highest prevalence of chronic illnesses (58.3%) and that the oldest age group of 75 years and older reported a lower prevalence (57.9%). Possibly, people in the eldest age group have survived because of their good health. As Hugo noted, relatively high levels of mortality at younger ages in nations like Indonesia may "select out" persons prone to illness, and that those who survive to older age may be healthier, on average, than older persons in more developed nations (Hugo, 1992a: 223).

Table 7.6 Prevalence of diseases in *Puskesmas*' patients of 55 years and older in three hamlets of Kebonagung and one hamlet of Giriwungu

Medical diagnoses recorded by local health centres (<i>Puskesmas</i>)	Jayan, Tegal & Talaban (Kebonagung)			Petung (Giriwungu)		
	Freq	%	Total %	Freq	%	Total %
Degenerative			34.4			18.2
Cardiovascular disorders	3	1.6		2	1.5	
Musculoskeletal & connective tissue disorders	.	.		.	.
Nervous system diseases	.	.		.	.
Arthritis & rheumatism	61	32.8		22	16.7	
Neoplasms	.	.		.	.
Other degenerative diseases	.	.		.	.
Infectious			47.8			74.9
Respiratory tract infections	11	5.9		51	38.6	
Skin disorders	15	8.1		32	24.2	
Tuberculosis	.	.		2	1.5	
Eye infections	1	0.5		2	1.5	
Diarrhoeas	5	2.7		7	5.3	
Other infectious and parasitic diseases	57	30.6		5	3.8	
Gastro-intestinal	24	12.9	12.9	6	4.5	4.5
Urogenital	6	3.2	3.2	2	1.5	1.5
Endocrinal/metabolic	.	.	.	.	.	.
Miscellaneous (anaemia, accidents etc.)	3	1.6	1.6	1	0.8	0.8
Total	186		100.0	132		100.0

Adapted from the sources:

- *Kasus penyakit lansia di Jayan, Tegal dan Talaban, Januari-Desember 1996;*
- *Buku Puskesmas pembantu di Petung, Januari 1996-Desember 1997.*

We also collected data from the local health centres (*Puskesmas*) in order to compare our subjective, self-reported diseases with more objective medical data. Data of patients who visited the *Puskesmas* were recorded in different ways. The *Puskesmas* in Jayan had a regional function and combined data of various hamlets. The *Puskesmas* in Petung did not add up the data per year but just when the book was finished. The *Puskesmas* had a different way of naming diseases. This makes it

² The effect of age cannot be calculated for the health data in Tables 7.4 and 7.5.

difficult to compare the data. Therefore, in Table 7.6 we grouped the diseases into broad categories. It should be noticed that the first frequencies covered three hamlets and the second frequencies covered a period of two years.

A similar pattern of diseases in old age emerges from the medical diagnoses as from the self-reported illnesses in the survey. Rheumatism and infectious diseases were the most prevalent diseases. If we compare the data from the survey and the *Puskesmas* in more detail, it appears that some illnesses are more frequent or only recorded in the survey. This suggests that many older people did not use the services of the *Puskesmas*.

If we compare the prevalence of diseases between the two health centres, we see many differences. Firstly, the infectious diseases and especially the respiratory tract infections and skin disorders are much higher in Petung than in Jayan. This is probably caused by the colder climate and the less hygienic conditions in Petung. Petung is situated in the mountains near the sea and the roads and water facilities are badly developed. Secondly, the percentages of other infectious and parasitic diseases are much higher in Jayan. This consisted mainly of tetanus neonatorum, which is not recorded in Petung. Thirdly, the prevalence of degenerative diseases, especially rheumatism, is almost twice as high in Jayan compared to Petung. Finally, the gastro-intestinal, urogenital and other diseases are also higher in Jayan. The differences in recorded diseases are difficult to interpret. Factors such as location, characteristics of patients, diagnostic methods, quality of personnel, all play a role in this.

7.2 Case studies

In this section two case studies are presented that illustrate how health problems can influence the lives of people and how these people handle them.

7.2.1 *A life affected by health problems: 'Kasih, my husband can no longer work'*

Simbah Kromo is approximately 62 years old and lives with her frail husband (± 68) in the hamlet of Jayan, Kebonagung village. She earns a living as a small market vendor (*baku*).

Kromo was born in a house near the house of the present hamlet head. She does not know her age, but her identification card (*KTP*) says that she was born in 1935. If this information is correct, Kromo is 62 years old. She was the third of five children of her parents, but never knew the oldest brother because he died at a very young age. She does not know his name. Her older sister was called Tukinem (see the genealogy in Annex 7.1). When Kromo could just walk, her brother Tugiman was born. Kromo remembers that her mother carried Tugiman in a sling cloth while she could already walk hand in hand with her mother. This means there must be a two to three year age difference. After him a brother Giso was born, who died very

soon. The household consisted of the father and the mother Sorjo Utomo, the older sister Tukinem, Kromo and younger brother Tugiman.

Kromo's parents both died when she was still very young. She does not know how old she was at the time. First her father died of beriberi. When he died, the mother stopped working. Because the house had fallen apart during the Big Earthquake (*Lindu Ageng*) of 1942, they were living in the open.

"My mother was stupid. She could not trade, could not be a labourer, could not work. She could only beg from the neighbours for food for the children. [Shows how her mother held up her hand.] Mother died because we were poor. She brooded a lot about how she had to take care of the young children. She also suffered from beriberi. Her cheeks and legs were swollen. There was no medicine, food was expensive, and we could not look for it. So, we did not do anything. '*Diujo*' that means 'just let it be'. Do you want to die or do you want to live? Whatever, it is up to you! In the past there was nothing. Now there is a hospital. You pay one, two million Rupiah, but you must admit a sick person to the hospital. You have to find the money, like the daughter of [the researcher's landlady] *simbah* Joyo. They payed three million Rupiah and she still did not get better. She died..."

Kromo's mother died soon after her father. At that time, she was about four or five years old, because she can still remember that her mother was bathed for the funeral. From then on they did not have parents or a house and Tukinem had to take care of her younger siblings. It was obviously too much for her, because every time somebody died, Tukinem would scream outside in the rain: "Father, mother, take me with you!" So, then Tukinem died of beriberi too. That was during the Japanese Occupation [1942-45]. They had no medicine, because it was expensive. Kromo was still young. For medicines one had to go to the new doctor in Patalan (Bantul) and Kromo was afraid to go there, because she had to cross a river. Kromo took care of herself and her little brother.

"Later Tugiman was suffering of beriberi too, but he could be cured. I was smart, and could look for medicine. Now my younger brother is old, and has six grandchildren already. I took care of Tugiman and raised him, let him marry and live with me until I made a house for him."

They did not go to live with relatives, because they were also poor. They 'followed' neighbours. They begged from many people everywhere. If they had asked only the closest neighbours, these neighbours would have become fed up with them. They begged as far away as Penteng, Talaban and Mangsan.

When Kromo was older, she gathered firewood far away in the Turunan forest in the mountains. She carried the firewood in a basket (*tenggok*) and sling cloth (*gendong*). She sold it on the market Gayam. If she could not sell the wood Kromo cried, because then they had nothing to eat. From the proceeds she bought cassava, dried cassava or red rice to eat. She sold wood for some months while her little brother played at home or the neighbour's.

Then she started trading vegetables on a very small scale. At the market in Imogiri she bought string beans, fermented soybean cake and the like, and sold it again while walking around at the market. Because she bought in large quantities and sold it by the piece, she could make profit. For instance she bought twelve bundles of amaranth for Rp 500 and sold it a piece for a total of Rp 600.

Kromo and Tangsir knew each other as neighbours. The older people asked if they wanted to marry. They married. They built a house at her parents' place. At that time Kromo was already trading and gathering dried leaves. Tangsir worked as a farm labourer at the rice-field and collected palm sugar juice. Kromo and Tangsir lived together with her younger brother Tugiman until he married. Then the parental inheritance, just the house and the rice-field, was

divided in two and Tugiman started to live on his own. Tugiman lives in the same house and still owns the rice-field.

When they were married for approximately four years, Kromo became pregnant but had a miscarriage after seven months. It was a girl named Tugiyem. After about two years a daughter Ngatijem was born and an other four years later a son Tuginin was born. After three to four years Kromo gave birth to a daughter in the hospital, but she died. Then she had four or five early miscarriages when she was two to four months pregnant.

The daughter Ngatijem went to school until the second class. Then there was no money anymore for education. She worked together with her mother at the market until she married. After that she followed her husband to Karangrejek (Imogiri). Nowadays she works at construction projects in Yogyakarta. Their son Tuginin graduated from the lower secondary school (*SMP*). He left the village to work as a household servant in Jakarta. Later he came back, married and lived together with his parents. He works as a pedicab driver (*tukang becak*) nowadays.

Kromo and Tangsir moved to their present house only six years ago, because they say they like to live closer to the road [a 500 metre difference]. Tuginin is still living in their old house. [A neighbour told how Tuginin was quarrelling all the time with his parents and had even physically fought with his father when they still lived together. According to another neighbour, it was a very noisy household.] As a market vendor Kromo works hard. She makes the food products at home and she sells them by walking around the market in Imogiri. She said: "I have been trading since before the time that I had grandchildren."

When we began to interview Kromo, she just wanted to take a week off and rest until her headache was better. The midwife (*dukun bayi*) told her to do so. She also got pills from the midwife. The day before she went to a masseur (*dukun pijat*) and next week she wants to go again. Six years ago (at the age of 56) Kromo could still thresh (*gabah*) two baskets (*tenggok*) of rice per day. "With a machine the rice becomes hot and stinky from petroleum but with a pestle and mortar (*alu lumpang*) it is nicer, healthier with vitamins...". Now she already feels tired around eight o'clock in the evening because she has a frail body, as she puts it, but she does not usually go to bed until eleven o'clock. Sometimes she does not sleep before one or half past one at night if she has to make flour (*tepung*) again. "When you pound a little of cassava flour; not enough (*kurang*). When you pound a lot; fatigue (*capai*)!"

Tangsir does not help her because he is suffering from a leg injury. A year ago he fell in the rice-field (*sawah*). He has not yet recovered from the fall and he cannot work anymore. He had to go to the doctor for an injection at various times. They went to the Sardjito hospital in Yogyakarta and saw many 'doctors' in Pundung (Imogiri), in Mingiran (south Yogyakarta) and in Semalu (Bantul), until they found one who suited them (*cocok*). Three times a month he goes to the favoured doctor with a neighbour on a motorbike. If he has to walk he cries from the pain. There are many neighbours who want to help: Sumadi, Sunar, Jumadi, Ponijam, Sugan, Margono... Everybody took him four times. Their son, Tuginin, who lives nearby is unwilling to help them. They have already spent two million Rupiah on medical treatment and had to mortgage the rice-field. Kromo has to provide the money all by herself and therefore she is still trading. She said: "Poor me (*kasihan*), my husband can no longer work!"

7.2.2 A case of dementia: 'Humans should not behave like chickens'

We use the case of *simbah* Oyot to illustrate the difficulties surrounding dementia. *Simbah* Oyot was already old (age unknown). She lived together with her husband, their son Harso Utomo, daughter-in-law Seni, and two grandchildren in the village of Giriwungu. *Simbah* Oyot said she liked to be called *mbok*, which is a term to address an older woman of humble origin, Oyot and that everybody knew *mbok* Oyot. First *Ibu* Seni told about the health condition of her mother-in-law.

"*Nyai* Oyot has not been 'normal' (*tidak normal*) for about eight months since she fell. Approximately one month before she fell she had been not 'normal' sometimes. She was not 'normal', because often she had been very angry. People here said it was stress. We took her to the house of a *dukun* (traditional curer) in Girimulyo. The *dukun* said she was like that because her own thoughts are deranged, that she is suspicious of her husband, that he might love another woman. We also asked a *dukun* from Klaten, but his diagnosis was the same as the *dukun* from Girimulyo.

When she is stressed nothing is right, she acts like a drunken person. If there are young people she is jealous of her husband who, she thinks, loves other women. The meaning of not being 'normal' is the same as stress. At the time that she was very angry she sometimes went to the house in which she was born (*tabon*), in Giripurwo. She had been doing this for a long time. Now she is more often not normal than normal. At the times that she was normal she could talk as usual, but at the times that she is not normal she cannot communicate. She cannot remember anything, not even about her children. She often calls me *mbak* [a term to address a woman of the same age] or *lik* [a term to address an aunt younger than your mother]. At the time that she was stressed and very angry, she was not afraid of anybody except for my eldest child.

Sometimes *nyai* Oyot walked outside. Once when I was busy she walked far away. Then I had to look for her. To get her to go home you have to say: 'There is a white person (*londo*).' Because she is afraid of white people and then she wants to be taken home. Once *nyai* Oyot wanted to go away but I had forbidden it, and then she was so angry with me that I had to tie her hands behind her back. She says often that her relatives have asked her to spend the night in their house while this was not the case at all. Then they say that there is a white person in their house to scare away *nyai* Oyot.

Because she is not normal, she also does not know how to chew betel. To chew betel she often takes a leave of *so* [tree leaves that are used in the soup] while she should take a betel vine leave (*daun sirih*). When I see it I change it for a betel vine leave, if not she chews with a *so* leave.

When *nyai* Oyot walked off to her relative's house in Giripurwo, sometimes she stayed away for a long period up to three months. I was often the one who brought her home and thus *nyai* Oyot often worried: "Why is the one who collects me not my husband or child but a daughter-in-law?"

During the interview the son of *simbah* Oyot, *bapak* Harso Utomo, returned and he also wanted to say something about the condition of his mother. "Although my mother is not normal, I feel peaceful (*ayem*) because she does not walk away from home anymore. When she walked away from home and was out on the streets, I felt sad because people thought that I could not take care of my parent. During these times it was difficult to look for her because it was not enough to look in just one neighbourhood; she could also be in another

village. When my mother is at home, even though not normal, I feel at peace because the money I earn can be used to help my parents and I do not have to worry (*tenang*) when I work. For example, when I go to the field I do not have to fear for my mother's safety because she is at home.

Mother became mentally deranged, not because she worried about money but because of her own thoughts. Humans should not behave like chickens. Because of my mother's condition, I have to take care of her. I am afraid that mother will behave like the crazy people who wander along the streets when I do not take care of mother. Thus mother has to be taken care of, so that she permanently stays at home. At the time that mother was angry and went away to her relatives' house in Giripurwo for a long period, I thought about her all the time, because they are only distant relatives. I did not feel good about them, so she had to be brought home."

The interviews above were taken on 30 September 1997. Three days later *simbah* Oyot fell again and remained completely apathetic. The following text is a part of my fieldnotes that I took after visiting *simbah* Oyot again.

They think that *simbah* Oyot has fallen although nobody saw it happen. When they found her, she was sitting against the wall with her head bent forward. Her face was covered in sweat, she did not react to anything and she could not walk anymore. When we visited *simbah* Oyot, she was lying on a bed only staring at the ceiling. Her daughter-in-law, *Ibu* Seni, sat beside her waving away the flies and holding her hand. *Simbah* Oyot always tried to pull away the cloth (*kain*) under which she was lying naked. Female visitors were sitting on the floor to pay their respect while drinking tea and chewing betel.

Some days later we left the village Giriwungu and when we came back at the end of November *Ibu* Seni told me that *simbah* Oyot had died. The next weekend they would have the *selamatan empat puluh hari*, the ceremonial meal held after forty days to commemorate the deceased.

7.3 Conclusion

Table 7.7 presents a selective overview of the health results. We tried to portray the health status of older people with the indicators for nutritional health, functional capacity of personal activities of daily life (ADL) and instrumental activities of daily life (IADL), physical and mental well-being, capacity of the senses, minor and chronic illnesses. The nutritional health and functional capacity of (I)ADL are relatively objective health indicators, because they were measured by a scale composed of various items. The physical and mental well-being, capacity of the senses, minor and chronic illnesses are subjective health indicators, because they were not measured by biomedical methods but reported by the respondents themselves. The (health) stages in becoming old and the diseases experienced by the respondents are the emic definitions and descriptions. We attempted to translate, structure and group these into etic descriptions for reasons of comparative analysis. Table 7.7 presents

the effects of sex, age and residence on some of the health indicators. The health variables that are not described in the table are not used for further analysis.

Sex has rarely a significant effect on the health indicators. We are surprised that older men and women have no significant differences in health status in general, because we assumed that the older age distribution of the female population would be reflected in their health. As expected, age has a strong significant negative effect on most health indicators. Place of residence has a significant negative effect on some health indicators. Because the living conditions, as hygienic and climatic circumstances are worse in Giriwungu, we expected a lower level of health there. Respondents from Giriwungu indeed have worse nutritional health and IADL, but reported a better capacity of the senses and less minor illnesses than respondents from Kebonagung.

Although the ANSI checklist was a less appropriate tool to measure the nutritional health state of the older people in Indonesia, we still used it to estimate and compare the mean scores. Older age and place of residence (Giriwungu) have a significant negative effect on the nutritional health state of the respondents.

The means of both the ADL and IADL scales were relatively high, which would imply that most older people can still perform the personal and instrumental activities of daily life without much difficulty. The functional capacity of ADL will not be used for further analysis because the scale has insufficient discrimination power. The functional capacity of IADL are significantly different according to age and place of residence.

Physical well-being was subjectively measured by questions on health in general, health compared to contemporaries, and health now as compared to ten years ago. The majority of the respondents experience their general health as good, even when they become older than 75 years. Nevertheless, the subjective general health condition declines significantly with age. Most respondents are also very positive about their health in comparison to peers. We did not find significant differences for this health measure, which implies that both males and females, all age groups and the inhabitants of the two villages feel that they are better off than their age peers. The health compared to ten years ago is the only health indicator on which sex has a weak significant effect. More female respondents report better health compared to ten years ago than males do. While more male respondents report themselves to be in poorer health now significantly more frequently. This might be explained by the fact that females retire at an earlier age than men do. Therefore, they feel better or healthier than ten years ago, because their body is no longer burdened by heavy work. Age has a significant negative effect on the health as compared to ten years ago. Health becomes worse with increasing age.

Generally the respondents are capable of using most of their sense organs. Age and place of residence proved to have unexpected significant effects. The respondents of 55 to 64 years experience more hearing problems and the respondents of 65 to 74

years experience more sight problems than the older respondents. One would expect the oldest respondents of 75 years and above to experience more problems, especially with hearing and seeing. It might be that these kinds of problems are common and accepted by the oldest respondents and they tend to complain less about it than the younger respondents. Respondents report being less able to smell and feel in Giriwungu significantly more often than in Kebonagung. Age has only a significant effect on chronic illnesses and residence only on minor illnesses. Chronic illnesses are mostly reported by the respondents of 65 to 74 years. The respondents who live in Kebonagung mostly reported minor illnesses.

The fact that older people generally consider their own health as good while most of them still suffer from minor or chronic illnesses, and the fact that the oldest age group reported less chronic illnesses, hearing and sight problems, suggests that people's standards in evaluating their health change as they become older. Older people seem to take some loss of physical strength for granted as part of 'normal' ageing. A decline in subjective health indicates mainly the extent to which older people feel that the actual decline in health exceeds what they expect on the basis of their own script of 'normal' ageing (Liefbroer and Gierveld, 1995: 33)).

Table 7.7 Selected indicators for health according to sex, age and residence (means)

Health indicators	Sex		Sign. ^a	Age group			Sign. ^a	Village		Sign. ^a
	Male (N=149)	Female (N=206)		55-64 (N=145)	65-74 (N=115)	75+ (N=95)		Kebonagung (N=179)	Giriwungu (N=176)	
Relatively objective health:										
- Nutritional health ^b	14.1	14.6	n.s.	15.4	14.2	12.9	***	14.6	14.1	**
- Functional IADL capacity ^c	42.5	40.6	n.s.	44.1	43.3	36.0	***	42.3	40.4	*
Subjective health:										
- Health in general ^d	3.8	4.0	n.s.	4.1	4.0	3.6	**	4.0	3.8	n.s.
- Health contemporaries ^e	2.5	2.4	n.s.	2.5	2.3	2.5	n.s.	2.4	2.4	n.s.
- Health 10 years ago ^f	1.3	1.5	*	1.6	1.4	1.2	***	1.4	1.4	n.s.
Self-reported health problems:										
- Incapacity of the senses ^g	4.3	4.4	n.s.	4.4	4.6	4.2	***	4.3	4.5	**
- Minor illness ^h	0.8	0.8	n.s.	0.8	0.8	0.9	n.s.	0.9	0.8	***
- Chronic illness ^h	0.5	0.5	n.s.	0.5	0.9	0.6	**	0.5	0.5	n.s.

^a Chi-square test: *** p<0.01; ** p< 0.05; * p<0.10; n.s. no significant difference.

^b The recoded categories of the ANSI checklist ranges from 0-8 (bad nutritional health), 9-16 (moderate nutritional health) and 17-24 (good nutritional health).

^c The IADL scale ranges from 5 (bad) to 45 (good).

^d The general health scale ranges from 1 (bad) to 5 (good).

^e The health compared to contemporaries scale ranges from 1 (worse) to 3 (better).

^f The health compared to 10 years ago scale ranges from 1 (worse) to 3 (better).

^g The senses capacity scale ranges from 0 (no capacity to use any of the senses) to 5 (capacity to use all five senses).

^h The disease scale ranges from 0 (no report of diseases) to 1 (report of at least one disease).

8. Livelihood

This chapter describes how older persons provide a livelihood for themselves individually and their household. The first section presents the general daily activities. These can be income-earning activities or housework or a combination of these. We will look at the following household resources: income in cash and in kind, food crops, trees and sources of water. Furthermore, the following assets will be considered: the house, farmland, livestock, and valuable household items. The survey data are supplemented with case studies.

The concept of livelihood has been discussed and defined in various ways. A broad definition of livelihood will be used, comprising the dimensions of process, activities, assets, resources and outcomes (cf. Niehof and Price, 2001). Livelihood is here defined as the assets, the resources, the activities, and the access to these (mediated by institutions and social relations) that together determine the living gained by the individual or household. The output of the livelihood generation is the livelihood security, which is described in Chapter 11.

8.1 Resources

Resources are the immediate means needed for livelihood generation (Niehof and Price, 2001). In this section we describe the relevant livelihood resources.

8.1.1 *Work or retirement*

Whether an older person works or not reflects the capability to be active (strength) and productive (income generating). We asked different questions about the work status: Do you work nowadays? What are your daily activities in general? On what activity do you spend most of your time? The answers to these questions show that 65.9 percent said that they worked, but only 59.4 percent said that they spent most of their time on work (N=355). Apparently, some persons still did some work but not most of their time.

The general daily activities were categorised as:

- Farm activities including income-generating activities in agriculture, hunting, forestry or fishery, such as the production of rice, cassava and other crops; the breeding of goats, cows and other livestock; the hunting and catching of animals; the gathering of wood and aquatic products.
- Other income generating activities consisting of the remaining, non-farming activities with which an income in cash or in kind is acquired. Examples are producing food (like palm sugar, fermented soybean cake, and kinds of chips), vending small food products, trading, carrying sand, crushing stones, serving, or teaching.

- Household activities involving the work and organisation in and around the house that are necessary to run a home such as cooking, cleaning, childcare and other housekeeping activities.
- Other activities at home consisting of just being/sitting/sleeping at home, talking to or visiting people, praying or playing music.

Table 8.1 Most important general daily activities of older persons by sex

General daily activity	Male		Female		Total	
	Freq.	%	Freq.	%	Freq.	%
Farm activities	101	62.3	66	28.1	167	42.1
Other income-generating activities	18	11.1	34	14.5	52	13.1
Household activities	10	6.2	77	32.8	87	21.9
Other activities at home	33	20.4	58	24.7	91	22.9
Total	162	100.0	235	100.0	397	100.0
Test scores	$\chi^2(3)=59.3^{***}$, p=0.000					

More than half of the respondents (55.2%) still perform income-generating activities most of the time. They are mainly male farmers. The respondents who perform income generating activities other than farming are mainly female. Less than half of the respondents (44.8%) does not perform any income-generating activities but only household activities or various other activities at home most of the time.

Here we use retirement in the sense of not spending most of the time on income-generating activities. Three-quarters of the retired respondents consist of women who still spend most of their time on household activities. Women who were always the housewife or already stopped working long before they became old inflate the number of retirees, which is also confirmed by the figures of retirement duration. Since the very old respondents, who are more likely to be female, are over-represented in the sample, it is also logical that more women than men have retired. The other activities of the retirees consist of just being at home, doing nothing other than sitting or sleeping (21.2%), talking or visiting people outside their own household (1.3%), and praying or playing music with the *gamelan* (0.6%).

Table 8.2 General daily activity by village and sex

General daily activity	Kebonagung				Giriwungu			
	M	F	Tot	%	M	F	Tot	%
Income-generating activities:								
- Farm activities	38	17	55	28.4	63	49	112	55.2
- Other income-generating activities	14	30	44	22.7	4	4	8	3.9
Retirement/"already old":								
- Household activities	5	41	50	25.8	4	32	37	18.2
- Other activities at home	19	30	45	23.2	15	32	46	22.7
Total	76	118	194	100.0	86	117	203	100.0
Test scores	$\chi^2(3)=46.2^{***}$, p=0.000							

Table 8.2 shows the pattern of daily activity to be different for the villages Kebonagung and Giriwungu. The comparatively large proportion of persons still farming in Giriwungu, is particularly striking. Table 8.2 also presents the frequencies

of the general daily activity for sex by village in order to test the hypotheses that social change processes have a different impact on the gender distribution among the type of activities. There is not much difference between the total number of men or women, who work or are retired, in the two villages. However, the number of men and women, who perform farm or other income-generating activities, differs significantly. In Giriwungu most women are farmers, whereas in Kebonagung most women have other kinds of work. In Kebonagung most men are farmers, while most women have other kinds of work. These differences can be explained by the different farming systems in each village. In the more prosperous village, Kebonagung, people mainly cultivate rice. Particularly in rice cultivation the effects of labour-saving technologies and the shifts in hired labour recruitment practices which drove off women, are visible (Keasberry, 1998). Hence, more women than men have jobs outside farming in Kebonagung.

Simbah Rejo said it this way: "In the past we used the *ani-ani* (traditional knife for cutting rice stalks), but today the *arit* (sickle) is used. I was no longer strong enough for this..."

Simbah Rejo (±72, female, retired), Kebonagung.

In the poorer village, Giriwungu, people mainly cultivate cassava. This type of crop is not much affected by the processes of agrarian change. Some men used a mechanical plough in the area around Kebonagung, which we never saw in use in Giriwungu. In fact, in Giriwungu people seldom use a buffalo to plough the fields but still hoe by hand. Finally, farming is the main source of income and there are almost no other opportunities to earn an income in Giriwungu. Most of both men and women are farmers there.

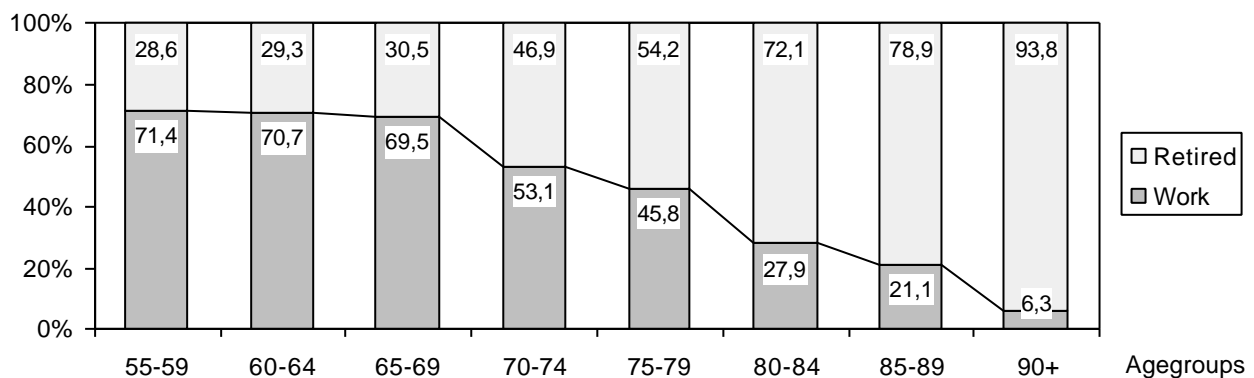


Figure 8.1 Activity status by age groups

The activity status by age groups (Figure 8.1) shows that as people get older they are more likely to be retired than working. The crucial age is around 75. People younger than 75 years are more likely to work and those older are more likely to be retired.

Of the communicative respondents who work (N=234), some have two to three different types of work (14.1%). Most of them are farmers (73.1%), including farm labourers (6%). Other occupations are small vendor, trader or middleman, producer of food like soybean cake and Javanese sugar, sand and stone collector, and construction labourer, besides numerous occupations that were reported only once. More than half of the respondents said to work to have an income (58.8%) or to produce food (9.3%). Some respondents work to help household members and other people (15.2%) or to stay busy and pass the time (13.5%). A few respondents work because they still feel healthy and strong (2.4%) or they have to because of lack of support (0.7%). Most of the respondents work in the same village where they live (91.5%).

If we consider the communicative respondents who do no longer work, most of them had stopped, because of their weak physical condition or health (59.8%). Other reasons are old age and working children (18.9%). In 17.4 percent of the cases other household members did not want the older person to work or help anymore, while 3.8 percent stayed home to take care of the household chores or grandchildren. People retire at an average age of 64 years, which is high since the life expectancy at birth is 65 years for the Special Region Yogyakarta as a whole in 1990 (BPS, 1996: 16). One could say that in the rural areas of Special Region Yogyakarta older people work until they die.

Work in the rural areas of Java usually consist of heavy manual labour. The case study of *simbah* Ngatinem (see section 6.2.1) illustrates this. The following cases describe the heavy work of stone collectors and a small vendor.

When we inspected the village of Keronagung for selection, we met five to seven women who are known as stone diggers (*pencari batu*) along the big river Opak. They collect the stones from the river, carry them in a basket and smash them to pieces with a hammer. Only one of the women is between thirty and forty years old and the others are all older women. Some of them look very old. They say that they only earn Rp 500 per day working from nine to three o'clock in the afternoon. But that did not seem to be entirely correct, because one woman was working next to a nine-day heap of stones for which she got Rp 12,000. The payment is Rp 12,000 per cubic meter. So, that is Rp 1,300 per day depending on the amount of work done.

One older woman has eleven children of which the youngest is still at the lower secondary school. Her eldest children have their own families. She has worked fourteen years as a stone collector. She used to have ricefields along the river, but the river has moved because of erosion and therefore she cannot irrigate the fields anymore.

Another woman, who is approximately in her late sixties, has also worked as a stone digger for fourteen years. Her husband does not work anymore and her children farm the land. She rocks a little to and fro, perhaps because of the fasting (it is Ramadan) or because she is already very old. Her heap of stones of nine days work is smaller...

Fieldnotes Kebonagung, 16 January 1997.

Early in the morning the small vendor (*bakul*) arrived at the side door and sold soybean packages, palm sugar, eggs, and so on to my landlady *Ibu* Rupi. It turned out that the *bakul* comes to the village every day to sell merchandise in the morning, and to buy crops in the evening. So, after we had dinner she was again in the kitchen loading a big white bag full of peeled and dried cassava. There is no money paid then. What has been bought in the morning is settled with what has been sold in the evening. It is barter converted into money. A possible shortage or surplus will be settled the next time. This is all done without using pencil or paper. The *bakul* knows it all by heart. She pays Rp 800 for a *tenggok* basket full of cassava. There are five to six baskets in a bag and thus it has a value of Rp 4,000-4,500.

On another evening, I helped *Ibu* Rupi to lift a big bag of cassava on the back of the *bakul*, because Rupi could not do it alone. The *bakul* said it was forty kilograms, but I think it was more. Five thousand minus two hundred rupiah, she said, while carrying that heavy load up hill.

Fieldnotes Giriwungu, 19 and 26 June 1997.

When the respondents compared work at present with the past, they said that it is still heavy manual labour for low rewards, but that the purchasing power of their income has declined.

"In the past, the work was very easy, to walk as a small vendor (*bakul*) is easy. Then there were no trucks or buses, only carrying goods with a sling cloth (*gendong*) and on the head. There were many vendors. Small sales could be enough for food. Now it is difficult if one is a small vendor. Little trading for a boss, who has much money. If you do not have much money, you cannot work. Nowadays, there is big money, but all the things are expensive. Everything is expensive. Poor people can buy what? If you want to buy rice, it is Rp 1,200 for one kilogram now. In the past it was cheap. The price was only five or six *cents* for seven and a half ounces (*ons*) of rice."

Simbah Rejo (±72, female, retired), Kebonagung.

"The people from here lead a trapped life. When they do not work hard, there is no prosperity. The area here is a minus area. Even looking for a mouthful of food gives you a headache. When I pray to God, and if I still have permission to live, then I will have enough but no more than that."

Bapak Dwijo (64, male, petty trader and labourer), Giriwungu.

These cases indicate that although most respondents (had) worked hard in agriculture or agriculturally linked employment, their income is still limited. How much income in cash and in kind older persons and total elderly households earn is described in the next sub-sections.

8.1.2 Individual income

We asked the older respondents to estimate their individual income per year¹. The income could have been in cash or in kind. For instance, cash income from a wage or the sale of products, or income in kind from agricultural yield. The respondents had to convert the income in kind to sums of money. This turned out better than expected because people knew the market prices for most products. However, this was still a difficult question because it was hard to recall the income of a whole year that was irregular and some people were probably suspicious of providing information on their whole income. Therefore, it is not surprising that thirty-two cases (8.1%) did not respond or said they did not know the answer. We should obviously handle these results with care. Nevertheless, the rest of the respondents tried to answer to this question and estimated the value of their yield.

Less than half (40.3%) said they had no income of their own (N=160). Half of the respondents (52.6%) had an annual income of Rp 874,253 on average, which is a monthly income of Rp 72,854² (N=205). In the Special Region Yogyakarta the mean value of basic daily needs (*kebutuhan hidup minimum*) was Rp 119,281 per month in 1997 (BPS, 2001). The older persons earn less than they officially need for their daily needs, although we have to bear in mind that life is cheaper in the rural areas than in the urban areas. Besides, the official basic daily needs are probably based on wages from formal employment and our calculations are based on income in cash and in kind. The yield of cassava, for example, may have a low market value, but it still gives people something to eat. Nevertheless, the income of the respondents is not sufficient to fulfil their basic daily needs if they need to buy something that they cannot produce themselves.

When we include the nought incomes, then the average income of the respondents was Rp 491,019 per year, or Rp 40,918 per month (N=365). The only data in the literature that we have found is a monthly income of Rp 36,000 that Sigit found among older persons in the rural areas of Java long ago. These persons lived under the level of subsistence that was estimated by the Central Bureau of Statistics at Rp

¹ We asked the income for the whole year because most elderly did not have a fixed monthly income and receipts often vary seasonally. We converted the annual income to a monthly income to compare our data with other research data.

² At the time of the Survey the exchange rate for 1,000 Indonesian Rupiah was 0.42 US Dollar. Consequently, the average annual income was US\$ 367 and monthly income was US\$ 31 of the respondents who had an income (N=205). The average annual income was US\$ 206 and monthly income was US\$ 17 of all the respondents who had answered this question including the persons with no income (N=365).

65,000 per month in 1984 (Sigit, 1988). If indeed these data are comparable then the situation has even worsened for the respondents in Kebonagung and Giriwungu.

Table 8.3 Annual individual income in rupiah by sex

Income (Rp)	Male		Female		Total	
	Freq.	%	Freq.	%	Freq.	%
0 - 249,999	68	44.7	152	71.4	220	60.3
250,000 - 499,999	19	12.5	25	11.7	44	12.1
500,000 - 999,999	29	19.1	13	6.1	42	11.5
1,000,000 - 1,999,999	22	14.5	17	8.0	39	10.7
≥2,000,000	14	9.2	6	2.8	20	5.5
Total	152	100.0	213	100.0	365	100.0
Test scores	$\chi^2(4)=33.6^{***}$, p=0.000					

The annual individual income classes differed significantly by gender. More women than men had an income in the lowest income classes and more men than women had an income in the highest income classes. This was expected because women generally earn less than men (Rudkin, 1993: 224) and we already found that women retire earlier than men. On average women earned an individual income of Rp 27,108 and men Rp 60,270³.

The annual individual income classes also differed significantly by age. The oldest respondents aged 75 years and older had the largest proportion in the lowest income class (85.8%) with an average individual income of Rp 11,153. The respondents of the younger groups were equally distributed over the middle income classes. The youngest respondents aged between 55 and 64 years had the largest proportion in the highest income class (11.4%) with an average individual income of Rp 67,113⁴. The youngest respondents earned the most and the oldest respondents earned the least.

Table 8.4 Consumers of individual income by household type

Income consumers	Household type				Total	
	Elderly alone	Elderly + spouse	Elderly + spouse + others	Elderly + others	Freq.	%
Elderly alone	9	<u>4</u>	<u>13</u>	<u>16</u>	42	18.3
Elderly + spouse	.	18	<u>18</u>	2	38	16.5
Elderly + spouse + children	.	10	103	35	148	64.3
Elderly + grandchildren	1	.	.	1	2	0.9
Total	10	32	134	54	230	100.0

The underlined frequencies are cases for which the individual income of the older respondent was not sufficient for the whole household.

³ This was respectively US\$ 11 and US\$ 25 at the time of the Survey.

⁴ The average individual monthly incomes were for the age group 55-64 years US\$ 28, 65-74 years US\$ 18 and 75+ years US\$ 5 at the time of the Survey.

We asked the working respondents how many persons they can support from their income. In Table 8.4 the frequencies of the so-called income consumers are crossed with the type of household of the respondent. The individual income of the respondent was most often said to be enough for the respondent her/himself, spouse and children. Even in ten cases where they did not live together with their children, it was answered that the income was enough for the respondent her/himself, spouse and children. It indicates that either some respondents were taken care of by non-residing children or that the question was not properly understood. In 23.0 percent of the cases, which are underlined in the table, the income of the respondents was not enough for the whole household. This indicates that these respondents were dependent on others.

The respondents (N=355) were also asked if their economic situation was sufficient for their daily needs. Three-quarter of the respondents answered that their individual income was sufficient (N=265). Of these 46.8 percent said that it could fulfil their needs and it was enough for food. Others said that it just had to be enough because they submitted to their fate (*nrimo*) and otherwise they had to make it enough or seek food in the forest (35.4%). Some said that it was enough because they were also supported by their (grand) children (16.3%) or they only lived alone (1.5%). For one-quarter of the respondents the individual income was not sufficient (N=90). Reasons were that their income was uncertain (69.3%) or that they had many needs (18.2%). Some respondents still had children for whom they needed school money (5.7%). Although the income was not sufficient some respondents still felt economically secure, because their child(ren) already took care of them and they did not seek food themselves anymore (5.7%).

Many older respondents earned a little. The following cases show how hard they have work to earn only small amounts of money.

Our landlady *Ibu* Rupi sold *bengl* at the market this morning for the first time this season. *Bengl* is a yellow root that they cut into thin slices and dry in the sun. It is used for medicinal tonics (*jamu*). She got Rp 500 per kilogram and sold 2.3 kilogram. So, she earned Rp 1,150 for which she bought food again.

Fieldnotes Giriwungu, 13 July 1997.

Simbah Kromo is a small vendor of food products at the market in Imogiri. She sells soybean packages (*empe bacem*), steamed cassava in a stacked form (*tiwul dedang*), steamed cassava flour (*tiwul jadah*) and packages of *petai* beans and grated coconut (*botok*). She sells the products at the doors of the hamlets that she passes during the approximately one hour walk to the market. Neighbours also buy products, often on credit, when she is still cooking at home. Three additional activities of Mbah Kromo:

- *Simbah* Kromo usually buys 100 packages of not yet fermented soybean (*tempe gembel*) from a vendor in the village for Rp 2,000. When she sells them directly she can earn Rp 2,500, which is a profit of Rp 500. But she sweetens them with sugar and fries them in oil and then she can earn Rp 5,000. However, the expenses for the sugar and oil are Rp 2,500 and the profit is still Rp 500.

- *Simbah* Kromo buys dried cassava for Rp 1,000 at the market. She pounds this to flour which is then steamed in a pointed basket. The six cooled-off stacks of cassava are each cut in five pieces and wrapped in banana leaves and plastic. Each piece is sold for Rp 50 and she earns Rp 1,500. The profit is Rp 500.
- *Simbah* Kromo buys the *tiwul jadah* and *botok* from her sister-in-law, who asks Rp 3,000 for it. *Simbah* Kromo does not count the pieces and each piece is sold for Rp 50. The profit is probably Rp 500 for each product.

The profit is Rp 2,000 at the most for a whole day of work consisting of two hours of pounding, time for cooking and preparing, six hours walking and selling at the market. Besides trading, *simbah* Kromo is asked by 'neighbours' (who can be anyone she meets on her trip to Imogiri) to sell, pawn or pay off goods at the trader's pawnshop or to renew official documents in Imogiri. People pawn anything such as plates, rice pots, clothes, jewels, etcetera. *Simbah* Kromo receives a commission (*upah*) for which she buys food.

Simbah Kromo (±62, female, small market vendor), Kebonagung.

Simbah Rejo depends on her son's financial support, who works as a pedicab driver in Yogyakarta and only comes home once every ten days or longer. In the right season she gathers dry banana leaves from people's yard. Then she can find two piles a day, but there are also many days that she cannot find any. She sells them for Rp 200 per pile to the boss of the sugar factory in the village. At the time of the interview [October 1997] the weather was too dry and there were no leaves. She could only sell four to five piles of dry leaves once per month. Thus, she earned Rp 800-1,000 per month.

Simbah Rejo (±72, female, retired), Kebonagung.

Many older respondents of the case households earned a little money. Often they made so little profit that I wondered why bother with all the effort and not do something else. The simple answer is that these people do not have the choice or the means to change their situation.

8.1.3 Household income

A household member of the older respondent answered the questions about the household income. The household income is calculated on the basis of the individual income in cash and in kind of the older person, the cash income and the income from agricultural yield of the other household members. The income from livestock is not included in this household income. Livestock was usually kept as a means for saving. Livestock as an asset is described in sub-section 8.2.3.

The annual household income was on average Rp 1,898,180, which amounts to Rp 158,182 a month⁵ (N=361). This is high compared with the official minimum wage of the Special Region Yogyakarta, which amounted to Rp 106,500 a month at the time

⁵ At the time of the Survey the average income of the total elderly household was US\$ 797 per year and US\$ 66 per month.

of the data collection in 1997⁶ (BPS, 2001). The difference can be explained by the difference in measurement. The Indonesian Government probably does not take into account income in kind but only cash income from formal labour. In general, the elderly households in our sample were also larger and had a different composition. Most of them were three-generation families with more than just two adults. Consequently, the households in the sample needed a larger income than the official minimum wage.

Becoming older or living in the village Giriwungu has a significant negative effect on the annual household income of the respondents. The household income of the respondents aged between 55 and 64 years is most frequently found in the highest income class of two million rupiah and higher. The household income of the respondents aged between 65 and 74 years is most frequently found in the second highest income class of one to two million rupiah. The household income of the respondents aged between 75 years and older is most frequently found in the lowest income classes of up to one million rupiah. Respondents who live in the village Giriwungu have a significantly lower annual household income (Rp 103,473 on average) than respondents in Kebonagung (Rp 211,396 on average)⁷.

Rural households have various sources of income to make ends meet (see Annex 8.1). Persons in Kebonagung have more types of livelihood means, such as both self-employment and wage employment and both agricultural and non-agricultural sources of income, than persons in Giriwungu. In Giriwungu most people are only self-employed in agriculture. Annex 8.1 only presents the means of the adult household members. Children and grandchildren who were still attending school are not expected to help with farming. This is different from the time that the older respondents themselves were young.

We describe the different means of livelihood in the next case of *Bapak Dwijo* (64 years) and his wife *Marmi* (age unknown, but not yet old) in the village of Giriwungu.

Pak Dwijo and his wife have a small shop (*warung*) at the house that only has little assortment and does not run very well. *Ibu Marmi* sells products like cans of food, sugar, oil, and matches. *Pak Dwijo* buys the products at the market if there is money and that is often not the case.

Pak Dwijo is mainly a trader. He buys available crops such as coconuts, bananas, dried cassava or goats in the village and sells them at the market. Every *Pon* day he travels with his goods in a truck to the market in Imogiri (20 km. in the direction of Kebonagung) and every *Kliwon* day to the market in Trowono (20 km. in the direction of Wonosari). He said

⁶ The Indonesian Government set an official monthly minimum wage for each province. The government admits that the minimum wage set covers just 95% of the minimum requirements of an average household consisting of two adults and two children (EUI, 1996 in Kragten, 2000: 84). The minimum wage was equal to US\$ 45 at the time.

⁷ This was equal to US\$ 44 and US\$ 89 respectively (for Giriwungu and Kebonagung) at the time of the Survey.

that he bought 300 coconuts for Rp 100 each and sold them for Rp 110 yesterday, but that cannot be correct. After deduction of transportation costs of Rp 2,000 for himself and Rp 300 for the goods, he only earned Rp 700 for which he could not have bought the products for the shop and a drink.

Pak Dwijo also works as a farm labourer at other people's fields. They do not have fields of their own anymore, because of "family affairs" he said. *Ibu Marmi* told us that they had often had to borrow small amounts of money, which became so much that they could not repay it anymore and had to sell their field for Rp 500,000. The major expenses were for the education of their two sons.

For the past two months, *Pak Dwijo* has cultivated one of his brother-in-law's fields. *Simbah Kromodimejo* asked *Pak Dwijo* to take care of the field, because he is old and lives with his daughter's family too far away (Wonosari). The field consists of eleven terraces of approximately 880 m² in total between the slope called *Jurang* and the hamlet of *Salak*. There are very old cassava plants, four coconut trees, thirteen young banana trees, one papaya, six *melinjo* trees and an uncountable number of *jati* shoots. It is a tenant-farming arrangement (*bagi hasil*) in which the yield of the present year is for *Kromodimejo* and maybe a share for *Dwijo*, and the yield of next year will be for *Dwijo*. If *Dwijo* does all the work and buys the seeds then he may keep two-thirds of the yield. *Pak Dwijo* said that the arrangement is a governmental regulation (*aturan pemerintah*), but we think it is just tradition. *Pak Dwijo* cleans the field and wanted to plant peanuts or corn in the rainy season. The old cassava plants were sold to a man, who collects the roots and parts of the stem for fodder. The proceeds are for *Simbah Kromodimejo*. The numerous shoots of teak tree (*jati*) are offspring from somebody else's trees of the Program at the other side of the road. *Pak Dwijo* plans to replant the shoots at the side of the field and the proceeds will be for *Simbah Kromodimejo*. He burns the leaves and weeds to fertilise the soil, because it is too expensive to buy artificial fertiliser.

Finally, *Pak Dwijo* has a share-breeding arrangement (*bagi hasil ternak*) with the village head who lives in front of their house. *Pak Dwijo* and *Ibu Marmi* own one goat and take care of a billy goat belonging to the village head for one year. *Pak Dwijo* will return the billy goat, pay Rp 10,000 and may keep all the offspring. He may also barter one billy goat for two young goats.

Bapak Dwijo (64, male, petty trader and labourer), *Giriwungu*.

This case shows that the means of living can be agricultural, agriculturally-linked or non-agricultural. For such a working arrangement more time and energy is needed to recruit, plan and organise all the activities than for a stable, single job. Besides, the proceeds can be in cash and in kind.

8.1.4 Food crops, trees and water

In the fertile lowlands in which the village of *Kebonagung* is located, the main farming system is irrigated-rice cultivation. Triple cropping is usually possible, because a river runs along the village and irrigation facilities are available. A large part of the rice yield is sold to a buyer at the rice mill and at the daily market in a nearby village. *Kebonagung* has more of a monetary economy than *Giriwungu* where there is more income in kind and more barter. In the less fertile highlands in which the village of *Giriwungu* is situated, the main farming system is cultivation of cassava and corn.

There are no irrigation facilities or water sources available, which makes farming very complicated. Single cropping of rainfed rice (*padi gaga*) is only possible if the rainy season lasts long enough. Most people own trees from which they sell fruits like coconuts and banana at the market or to a passing middleman. The market is in another village and only open once a week⁸. In the subsistence economy of Giriwungu farmers mainly provide for their own needs.

Food crops

If we look at the kind of crops the elderly households cultivate, large differences become visible between the villages Kebonagung and Giriwungu. On average the households cultivate 5.5 different types of crops and one household cultivate the maximum number of 29 crops (see Annex 5.8 for a complete list of crops). Table 8.5 presents the most important crops of which at least ten cases were recorded.

Table 8.5 Main types of crop cultivated by elderly households per village

Types of crop	Kebonagung (N=194)		Giriwungu (N=203)		Total (N=397)	
	Freq.	%	Freq.	%	Freq.	%
Staple food:						
- Rice	143	73.7	188	92.6	331	83.4
- Corn	3	1.5	193	95.1	196	49.4
- Cassava	.	.	195	96.1	195	49.1
- Millet	.	.	18	8.9	18	4.5
Legumes:						
- Soybean	108	55.7	13	6.4	121	30.5
- String bean	1	0.5	11	5.4	12	3.0
- Peanut	12	6.2	186	91.6	198	49.9
- Wing bean (<i>cipir</i>)	.	.	22	10.8	22	5.5
Vegetables:						
- Chilli pepper	1	0.5	55	27.1	56	14.1
- <i>Melinjo</i> tree leaves	10	5.2	68	33.5	78	19.6
- Breadfruit (<i>kluwih</i>)	1	0.5	18	8.9	19	4.8
Fruit trees:						
- Coconut	69	35.6	115	56.7	184	46.3
- Banana	56	28.9	85	41.9	141	35.5
- Jack fruit	4	2.1	25	12.3	29	7.3
Wood trees:						
- Charcoal wood	.	.	15	7.4	15	3.8
- Acacia	.	.	54	26.6	54	13.6
- Teak	.	.	58	28.6	58	14.6
- Mahogany	1	0.5	38	18.7	39	9.8

Elderly households in Giriwungu have more variation in the type of cultivated crops than elderly households in Kebonagung. Rice is the most important staple food in Indonesia. Although this table does not present results for the amount of yield, we observed that (if the dry season does not last too long) the fertile soil and the availability of irrigation systems make triple cropping of rice possible in Kebonagung.

⁸ In fact there was market once per *pasar*, a week of five days according to the Javanese calendar.

The poor soil and lack of water in the limestone mountains make it much more difficult to cultivate rice in Giriwungu, but people try to have at least one rice harvest a year.

Several of the other staple foods are only cultivated in Giriwungu. These are more important for consumption than rice, because they are more resilient to difficult environmental circumstances. Additionally, cassava is cheap and a perennial crop, which can always be harvested. Although cassava is known as 'a poor man's crop' many older persons prefer it above rice. They say that cassava satisfies one's hunger better than rice. We observed that many respondents eat cassava more often than they eat rice. The survey results show that maize and cassava are mainly cultivated for commercial purposes, which means that only a small part of the total production is for own consumption. In Kebonagung the people would not waste the soil on these 'inferior' crops instead of the more valuable rice. In this village about a quarter of the households has to buy rice or get it from another source since they did not grow it themselves.

The frequencies of soybean in Kebonagung and peanut in Giriwungu stand out among the legumes. A large majority of the households produce these legumes for commercial purposes. The households do not report large frequencies for a broad variety of vegetables. Chilli pepper, *melinjo* and *kluwih*, plants of which the fruit or leaves are used as vegetable, are reported most frequently. Other vegetables were only reported occasionally. Again there are large differences between the villages of Kebonagung and Giriwungu.

The same goes for the use of trees. Fruit trees are more important in Giriwungu than in Kebonagung (see also Table 8.6). Wood trees are not reported to be present in Kebonagung. Most of the present wood trees are a result of a project to improve the living conditions in the area of Giriwungu. The trees are usually sold to a middleman, who sells them again as timber wood or firewood in the low lands where wood is scarce. Trees are considered valuable assets. It takes many years before these trees are tall enough for sale and then a large sum of money can be earned with them.

Table 8.6 presents the results of how the elderly households used the yield of the crops and trees available in both villages. The usage is distinguished in self-subsistence, mixed, and commercial. The farming system and type of economy can help to explain the differences between the villages. In Kebonagung farmers are mainly cultivating rice for mixed usage and soybean for commercial purposes. In addition, people can buy food and crops they do not grow themselves on a nearby daily market. The people from Giriwungu need to be more self-sufficient, because the village is more isolated and people can only go to market once a week. The people in Giriwungu cultivate so much cassava and corn that the largest part is sold and so little rice that this is mainly for their own usage. Finally, people probably have more income from non-agricultural employment in Kebonagung than in Giriwungu. With this cash income they can buy food and do not need to cultivate a variety of food crops themselves.

Table 8.6 Usage of yield by village

Usage of yield	Kebonagung		Giriwungu		Total	
	Freq.	%	Freq.	%	Freq.	%
Rice:						
- For household use only	56	40.0	178	95.2	234	71.6
- For household use and sale of surplus	71	50.7	7	3.7	78	23.9
- For market sale	13	9.3	2	1.1	15	4.6
Total	140	100.0	187	100.0	327	100.0
Test scores	$\chi^2(2)=119.9^{***}$, p=0.000					
Coconut:						
- For household use only	14	21.5	20	17.7	34	19.1
- For household use and sale of surplus	29	44.6	33	29.2	62	34.8
- For market sale	22	33.8	60	53.1	82	46.1
Total	65	100.0	113	100.0	178	100.0
Test scores	$\chi^2(2)=6.5^{**}$, p=0.040					
Banana:						
- For household use only	14	28.0	6	7.3	20	15.2
- For household use and sale of surplus	13	26.0	8	9.8	21	15.9
- For market sale	23	46.0	68	82.9	91	68.9
Total	50	100.0	82	100.0	132	100.0
Test scores	$\chi^2(2)=20.1^{***}$, p=0.000					

Trees

The use of trees can be very varied. Different parts of a tree can be used such as the fruits and leaves, while the wood can be sold as timber. Examples of trees cultivated for their fruits are coconut, banana, and palm sugar trees. Table 8.6 shows that coconuts and bananas were mainly cultivated for commercial usage in both villages. The leaves of the banana tree in particular are used for package material of food snacks and half-rounds of palm sugar. All kinds of trees are used for firewood directly or charcoal indirectly. Hardwood trees such as acacia, teak and mahogany are sold as timber. If they are sold when they are not yet fully grown, the trees are a source of cash income. If they are sold when they are fully grown, like teak trees which take ten to fifteen years to mature, the trees represent an asset.

Several cases already described the varied use of trees. Banana leaves are used for wrapping. From palm trees the sap is collected to produce sugar. The following cases describe the use of trees as firewood and as merchandise.

"When [my son] Gusto needs coconuts he takes them from my garden. Then he takes the coconuts home and I am just given the dry leaves to burn. I look for firewood myself in the field toward the West. People from Pandem own that. It is not my field. When there are people who renovate a grave (at the graveyard behind her house), the people who understand give me wood. The people who do not know, take the wood home. People only renovate a grave once a year. Formerly, a grave was made from wood with pillars surrounding it. Now, they use walls of bricks and cement. When I do not have firewood, I will look for it myself in the field. But not in other people's fields. I look for firewood every day.

Then I save it for the rainy season. Firewood is cheap. One bundle is only Rp. 1,000. But I never buy firewood, I just collect it."

Simbah Marto (±65, female, retired with pension), Giriwungu.

After we walked to the field of *simbah* Ngatinem and Radiyo, we took a rest and they told us about the hardwood trees in the area. Since the year 1971 there are teak, mahogany and acacia trees from a governmental Reforestation Programme (*reboisasi*). Before, there were bare mountains. When they bought the land, the very young, newly planted trees were already there. People got money to clean the fields and make holes, approximately Rp 5,000 per household each time. They also received the young tree plants. This happened three times. When they sell the trees, they may keep the money. We observed that the trees are not so tall or thick. They do not plant new trees, but let a new shoot grow at the bottom of the old tree. It takes ten to fifteen years before it is as tall as its 'mother' is.

Simbah Ngatinem (61, female, farmer), Giriwungu.

In the field that *bapak* Dwijo cultivates for his brother-in-law Kromodimejo stand many shoots of teak tree (*jati*). When they are tall enough to be sold, *Pak* Dwijo will have to hand over the proceeds to *simbah* Kromodimejo. The proceeds for a big *jati* tree can be Rp 500,000 and Rp 20,000 for a small tree. *Pak* Dwijo said that many people sell their trees before they have grown big, because their "stomachs are singing".

Bapak Dwijo (64, male, petty trader and labourer), Giriwungu.

In Kebonagung there are many less trees than in Giriwungu. The lowlands of the sub-district of Imogiri are mainly open ricefields with only some fruit trees on the side of the ricefields and near the houses. There are no uncultivated areas where one can gather firewood and there are no hardwood trees in Kebonagung. People like *simbah* Rejo and Kromo can only look for dry leaves and branches along the road and in yards of people who do not need it themselves. The highlands of the sub-district Panggang are mountainous with many tall bushes and trees. The fruit trees are mainly near the houses. Bushes and trees for fodder and firewood are near the fields or at uncultivated areas. The hardwood trees are not indigenous, but planted at the fields by a reforestation programme. People from Giriwungu can meet their need for firewood to cook meals much easier than people from Kebonagung. The large majority of the elderly households cook with firewood in Giriwungu (99.0%). In Kebonagung, however, one-third of the elderly households possess a stove and use oil, gas or electricity to cook (28.4%). The others still cook with firewood, which most of them have to buy.

Water

Access to water is another necessary livelihood resource. In the household, water is used for drinking, cooking, washing and cleaning, for plants or livestock at the farm, for household production of merchandise, and other purposes. When water is scarce all these kinds of livelihood activities are in danger. In Kebonagung the majority of the

elderly households has drinking water from a well or pipe (98.5%). Only at the end of the dry season, some wells fall dry. The Opak river supplies most rice-fields with water through ditches and canals. In Giriwungu there are almost no natural water sources and most elderly households rely on the rain for water (92.1%). In the dry season people have to buy water that is brought in the village. It is stored in a large container near the house. The next cases illustrate the difference in access to water between Kebonagung and Giriwungu.

"We have never had to ask for water from other people. When the well is dry, we have it deepened. Only last time, two weeks ago, when that was done the water was dirty for two days. So we took water from the well of our neighbour *simbah* Cip. We could not go to my uncle *simbah* Tomo, because his well was dry too. [...]

When Sumarni [daughter] is home, she buys medicinal tonic (*jamu*) from the vendor. That can be daily. Sumarni does not buy *jamu* when she is waiting outside the classroom for [her daughter] Anisa. If she buys *jamu* the vendor always asks for a bucket of water to rinse off her utensils. That is the only person who sometimes asks for water."

Simbah Yoso (65, male, retiring farmer), Kebonagung.

"Before we got containers for water (*PAH*), people already bought water in a jerry can. The first aid for water containers was from the Department of Health (*Depkes*) in 1982 or 1983. With that aid open water reservoirs were made. Since 1990, the educational program on family's welfare (*PKK*) supports the improvement of water facilities for six years. Now we make closed water containers."

Bapak Harjosutrisno, head of the hamlet Petung, Giriwungu.

"The village of Giriwungu consists of 356 households who live in a so-called seriously affected disaster area, because of the water difficulties. It concerns three hamlets: Petung with 105 household heads, Pejaten with 156 household heads and Klepu with 96 household heads. The two other hamlets are not affected, because there is a lake in the hamlet Puduk and 60 percent of the household heads get water from the Municipal Water Corporation (*Perusahaan Air Minum, PAM*) by water tap in the hamlet Jurug."

Bapak Suparno, head of the village Giriwungu.

One tank of 5,000 litres of water cost approximately Rp 40,000 at the height and Rp 25,000 at the end of the dry season in 1997. For farmers or retired persons, who do not have (much) access to cash money, this is problematic.

8.2 Assets

Assets consist of a wide range of tangible and intangible stores of values or claims to assistance that can be converted into resources when necessary (Niehof and Price, 2001). In this section we describe the assets of the house, farmland, livestock and

valuable household items that older persons own or have access to. The ownership of trees, especially hardwood trees, can also be an asset, as was discussed in subsection 8.1.4. Assets give an indication of the economic status of older persons on the one hand and claims to care and support from their children on the other.

8.2.1 House

The quality of an older person's house is an indicator of his/her economic position. We studied house ownership as an indicator of the power and authority that an older person has in the household and family. It can be assumed that older parents still have (some) power and authority over their children when they are still in control of property, because then the children are dependent on their parents. The inheritance of assets is the key to the claims of older parents to care and support from their children.

Housing quality

The housing quality index⁹ is a method to measure the economic position of the respondents. We acknowledge that the construction of wooden houses in Giriwungu is also culturally determined and we do not think that a wooden house is of inferior quality. However, we assume that people who live in a house made of bricks have invested more money in their house and probably are economically more secure than people who live in a house with only plaited bamboo walls. The difference is the price of the materials.

The questions about the quality of the house were put to household members and noted by the interviewer. We originally had checked eight items but removed the item 'toilet facilities' from the list, because it correlated negatively with the item 'type of largest outside wall'. The index combines information on seven items scored 0 to 3 and summed for a range of 0 to 21, a higher score indicating better quality. The alpha reliability coefficient for this measure is 0.74 and is thus a reasonable reliable scale. The total index score is divided into five categories for the analysis. The results for the housing quality index are presented in Annex 8.2.

The houses of the respondents in Kebonagung are usually made of better materials than in Giriwungu¹⁰. In Kebonagung most respondents live in houses built of cement walls and floors. In Giriwungu most respondents live in houses built of wood and although most of them have cement or brick floors, many still have earth floors. In both villages the majority of the respondents have no windows or had wooden

⁹ The method that we used to measure the housing quality is a combination of an index described by Rudkin [1993 #216: 213] and questions asked in the 1990 Population Census (BPS, 1992b). We adapted the answers to the local situation. We also added the item 'type of window' because we observed that the people themselves distinguished between the types of windows when they valued a house.

¹⁰ Each item of housing quality was significantly different (χ^2 .99) for the two villages.

shutters, but in Kebonagung more elderly households have the more luxurious windows of glass.

The respondents in Kebonagung also have better housing facilities than in Giriwungu. In both villages most households have electricity, but those who still use a kerosene lantern were more frequently found in Giriwungu. The facilities of drinking and washing water are almost the same. There are almost no water sources such as a spring or a river in the limestone mountains of Giriwungu and most households collect rainwater in a container for drinking and washing. The water container is usually next to the bathroom outside the house from which the water is hauled with a bucket when taking a bath. In the dry season the water facilities are a problem in Giriwungu and those who can afford it order water by truck. The groundwater level is not very deep in Kebonagung and most households have a well in their yard for drinking and washing. The well is usually next to the bathroom outside the house but many a household already have a bathroom inside the house in Kebonagung. The wells can dry up at the end of a very dry season, but then the river usually still hold water. Because the river Opak passes Kebonagung many people use it as a toilet, even when they have toilet facilities of their own. In Giriwungu most elderly households have their own toilet but without a septic tank.

The total index score for housing quality of elderly households differs significantly in the two villages. The households in Giriwungu score most frequently in the lower three categories, which indicates poor to moderate house materials and facilities. The households in Kebonagung score most frequently in the middle and highest two categories, which indicates moderate to good house materials and facilities. We did not find that the total index score of housing quality significantly differs for men and women. This is contrary to Rudkin who reported that women had lower scores on the indices of housing quality on Java (1993: 219). Older age has a significant negative effect on the housing quality. Although most respondents of each age group live in a house of moderate to good quality, the oldest respondents live significantly more frequent in houses of worse quality and the youngest respondents in houses of best quality. The following case illustrates the differences in housing quality.

Several times *simbah* Kromo mentioned the good unoccupied houses in the village. In front of their house is the house of a doctor, who lives in another house near Imogiri. She says that it is haunted, because before they built this house there had been a house built with wood from a *joglo* house, which they had bought in the mountains. [A *joglo* is a traditional Javanese mansion with a steep upper roof section.] *Simbah* Kromo often hears sounds like "*dagduk-dagduk*". She said: "A *joglo* house is definitely haunted! A good house of so many thousands of rupiah and empty. In the evening I am scared. Here [in our house] there are often holes in the roof. I often go over there for shelter when it rains in the daytime. When it is evening I go to another neighbour." When we walk to the shop *simbah* Kromo points out the good houses in which nobody lives.

When we passed her former house in which her son and his family now live, she said: "The house of my child is good. He has electricity, television, everything." We reminded her that she used to live there too. Then she answered: "My daughter has her own share of the

inheritance in the East and my son has his own share in the West. The parents have their own share..."

Simbah Kromo (±62, female, small market vendor), Kebonagung.

House ownership

We asked the respondent about the ownership of the house in which s/he lived. It appears that most older persons own the house themselves. Table 8.7 shows that men more frequently own the house than women. Consequently, women live more frequently in a house that is owned by someone else. This is most often the spouse of the respondent, namely 12.7% the wife of male respondents and 23.9% the husband of female respondents. The other household members who own the house are parents, parents-in-law, uncle, sibling, nephew or niece, (grand)children or children-in-law. Although it seemed that men hold on longer to their house ownership than women, we could not find a significant gender difference by age¹¹.

Table 8.7 House ownership by sex

House ownership	Male		Female		Total	
	Freq.	%	Freq.	%	Freq.	%
Older respondent owned house	120	80.0	106	51.7	226	63.7
Household member owned house	30	20.0	99	48.3	129	36.6
Total	150	100.0	205	100.0	355	100.0
Test scores	$\chi^2(1)=29.9^{***}$, $p=0.000$					

We also asked who would inherit the house and why¹². Male respondents and respondents from Kebonagung are the least specific about who would inherit the house. Half of them answered that (all) the children would inherit it. Half of the women chose someone other than the eldest child to inherit the house. Respondents in Giriwungu also chose most frequently for a child other than the eldest child (43.0%).

Table 8.8 Sex of future inheritor of house by residence

Sex of future inheritor of house	Kebonagung		Giriwungu		Total	
	Freq.	%	Freq.	%	Freq.	%
Male child	22	21.2	22	23.7	44	22.3
Female child	17	16.3	41	44.1	58	29.4
Sex of child is undefined	65	62.5	30	32.3	95	48.2
Total	104	100.0	93	100.0	197	100.0
Test scores	$\chi^2(2)=22.3^{***}$, $p=0.000$					

¹¹ Test scores were: $\chi^2(6)=3.7$, $p=0.720$ (N=226).

¹² The possible type of inheritors were recoded in the three categories 'eldest child', 'other child' and '(all) the children'. Test scores (N=197) were for sex $\chi^2(2)=14.6^{***}$, $p=0.001$ (N=226); age $\chi^2(4)=1.6$, $p=0.811$; village $\chi^2(2)=11.6^{***}$, $p=0.003$.

Table 8.8 presents data on to sex of the child that is chosen as future heir(ess) of the house¹³. Male respondents and respondents from Kebonagung are, again, less specific in their answers than female respondents and respondents from Giriwungu. We found significant differences for the gender and residence of the respondents. Most interesting is that respondents in Giriwungu have a stronger preference for letting a daughter inherit the house than respondents in Kebonagung. It is common that older parents leave the house to the child with whom they live together in the end. This might indicate that older parents prefer to live with a daughter. That assumption is confirmed by the reasons given by the respondents for their choice. More than half of the respondents from Giriwungu chose the child that takes care of them and with whom they live together (53.8%). More than half of the respondents in Kebonagung (55.8%) answered that it is the tradition that (all) the children or their descendants are equally inheritors. Other reasons given are that the other children already have a house or (will) inherit something else, or that they have only one child.

The cases below show that ownership of a house or land can be for older persons a claim to care. The older parents believe that they will be taken care of as long as they do not divide the inheritance among the children. Similar results were found in a fishing village in Madura where daughters can claim the parental house and the parents are entitled to be cared for by their daughter (Niehof, 1985). The following cases show that parents try to share the inheritance equally among their children if circumstances permit it.

Simbah Ngatinem and her husband Radiyo still own the house and all the fields. We asked her why they had not yet divided it among the children.

Ngatinem: "We can not divide it when *simbah* is still like this."

Interviewer: "What do you mean with 'like this'?"

Ngatinem: "Not yet old!"

Interviewer: "When is someone old?"

Ngatinem: "When you are very old (*renta*) or bent over (*bungkuk*), teeth gone, weak and only sit, and a child takes care of everything. Then you can divide the house and land. Or maybe not before you die... [laughs] When the land is already divided between the children, I do not have power (*kuasa*) anymore."

Interviewer: "There are parents who have already divided their land."

Ngatinem: "The children will not care about (*sayang*) you anymore if you have already divided it. Then the child does not want to take care (*mengurus*) and the parents go hungry. The government does not allow the land to be divided before you are old."

Interviewer: "The government said that?"

Granddaughter Martini: "It is customary law (*adat kebiasaan*)."

Ngatinem: "In the village there are no people who divide their land when the parents are still young. It is not allowed."

Interviewer: "Who is the head of the household?"

Ngatinem: "I am the head of the household... both the older parents (*simbah-simbah*)."

Interviewer: "What is the meaning of head of the household?"

¹³ Test scores were for the respondent's sex $\chi^2(2)=9.3^{***}$, $p=0.009$ and age $\chi^2(4)=1.7$, $p=0.783$.

Ngatinem: "For the taxes it is in the name of *simbah*. The one who pays is *pak* Marjo [son-in-law]. He goes to the head of the hamlet to pay the tax. The house is still in *pak* Radiyo's [husband] name."

Simbah Ngatinem (61, female, farmer), Giriwungu.

Simbah Yoso is the owner of the house. Later it will be for his coresiding daughter Sumarni. Although the youngest daughter Temu lives with her husband's family, *simbah* Yoso is also building a house for her on the land in Ongopatran. That land is somewhere else in Kebonagung and *simbah* Yoso inherited it from his mother. He said: "The house is still mine. After a very long time, it will fall to my child. Now I have a house for Temu in Ongopatran, near the graveyard, but it is not yet ready. There is no well yet and we did not yet make a kitchen. It is still empty. The land is an inheritance from my mother Paikem, but I made the house. This house [where we live now] is for Sumarni."

Simbah Yoso (65, male, retiring farmer), Kebonagung.

The house is inseparably connected to the land on which it is built. We observed that sometimes other people than the users of the house officially own parts of the yard. For example, *simbah* Yoso's older brother inherited the backyard with the well and his younger brother inherited the front yard. Or *simbah* Kromo's backyard with the well was inherited by a younger sibling of her husband, who has migrated to Sumatra. The fact that the respondents mention the names of the formal inheritors demonstrates that the inheritors can always be expected to come back to claim the land.

8.2.2 Land

Ownership of land is a possible indicator for the power and authority that an older person has within the household. The promise of inheriting land can be a claim of older parents to care and support from their children.

Farmland acreage

We asked a household member of the older respondents several questions about the land to which all the household members (including the respondents) had access. For purposes of comparison, the acreage of different types of farmland, available to the households, is corrected with a factor based on the irrigation facilities available on the plot¹⁴. Almost ten percent of the elderly households have access to less than 0.01 hectare of farmland and are considered landless. Most of these landless

¹⁴ This method is based on Kragten (2000: 103) who also did research in the Bantul District. If the farmland is provided with technical or semi-technical irrigation facilities, the area of farmland is multiplied by a factor of three because triple cropping is usually possible. If the farmland is connected to village irrigation facilities (*irigasi sederhana*), the area of farmland is multiplied by a factor of two because double cropping is possible. Finally, for all farmland not connected to any irrigation system or for rain dependent rice field the area is multiplied by a factor of one because only one crop per year is possible.

households live in the village of Kebonagung (see Table 8.9). More than half of the households (59.4%) have access to less than 0.80 hectares of dry land and therefore do not possess enough farmland to meet their basic needs¹⁵. Unexpectedly, more than a quarter of the households have access to more than 1.50 hectare of farmland. The maximum area of farmland is 12.4 hectares, which is owned by a former village head of Kebonagung. The households have access to an average area of almost one hectare of farmland.

Table 8.9 (Corrected) acreage of farmland accessible for elderly households by village

Corrected acreage of farmland (ha)	Kebonagung		Giriwungu		Total	
	Freq.	%	Freq.	%	Freq.	%
0.00 ^a	31	16.0	7	3.4	38	9.6
0.01 - < 0.25	104	53.6	10	4.9	114	28.7
0.25 - < 0.75	43	22.2	35	17.2	78	19.6
0.75 - < 1.50	8	4.1	53	26.1	61	15.4
≥ 1.50	8	4.1	98	48.3	106	26.7
Total	194	100.0	203	100.0	397	100.0
Test scores	$\chi^2(4)=203.0^{***}$, p=0.000					

^a Households owning less than 0.01 hectare are considered landless.

Elderly households that have access to less than 0.80 hectare of farmland are more present in Kebonagung than in Giriwungu. The average available land is 0.3 hectare in Kebonagung and 1.6 hectare in Giriwungu. This means that in Kebonagung households more often cannot meet their daily needs from their own production than in Giriwungu. Although there are no irrigation facilities in Giriwungu, the total acreage of farmland accessible for the households is more frequently larger than 0.75 hectare. Since Kebonagung is more prosperous than Giriwungu, people in Kebonagung probably have more income from other sources than land and people in Giriwungu are mainly just self-subsistence farmers.

We also asked what the status of property was for each plot of land to which the household members of the respondents have access. The large majority of the land is owned by one of the household members (93.4%). Only in some cases (6.2%) the land is mortgaged or rented for money, for a share of the harvest and/or for the property document as collateral. Most of the time these arrangements concerned the more valuable land types of rice fields irrigated by village facilities (*irigasi sederhana*) (2.1%) and (semi-) technically irrigated rice fields (3.5%) (of a total of 625 plots of land).

¹⁵ According to Kragten (2000: 104), it is a general yardstick that an average household of 4.25 persons needs a minimum of 0.75 hectare of dry farmland to provide for its daily needs. Corrected for our somewhat larger households, we assume that an average household of 4.55 persons needs a minimum of 0.80 hectare of land, not connected to any irrigation system, to provide for its daily needs.

Table 8.10 (Corrected) acreage of farmland by income of elderly household (N=361)

Corrected acreage of farmland (ha)	Household income x 1000 rupiah (%)					Total
	0 - <250	250 - <500	500 - <1000	1000 - <2000	≥2000	
0.00 ^a	18.9	18.9	10.8	32.4	18.9	100.0
0.01 - < 0.25	9.1	7.3	18.2	19.1	46.4	100.0
0.25 - < 0.75	8.8	16.2	19.1	17.6	38.2	100.0
0.75 - < 1.50	15.1	9.4	32.1	28.3	15.1	100.0
≥ 1.50	4.3	16.1	17.2	29.0	33.3	100.0
Test scores	$\chi^2(16)=37.5^{***}$, p=0.002					

^a Households owning less than 0.01 hectare are considered landless.

The acreage of farmland to which the elderly household has access has a significant negative effect on the household income. Elderly households with access to small plots of farmland have significantly more frequently an income of more than one million rupiah. These households can probably not meet their daily needs with their production and need additional income. Elderly households with access to the plots larger than 0.80 hectare and smaller than 1.50 hectare most often have a household income between one-half and one million rupiah. These households can probably provide for their daily needs on basis of their own production and do not need much additional income. Elderly households with access to the largest plots of farmland have also most often a large household income of more than one million rupiah. These households can probably provide for their daily needs as well as produce for commercial purposes.

Land ownership

Ownership of land is an indicator of the control of older persons within the household. We asked the respondent whether s/he owned land individually.

Table 8.11 Individual land ownership by sex

Older person	Male		Female		Total	
	Freq.	%	Freq.	%	Freq.	%
Owens land individually	118	79.7	129	63.5	247	70.4
Divided land among child(ren)	2	1.4	25	12.3	27	7.7
Never owned land	28	18.9	49	24.1	77	21.9
Total	148	100.0	203	100.0	351	100.0
Test scores	$\chi^2(2)=17.6^{***}$, p=0.000					

Approximately two-thirds of the respondents own land themselves. Men own land significantly more frequently than women. Almost a third of the respondents do not own any land and women represent the largest part of them. Of those respondents who do not own land, a small part already divided the land among the children but the largest part had never owned land. The land division was done formally (5.4%), through registration in the land register and handing over of the property document (*Letter C*). Or the land division was done informally (2.3%), which usually meant that the child(ren) cultivate the land without possessing the legal documents. Women had already divided the land among their children significantly more often than men.

Perhaps females, especially older widows, are more pressured to pass the land on to their children.

Table 8.12 Individual land ownership by age

Older person	55-64		65-74		75+		Total	
	Freq.	%	Freq.	%	Freq.	%	Freq.	%
Owens land individually	103	71.5	81	71.7	63	67.0	247	70.4
Divided land among child(ren)	4	2.8	10	8.8	13	13.8	27	7.7
Never owned land	37	25.7	22	19.5	18	19.1	77	21.9
Total	144	100.0	113	100.0	94	100.0	351	100.0
Test scores	$\chi^2(2)=11.1^{**}$, $p=0.025$							

Older persons who own land individually, were equally distributed over the age groups. However, there is a significant age difference for older persons who did not own land (anymore). The oldest respondents more often had already divided land among their children. The youngest respondents more often had never owned land. It is possible that they will inherit land from their parents in the future. Twenty respondents of those who had never owned land did not have access to land owned by their household members either. Therefore, they are considered as the landless de jure and de facto (5.7% of the sub-sample of 355 communicative respondents minus four missing cases).

Table 8.13 Inheritors of farmland by sex (%)

Acreage of farmland (ha)	Inheriting sons (N=337)		Total	Inheriting daughters (N=326)		Total
	Male	Female		Male	Female	
0.00 ^a	70.8	80.2	76.6	67.5	80.3	75.5
0.01 - <0.25	16.2	12.6	13.9	13.8	9.4	11.0
≥ 0.25	13.1	7.2	9.5	18.7	10.3	13.5
Total	100.0	100.0	100.0	100.0	100.0	100.0
Test scores	$\chi^2(2)=4.5$, $p=0.104$			$\chi^2(2)=7.0^{**}$, $p=0.030$		

^a Households owning less than 0.01 hectare are considered landless.

We asked the landowners who would inherit their land. There was no significant difference between sons or daughters for inheriting plots of land. The plots of land are to be equally divided among sons (49.2%) and daughters (50.8%) (of a total of 559 plots of land). Nevertheless, Table 8.13 shows that children do not inherit the same size of land. We expected that sons would inherit a larger acreage of farmland, because that was often mentioned in the case studies. But the share of daughters is 1,738 m² and that of sons 1,316 m² on average. We did not find a difference between fathers and mothers in total land size to be inherited by sons. Fathers more often than mothers indicated that their daughters would inherit a significantly larger acreage of farmland. According to Geertz (1961: 52), parents are often more concerned about their daughters than their sons. They want the girl to inherit the major part of the property, because they feel that girls are more dependent on their family and boys can always fend for themselves.

We also found a significant difference for the age of the respondents and the total land size to be inherited by daughters. The youngest respondents often indicated that

daughters inherit smaller acreages of 0.01-0.25 hectare. The oldest respondents often wanted daughters to inherit the largest acreage of ≥ 0.25 hectare¹⁶. Place of residence of the respondents makes the largest difference. Children will inherit significantly larger acreages of farmland in Giriwungu than in Kebonagung regardless of the child's sex¹⁷. This can be explained by the fact that households in Giriwungu own, on average, more land than in Kebonagung. However, we already noted that farmland in Giriwungu is of less quality than in Kebonagung.

The transfer of property to descendants is a continual process and in Java it does not occur solely at death (Geertz, 1961: 52). The next cases deal with inheritance of land and other assets at marriage.

"When we married my husband and I each got an inheritance (*warisan*) from our parents: one cow, three goats, a house and yard, plates and cooking pots. We still live in the house of our inheritance. The cow that we have now is a child from a child from a child from a child from a child. We kept selling cows to buy food and daily needs. We bartered one cow for land belonging to the village head. We have just built the new toilet there. The transaction was made at the time that my youngest daughter Karyati was a baby."

Simbah Ngatinem (61, female, farmer), Giriwungu.

Simbah Harjosutomo lives next to the house of her son *Pak* Mitro and his wife. *Simbah* Harjo is deaf, but otherwise strong and healthy. She cooks and eats alone. According to our definition of household, *simbah* Harjo lives by herself and does not share the household with the Mitros although they walk in and out of each other's houses all the time. Once every three days she produces palm sugar at home and sells it to the small shop in the hamlet of Jayan. She earns Rp 7,500 from the sale of palm sugar every ten days.

Simbah Harjo still owns the house lot, a rice-field and cows. She does not work in the field anymore. That work is done by her son Mitro in exchange for a part of the yield. The agricultural proceeds are 500 kg of rice, 60 kg of soybeans and 120 coconuts per year. Before, she owned one cow that was looked after by people from Kujon in the neighbouring village of Sriharjo. That cow had two calves. One was for *simbah* Harjo and one was for the keeper. So, she has two cows now. According to *Pak* Mitro, his mother does not own anything of value in the house. She only has a bad table and chairs. Her daughter Ruminah took the good furniture. The only valuables she owns are the cows, a golden ring weighing two grams, and some money.

Pak Mitro: "It is enough for her daily needs. Old persons never consider the sufficiency. People think that they will always survive. But when they want things that they cannot afford, that is not good." [...] "Old people like to save money. I know that my mother saved money, because she just paid with her own money for the *slametan* ceremony to commemorate my father who died two years ago. We have never had to help her with money. Only a grandchild gives her some money and clothes sometimes. We ask her for rice sometimes, because she has enough."

¹⁶ The test scores were for sons $\chi^2(4)=6.1$, $p=0.190$ and for daughters $\chi^2(4)=10.6^{**}$, $p=0.032$.

¹⁷ The test scores were for sons $\chi^2(2)=57.8^{***}$, $p=0.000$ and for daughters $\chi^2(2)=61.5^{***}$, $p=0.000$.

Simbah Harjo has not yet divided the inheritance between her children, because it is not customary to do so before the parents have died. She has not decided how the land will be divided, but *Pak* Mitro (as the oldest son) plans to divide the land of 600 m² among himself, his brother Ngadiyo and sister Rudinah. His brothers Sabari and Kirman already inherited something from their father when they married. Rudinah will inherit less land, because she is a woman. He would divide it for example in portions of 20:20:15 or 25:25:20 [which is unsound arithmetically]. But nothing has been decided yet. It does not matter for *Pak* Mitro anyway, because as the oldest son he can decide whatever he wants when his mother dies. Besides, he still gets a part of the yield now.

Bapak Mitro (54) about his mother *simbah* Harjo (±70, female, palm sugar producer), Kebonagung.

We could not discover clear rules for inheritance of land during the fieldwork. Some respondents said that they have already divided property between their children. Other respondents said that it was not common to transfer property before the parents have died. Some respondents, like *Pak* Mitro in the above case and *simbah* Yoso earlier on, mentioned transfer of unequal shares, which was unfavourable for daughters. Other respondents said that this rule was old fashioned and that they usually transferred equal shares of property to sons and daughters. This mixture of customs concerning property transfer combines traditional Javanese practices (*adat*) and Arabic-Islamic customs. The Javanese customs give equal weight to both male and female relatives, bilaterally reckoned. Arabic-Islamic customs give more rights to sons (Geertz, 1961: 48).

The cases we have described are both from the village of Kebonagung, where respondents are more devout Muslims. In the village of Giriwungu respondents are more oriented towards Javanese customs. Interestingly, we found a small significant difference for the size of land to be inherited by sons or daughters in Kebonagung¹⁸. On average sons will inherit 247 m² of land and daughters 203 m². The Islamic custom of having male descendants inherit more property is only partially valid in Kebonagung. We found a stronger significant difference, and the other way around, for the size of land to be inherited by sons or daughters in Giriwungu¹⁹. There, on average sons will inherit 2,354 m² of land and daughters will inherit 3,235 m² of land. The Javanese custom of having male and female descendants inherit equally is not visible in Giriwungu. Perhaps the custom of having daughters inheriting the major part of their parents' property because of parental concern about the daughter's dependence prevails. Or more labour migration of sons has tipped the scale in favour of the daughters who stay behind. Sometimes it is difficult to divide property, especially when there is little to divide. Then a solution will be sought on which all participants agree.

¹⁸ We had to recode the categories of land size into '<0.01 ha' and '≥ 0.01 ha' to have enough cell filling for the Chi square test. Test scores were for sons and daughters inheriting from older parents living in Kebonagung: $\chi^2(1)=2.8^*$, $p=0.094$.

¹⁹ Test scores were for sons and daughters inheriting from older parents living in Giriwungu: $\chi^2(1)=4.7^{**}$, $p=0.030$.

8.2.3 Livestock

Livestock is another indicator by which the economic situation of the elderly households can be measured. We asked the respondents what type of livestock they had, how many, the value and the status of the property. The respondents make a distinction between young and mature chickens, goats and cows because that is important for the value. The households have on average about two different types of livestock. In this calculation, young and mature animals of the same kind are distinguished as different types. The livestock proved to be worth 777,052 rupiah²⁰ on average. Fifty-six households (14.2%) do not own any livestock. One household has a chicken farm of which the chickens had the maximum value of six and a half million rupiah²¹. Most of the livestock is owned by the households (93.5% of 733 animal records). For the rest of the livestock the arrangement of (*di*)*gadhuh* (rent or let out livestock for shared breeding) is the most common. Table 8.14 presents the distribution of types of livestock in the two villages.

Table 8.14 Type of livestock kept by elderly households in Kebonagung and Giriwungu

Type of livestock ²²	Kebonagung (N=194)		Giriwungu (N=203)		Total (N=397)	
	Freq.	%	Freq.	%	Freq.	%
Chickens: (almost) mature hen and rooster	117	60.3	125	61.6	242	61.0
Test scores	$\chi^2(1)=0.1, p=0.796$					
Other poultry: duck, goose, turkey	26	13.4	8	3.9	34	8.6
Test scores	$\chi^2(1)=11.3^{***}, p=0.001$					
Cloven hoofs: goat, sheep	28	14.4	170	83.7	198	49.9
Test scores	$\chi^2(1)=190.6^{***}, p=0.000$					
Cows	37	19.1	121	59.6	158	39.8
Test scores	$\chi^2(1)=68.0^{***}, p=0.000$					
Water buffalo	11	5.7	-	-	11	2.8
Test scores	$\chi^2(1)=11.8^{***}, p=0.001$					

The data show large differences between the villages Kebonagung and Giriwungu except for the possession of chickens. Almost two-thirds of the households have chickens. Chickens and other poultry are usually used for food or sold to provide for daily needs. Poultry other than chickens are significantly more present in Kebonagung, which can be explained by the availability of water. Ducks and geese need to be herded along water pools. This explanation can also be used for the water buffalo. The water buffalo is usually kept for pulling power to plough the irrigated rice fields or as a means of savings. Irrigated rice fields are abounding in Kebonagung.

²⁰ The average value of the livestock was US\$ 326 for the households at the time of the Elderly Household Survey (March 1996).

²¹ This was equal to US\$ 2,730.

²² The reported different types of livestock are grouped per species for reasons of statistical analysis.

The households in Giriwungu significantly more often breed goats, sheep and cows. These animals are usually bred as a means of savings or offering gifts.

Not all respondents thought of cats, dogs, and birds as livestock and thus these animals were not always reported. These animals are not treated as pets, but cats are usually kept to catch mice, and dogs to guard the fields against the monkeys. Dogs (and monkeys) were only observed in Giriwungu. Birds are usually regarded as a hobby, but because of their high price also as an asset and status symbol.

"I have already distributed all the cows to the children. I do not own them anymore. Two cows to Sumarni [eldest, coresiding daughter] and one cow to Temu [youngest daughter]. The cows are taken care of (*gaduh*) in the mountains. I distributed the cows before my daughters were married in order to make them happy. If I had waited until I was old, I could not give it to them anymore. Formerly, I was strong and could still give them. Now I am old and cannot give them away anymore. I only kept one cow for our own daily needs, because I cannot work as a labourer anymore. In case something important happens and we have to sell the cow to fulfil our daily needs."

Simbah Yoso (65, male, retiring farmer), Kebonagung.

This case shows that a cow is a store of value that can be converted into resources when people need money to buy food or pay hospital bills for example. People invest in livestock even in Kebonagung where there is not much space to keep big animals, and fodder is not freely available. Additionally, the case illustrates that livestock can be a part of the inheritance that can be transferred long before death.

8.2.4 Household items

Based on Rudkin's index for items available to the household (1993: 213) we tried to develop an index for valuable items available to the elderly household. We asked for all valuable possessions of the household and found 43 different items. However, all these items together did not result in a reliable index, because the response for some items was very low and some items correlated negatively. Therefore, we had to decrease the number of items and made an index with only household items. The Household Item Index combines weighted responses to questions on access to ten items. A respondent scored zero on the item if the household did not have access to any and one or more (depending upon the item's weight) if a particular item was available. Items available to fewer households were weighted more heavily; scores ranged from 0 to 29. The items and weights are as follows: radio (1); television and bicycle (2); stereo, (oil, gas or electric) stove, motorcycle/scooter and gold/jewellery (3); sewing machine, refrigerator and car (4). The alpha reliability coefficient for the scale is 0.72. For the analysis, the indicator was divided into five categories (based on breaks in the frequency distribution): 0, 1 to 2, 3 to 6, 7 to 14, and 15 to 29.

Sixty-six elderly households (16.6%) do not have any of the ten items available (N=397). The categories of weighted household items are significantly different for the two villages. Households in Giriwungu score more frequently in the lowest two categories, which confirms again the poorer economic status of this village. Accordingly, households in Kebonagung score more frequently in the highest three categories, which confirms the better economic status of this village. There is not a single household in Giriwungu that scored in the highest category of 15 to 29.

The household item categories also significantly differ with respect to age. Households with a household member of 75 years and older have more frequently no access to any valuable household item. Households with an elderly household member aged between 65 and 74 years score more frequently in the category of one to two. Households with an elderly household member aged between 55 and 64 years score more frequently in the categories of three to fourteen. The older persons become, the poorer their economic status. The household items are not significantly different for the variable sex, which is contrary to Rudkin's findings (1993). She found that women reported significantly lower scores on the indices of consumer items available to the household on Java.

8.3 Case studies

This section presents case studies that show how social change has affected people's lives. The first case describes the life of a palm sugar collector, an occupation that is becoming extinct. The second case is about a respondent who describes how the living conditions have changed.

8.3.1 *The disappearing occupation of *nderes*: 'As long as you can eat, you have to look for a livelihood'*

Simbah Muh is a man of 58 years, who lives with his wife Juminem (55) and youngest daughter Siti (19) in Kebonagung. He is palm sugar collector (*nderes*) who climbs to the top of palm trees every day. Annex 8.3 presents the genealogy of *simbah* Muh's family.

In 1942 Muh was born in the house next to where he lives now. Very soon after his birth his father died. His mother remarried with his father's younger brother after the *slametans* ceremonies to commemorate the death of his father were finished. The last *slametan* was held after a thousand days or approximately three years. Muh's mother and stepfather/uncle had two more children. When Muh was still young he just played outside. When he was approximately ten years old, he started to herd the goats and cow for his parents. He gathered weeds, worked on the land and played in between chores.

Just before Muh married, he started to collect sap from palm sugar trees (*nderes*). At first he tried to manage sap collection from five trees by himself. He learned the whole process of *nderes* from his stepfather/uncle. It is a very precise procedure of preparing the flowers of the palm tree in order to give sap continuously. In addition to his sap collecting, he still

herded the goats and cow and he worked as a farm labourer if there was work as ploughing, weeding, planting or harvesting. In 1962 Muh married Juminem and they followed her parents to the house where the head of the hamlet now lives, a younger brother of Juminem. After a year their first child, Espangati, was born.

Muh, Juminem and Espangati moved to their present place, because Juminem had a fight with her stepmother. First they had built what is now the back of the house and little by little they built the rest. When we asked how they could afford such a good-looking house like that, Juminem answered: "Old people from the mountains liked to be thrifty in order to invest in a golden bracelet, necklace etcetera. (Juminem was married before to someone from the mountains, divorced and remarried after a month with Muh.) So, I was able to use that gold, which I had earned with rice-harvesting work. We sold it to buy wood to make this house. Muh's mother, *Ibu* Kasangdimejo, also gave timber wood. Now, we have many holes in the wood, because it is wood from the mountains."

Espangati went to the elementary school when she was eight years old. She married directly after finishing of the lower secondary school at the age of seventeen. Her husband lived with her family first for about a month, but then they moved to his parents' house. Espangati started to work as a small vendor of a kind of gelatine that is used in cool drinks (*bakul es cincau*). Later they opened a small shop (*warung*) that they still have. Espangati was 34 years at the time of the interview and they had two sons.

In 1966 their second daughter Estu was born. She completed elementary school, lower and higher secondary school. After school Estu left to Singapore to work in a hospital for four months. Then she worked in a plywood factory in Malaysia for three years and she works in a computer electronic factory in Taiwan now. She earned much money in Taiwan. In January 1998 she had worked there for two years and did not want to extend the contract anymore. After the contract was finished she would go home, stay with her parents and probably be a small vendor again.

The third child Sigit, a son, was born in 1968. He also completed higher secondary school. Then he worked in the sugar factory Madukismo until he became bored with it. He married Murwanti, the daughter from the hamlet head of Kalangan, and they had a daughter. He worked as a welder in an iron factory in Yogyakarta until he went to Malaysia two years ago to work in a plywood factory. He does not earn as much as Estu and he has his own family to maintain, so he 'only' sent money to his parents once. Last *Lebaran*, he sent one million rupiah. He has already sent money five times to his wife and child. He just extended his contract for a year.

Muh and Juminem had decided not to have more children. But Juminem was often sick when Sigit had just started elementary school. She thought: "Maybe I want to have a child again?" So, she became pregnant and has never been sick. In 1978 the daughter Siti was born, who was nineteen years old at the time of the interview. She has completed higher secondary school and is now attending an accounting course in the municipality of Bantul three days a week.

Although they had lived there for a long time, Muh's stepfather/uncle formally distributed the house lot to them in 1984. Muh also inherited a little ricefield of 700 m². His mother was already dead by that time.

His entire life Muh has gathered the palm sugar sap (*nderes*) every morning and afternoon. In the past they owned more palm trees, about ten, but they were cut down because they did not give sap anymore. He used to tap more than twenty trees, ten for himself and ten as a labourer in the hamlet of Tegal, until two years ago. Then he had to reduce the number of trees, because he felt tired as he became older. About one and a half years ago the

labourer who usually worked for the sugar boss Tejo quit the job because he was bored. Then Muh asked his neighbour Tejo, who is a cousin of Juminem, if he could take over those trees. So, now he is collecting sap from six of his own trees and eight trees for Tejo. Along with this work, he jacks up bamboo wood stubs, gathers dried (sugar cane) leaves for the palm sugar production, works on their rice field and as an farm labourer if their is work.

Muh delivers the sap for Tejo at the door of the palm sugar factory. They arranged that the harvest of Tejo's trees is for Tejo or Muh every five days (*pasaran*). The palm sugar industry is not using much palm tree sap anymore but a syrup and refined sugar. This new palm sugar does not have the original ingredients and tastes different. Muh's wife Juminem usually cooks their palm tree sap into a thick, brown syrup directly after Muh collects it. The syrup is then poured into wet coconut shells in which it congeals into sugar. Then it has to dry on a rack and the palm sugar will be packed for sale. Juminem sells it to small vendors and shops.

Muh's sister-in-law Rubilah told us, while we watch how he climbs a palm tree: "*Simbah* Muh and Udipawiro are the last two men who can collect palm sap. Muh does the most. Nowadays many persons are labourers in the ricefields or construction, vendor... If you collect palm sap you suffer financial loss. In the rainy season it is difficult, because it is difficult to climb. Young people do not want to climb again, and children do not allow old people to climb anymore. As a labourer one gets paid directly. As a palm sugar collector one still has to cook the sap to produce the palm sugar, and then one still has to sell the produce. Sometimes the firewood is expensive. A labourer earns Rp 4,000-5,000 per day and gets it directly! The proceeds can be more for palm sugar, but sometimes, like now in the dry season, there is less sap. If there is, it is a little. Still, you have to buy firewood to cook it. One bundle of firewood costs one thousand rupiah. From the proceeds of the sale of sugar compared with what you have to pay for the firewood, the firewood is more expensive; a financial loss (*rugi*)! On average per year a labourer has more income and a labourer is sure of his income. Besides, not every one can collect palm sap. One has to work slowly, it cannot be done fast. When the cut from where the sap is drained is not good, it can dry up or become sour. The amount depends on the people. My husband Sukardi collected palm sap too before, but he stopped when our child was one year old, because many trees dried up. When it is not your own tree the proceeds are divided in half. When people can ride a bicycle they work in Yogya. *Simbah* Muh cannot, he chooses to collect palm sap only."

Muh does not know how long he can go on with this work. He jokes: "Ten years?" In the past there were many old men who did it until they were very old. He will continue until his body is not strong anymore. If the body wants, maybe fifteen years. He does not know how long his body will remain strong. "As long as one can eat, humans need to make an effort to look for a livelihood. If there is work in the rice-field, one can work in the rice-field." If he stops working, Muh will live with one of his children. He will ask his child Espangati. He already said to his grandson Agus: "Later, when you are grown up and can work, you can look after your grandparents."

8.3.2 Changing livelihood: 'Then it was difficult to get money, now the prices are expensive'

Simbah Yoso (65) lives with his wife Giyem (\pm 55), daughter Sumarni (35) and granddaughter Anisa (5) in Kebonagung. Yoso is retiring as farm labourer, but still tends his cow every day. Yoso's life history has been described in Chapter 6.2.2. Here he describes how life has changed for them.

"In the past it was easy for people to look for work and the prices were still cheap. Rice was cheap; one kilogram cost only five cents. Now one kilogram costs Rp 1,200. Although the price of rice was low, it was difficult to get money in the past. People did not eat rice every day until they were full. They more often ate cassava. So, it was contradictory. The prices were low, but the food was difficult to get. Nowadays the prices are expensive, but we can eat until we are full and there are still leftovers. When I was small, we could not eat until we were full. In order to do so, we had to mix with cassava. Now I can eat rice every day, sometimes add an egg. I never ate eggs in the past.

Nowadays it is easy to look for money, because there is much paid manual labour such as in construction projects, farm labour. People can work as a labourer everywhere. In the past when we were still colonised by the Dutchman there was no work except for work in the sugar factory.

There was no paper money yet, only coins. In the Dutch period there was the cent (*sen*). That was at the time that Queen Juliana became queen or was born, I do not know. The only thing I know is that Queen Juliana is a child of King Heminah [Queen Wilhelmina]. At that time there were many coins like *sen*, *benggol*, *ndhil* made of brass, and *ketip*, *talen* made of silver. After a long time the Japanese (*Nippon*) came to take over. So, the Dutch people were forced to go away. Then the money changed again. Paper money for big values and aluminium money for small values. The Japanese made the Javanese people smart. Javanese people were taught how to fight and make war. Then the Japanese were chased away by the Javanese people, because they had become smart.

In the past farmers did not give fertiliser to the rice plants, only manure and dried leaves. Now farmers give urea-based fertiliser or *TS*. The species of plants that are grown by the farmers are still the same, but the variety is different. Before farmers cultivated Javanese rice with very long stalks having a growth time of about five months. Now the rice is already crossbred or artificially bred by the agricultural technician in shorter stalks with a growth time of three months. The agricultural technicians are very smart. They can crossbreed every plant. Mango *gadung* artificially bred with mango *sengir* will become a new kind of mango. Bananas are also crossbred. The rubber potato (*telo karet*) is artificially bred with the orange potato (*telo meni*) with a greater yield. Those plants are crossbred to increase the yield. One cassava plant used to give three kilograms of harvest only. The new variety can give ten kilograms of harvest per plant.

The Javanese rice gave a yield of one kilogram per square meter. The yield of the new rice variety can be two kilograms per square meter. But the taste of Javanese rice is much nicer, because Javanese rice is more delicious and soft. The new rice lacks taste and when the cooked rice is cold it becomes hard. That is different from the Javanese rice, warm or cold it is always soft. The rice variety has changed more than ten times; *Pb5*, *Pb26*, *Pb8*, *Taiwan*, *Ir64* and others.

I do not feel that the natural environment has changed. I do not know. I only feel that the water has changed. To make a well previously a hole of three meter was enough to reach water level and there was much water. Now a hole of seven meter is just until the water level. In the past the well was full of water in the rainy season and it was easy to take out the water. Now we have to use a pulley and bucket even when it is rainy season. There is no difference in water level in the dry season.

At present the river is deep while it was shallow before. Then the river fell under the authority of the Dutchmen in the dry season, because they irrigated the sugarcane and there was only little water in the river. It could dry up. So, the farmers could not grow rice in the dry season, because there was no water in the river to irrigate the fields. Farmers only

grew rice once per year. The water was already finished by the people who live upstream and people downstream did not get water. Now the water in the river cannot fall dry, because water is added from a river that is as big as the Progo river. Nevertheless, it is still not enough to irrigate a whole village, because many ricefields towards the East cannot be irrigated. In the past water was more difficult in the dry season, because the farmers were not yet organised by the government. Now the farmers are ordered by the government to make dikes and irrigation channels. When a farmer wanted to irrigate his ricefield previously, he had to make dikes alone with rice straw, dried coconut leaves and wood from the river to his field."

8.4 Conclusion

In Table 8.15 at the end of this subsection we present the effects of sex, age and residence on the livelihood of the respondents at the individual and household level. Sex has a significant negative effect on all livelihood indicators at the individual level. Older women reported significant lower levels of economic status on all the individual measures. Women did not report significantly different levels of economic status on any household measure. This is not what we expected since Rudkin (1993) also found significantly lower levels of economic well-being for the indicators: household income, housing quality and consumer items available to the household. However, she did find that the gender effect was stronger for the individual than for the household measure. Individual older women are less economically secure than older men. This does not have to be a problem when older women share the household with other people, because these older women may share in the collective household income. It can be a problem when older women live alone and cannot rely on other sources of support.

The age effects were investigated as well. Being older has a significant negative effect on income-generating activity and consequently on the income of the respondents. More surprising is that being older also has a significant negative effect on the household income, housing quality and household items. The very old respondents have lower incomes, live in a house of lesser quality and have less access to household items. The locations of the village can probably explain this effect. All indicators at the household level, which are negative for the livelihood in Giriwungu also have a negative effect on age. The sample consisted of more respondents aged 75 years and older in Giriwungu than in Kebonagung.

Because of Rudkin's findings, we expected a negative effect from living in a rural area rather than urban area on livelihood. Although both study areas are rural, we may consider Giriwungu, which is located in an isolated mountainous area, as more rural than Kebonagung, which is nearer to the city Yogyakarta. Although older persons engage more frequently in an income-generating activity in Giriwungu, they earn on average less than in Kebonagung. For older persons it is probably necessary to work longer at a higher age, because the mean individual and household incomes

are lower in Giriwungu. Elderly households in Giriwungu even have half the average monthly income of households in Kebonagung.

Residence has a significant effect on all economic indicators at the household level. For the respondents in Giriwungu the effect is negative on household income, housing quality and household items, and, unexpectedly, positive on farmland acreage and value of livestock property. In Giriwungu elderly households generate a lower income, live in houses of lesser quality and have fewer household items available. But they own more land and have more valuable livestock than in Kebonagung. It appears that people in Giriwungu invest their money in valuable farm assets, which are traditionally good investments for farmers. In Kebonagung people invest their money in valuable household assets, the more luxurious investments of a modern society.

The majority of the respondents or their spouse own the house in which they live. The last child who lives with its parents will usually inherit the house and take care of them in the end. The fact that more respondents in Giriwungu say that a daughter will inherit the house may indicate that they have stronger preference for living with a daughter than respondents in Kebonagung. Most of the respondents own land individually and only a few have already divided land between their child(ren). The respondents had not yet divided property between their children, because they would lose their claim to care from them. Respondents in Giriwungu say that daughters will inherit larger plots of land than sons.

Processes of social change have altered the livelihood of the respondents. The introduction of new technologies and working methods saved labour as a result of which older persons have to stop working at an earlier time. The use of the finger-knife for harvesting rice and the collection of palm sugar are (almost) extinct activities now. The introduction of new plant varieties and the use of chemicals have increased the yields. However, according to some respondents, this was at the cost of its taste and produce texture. On the one hand, life has become better, but on the other hand life has deteriorated. Food prices are high and water is more difficult to get. The effects of social change seem to be more pronounced in Kebonagung than in Giriwungu.

Table 8.15 Selected indicators for livelihood according to sex, age and residence (percentages or means)

Livelihood indicators	Sex		Sign. ^a	Age group			Sign. ^a	References Chapter 8		Sign. ^a
	Male (N=162)	Female (N=235)		55-64 (N=148)	65-74 (N=123)	75+ (N=126)		Kebonagung (N=194)	Giriwungu (N=203)	
Individual level:										
- Income-gen. act.	73.4%	42.6%	***	70.9%	61.0%	30.9%	***	51.1%	59.1%	***
- Individual income ^b	Rp 60,270	Rp 27,108	***	Rp 67,113	Rp 41,929	Rp 11,153	***	Rp 45,584	Rp 36,070	n.s.
- House ownership	80.0%	52.0%	***	63.4%	65.8%	62.1%	n.s.	62.9%	64.8%	n.s.
- Land ownership	79.7%	63.5%	***	71.5%	71.7%	67.0%	**	67.6%	73.1%	n.s.
Household level:										
- Household income ^b	Rp 170,526	Rp 149,305	n.s.	Rp 194,203	Rp 159,632	Rp 118,106	**	Rp 211,396	Rp 103,473	***
- Housing quality ^c	10.2	10.4	n.s.	11.3	10.2	9.2	***	12.9	7.9	***
- Farmland acreage ^d	1.1 ha.	0.9 ha.	n.s.	1.0 ha.	1.0 ha.	1.0 ha.	n.s.	0.3 ha.	1.6 ha.	***
- Livestock value	Rp 856,031	Rp 723,279	n.s.	Rp 794,045	Rp 833,801	Rp 701,964	n.s.	Rp 589,193	Rp 958,368	***
- Household items ^e	4.3	4.4	n.s.	4.9	4.3	3.8	**	6.9	2.0	***

^a Chi-square test: *** p<0.01; **p< 0.05; * p<0.10; n.s. no significant difference.

^b Monthly income. The exchange rate for 1000 rupiah was 0.42 US Dollar at the time of the Elderly Household Survey. N(individual income)=365.

^c Housing Quality Scale of 7 items ranges from 0 to 21 (N=355).

^d Corrected acreage of farm land (N=355).

^e Household Items Scale of 10 weighted items ranges from 0 to 29.

9. Living arrangements and daily care within the household¹

In this chapter we first describe the living arrangements of the older people and their children in order to understand from whom they can receive care and support within their own household. The way people usually live determines what their perspective and expectations are with regard to the support they need. In Indonesia most people, especially those whose primary source of income is agriculture, live with their children (Molyneaux et al., 1990: 119) and much care is likely to be provided by the household members. This care is not specifically provided for the older person, because they cannot perform the activity themselves anymore. The activities become the responsibility of a younger member of the household to provide it for the whole household. As Gardiner said, households are care providers (1997: 240). The living arrangements of older parents and their children are described by the availability, coresidence and proximity of the children.

Parents cannot automatically rely on the care provided by children when they live at a distance from each other. The second section presents several cases in which labour migration, transmigration and international labour migration complicate the provision of help. The third section describes the arrangements for daily care between parents and their children. We discuss the care for the personal activities of daily life (ADL) and support for the instrumental activities of daily life (IADL), usually provided to the older person within their own household. Furthermore, we discuss the implications of children who live at a large distance from their older parents for their daily care. Finally, a case of an older parent who works in Jakarta and supports a child's family in the village and a case of reciprocal care between a parent and child are described.

9.1 Living arrangements of older parents and children

The availability of children as a resource for elder care will be described by looking at the composition of elderly households and coresidence of children. As children are traditionally the primary caregivers of older parents, their gender and proximity are important. An issue here is a possible preference of parents for living with a daughter or a son. The proximity of the children is studied to indicate potential sources of elder care by non-coresiding children.

¹ Parts of this chapter, in particular the sub-sections 9.1 and 9.3, have been published in (Keasberry, 2001).

9.1.1 Availability of children

Just a very small proportion of the older persons lives alone and ten percent lives together with only their spouse. Almost half of the sample lives with a spouse and 'other(s)' and about a third only lives with 'other(s)'. The population statistics of the villages shows that most households consist of two generations when there are no elderly people, and of at least three generations with elderly people². The average household size in the whole sample is 4.6 persons. The household size in Giriwungu (4.9) is significantly larger than in Kebonagung (4.2).

The few people who live alone (N=15) are mainly women in the age group of 75 years and older living in Kebonagung. Forty percent of them have no children (anymore) and thus are deprived from care by a child. Sixty percent have only non-coresiding children, who are mostly living in the same village as their parent. The majority of the people who live with 'other(s)' usually live with their own child(ren), a child-in-law and/or grandchildren. These people are close to their primary caregivers.

Most respondents have between two and five children who are still alive with a mean of 3.3 children. The largest families with parents aged 55 years and older have eleven children. Almost a quarter of the respondents does not live together with a child (23.9%) and more than half live with one child (55.9%). The rest of the respondents live together with two to six children (20.2%). Most respondents also have (other) children with whom they do not share a household. The majority have one to ten non-coresiding child(ren) (83.6%). Still 65 respondents do not have any child living outside their own household (16.4%). Only 4.3% of the respondents have no children (anymore). Given the absence of a social security scheme, these childless people are probably more vulnerable when they are in need of support.

Table 9.1 Availability and coresidence of children by residence of older parent

Availability and coresidence of children	Kebonagung		Giriwungu		Total	
	Freq.	%	Freq.	%	Freq.	%
No children	10	5.2	7	3.4	17	4.3
Only coresiding children	26	13.4	22	10.8	48	12.1
Only non-coresiding children	52	26.8	26	12.8	78	19.6
Coresiding and non-coresiding children	106	54.6	148	72.9	254	64.0
Total	194	100.0	203	100.0	397	100.0
Test scores	$\chi^2(3)=16.3^{***}$, $p=0.001$					

Table 9.1 presents the children's availability and coresidence in relation to the parents. As already mentioned, very few people have no children at all. More than a tenth have only children who live in the same house and almost a fifth do not coreside with a child but only have children who live outside their house. Almost two-thirds have both coresiding and non-coresiding children. The availability and (non-) coresidence of children differs significantly according to where the elderly parent lives. Kebonagung has twice as many respondents who only have non-coresiding

² See Annex 3.2 for the household compositions by hamlet.

children as Giriwungu. Kebonagung has a much smaller proportion of respondents who have both coresiding and non-coresiding children than Giriwungu. So far, these findings do not support our hypothesis that Giriwungu experiences more out-migration of the younger generation.

The group of elderly people who do not live with a child consists of people without any children and people who only have non-coresiding children. First, we look at the childless people more specifically. Six childless persons, all female, live alone (1.5%). Two childless persons, both male, live with their wife and brother or mother (0.5%). Nine childless persons live at least with 'other male kin', for example a nephew, great-grandson, etcetera (2.3%). Some of them also live with 'other female kin', like the mother-in-law, a niece, (great-)granddaughter, or mother. Thus most of the childless people still live together with other kin.

Secondly, we look at those people who only have non-coresiding children. The majority of these people live with their spouse (52.6%) and others (24.4%), or only with others (11.5%). A minority of these people live alone (11.5%). Although gender does not have a significant effect on the availability and coresidence of children, respondents who only have non-coresiding children are twice as often female. If these non-coresiding children live far away from their parents then these people will be deprived of care from their children. However, as Table 9.3 shows, most non-coresiding children, who have no siblings living with their parents, still live in the same village as their parents. The majority of the respondents, who only have non-coresiding children, have at least one child living in the same village (76.9%) and hence the possibility to receive support from a child.

9.1.2 Preference for child's coresidence

It is generally believed that Indonesian elderly people have a preference for living with a daughter³. Since household chores like preparation of meals, washing clothes and cleaning the house are female tasks, it consequently means that parents should ask for care from a daughter, or a daughter-in-law when they live with a son. Parents would more easily ask for care and support within the household from a blood-related daughter, because she owes it to them, than from a daughter-in-law. Table 9.2 shows the findings regarding coresidence with children, divided into sons and daughters.

³ Koentjaraningrat reported that old mothers prefer to live with a daughter after the death of their husband, because this is more logical with regard to household matters than living with a daughter-in-law (Koentjaraningrat, 1957: 68). And Jay observed a clear statistical bias in favour of residence with or near the bride's parents, although all of his informants maintained that neither the bride's nor the groom's family was as a rule favoured in the choice of residence (Jay, 1969: 40). In Java all children have the obligation of taking care of their elderly parents. So, if the parents only have sons or all daughters already live with their parents-in-law, they can still choose to live with a son.

Table 9.2 Preference for coresidence with sons or daughters by sex, age and residence of older parent (%)

Preference of older parent for	Sex		Age group			Village		Total N=397	
	Male N=162	Female N=235	55-64 N=148	65-74 N=123	75+ N=126	KA N=194	GW N=203		
	Not coresiding with child	19.0	27.4	24.3	23.4	24.0	32.0		16.3	23.9
Coresiding with only son(s)	26.4	30.8	34.5	25.8	25.6	31.4	26.6	29.0	
Coresiding with only daughter(s)	39.3	33.8	25.7	43.5	40.8	24.4	47.3	36.0	
Coresiding with combi son(s) and daughter(s)	15.3	8.1	15.5	7.3	9.6	12.4	9.9	11.1	
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	
Test scores	$\chi^2(3)=8.8^{**}$ p=0.033		$\chi^2(6)=14.2^{**}$ p=0.028			$\chi^2(3)=26.2^{***}$ p=0.000			

As we previously concluded, older mothers are more likely not to live together with any child. Elderly fathers live in larger households more often and hence they are more likely to coreside with both son(s) and daughter(s). If we consider the parents who coreside with only daughter(s) or son(s) (N=258), we find a weak significant preference for coresidence with daughters⁴. As explained, we expected that all parents would have a preference for coresidence with a daughter. However, Table 9.2 shows that fathers have a significant preference for living with daughters and mothers have a significant preference for living with sons. This remarkable finding will have to be further explored.

Age and residence also have significant effects on the preference. Persons not living with a child or living with both sons and daughters are most frequently among the youngest respondents. They are probably still healthy and strong and hence can still take care of themselves. Besides, this generation usually invest(ed) a lot in the education of their children and possibly encouraged them to find work outside agriculture for which they had to leave the village. This generation can also still have children who are not yet adults or not yet living on their own, which explains why they live together most often with several children. The persons aged 65 years and older have a clear preference for coresidence with daughters. This and the fact that parents living in Giriwungu have a strong preference for coresidence with daughters might indicate that it is a more traditional preference. It also might partly support the hypothesis that Giriwungu experiences more out-migration, but that it applies only to sons and that daughters stay behind to take care of their parents. However, the proportion of older people in Kebonagung not living with children is twice that in Giriwungu.

⁴ If we assume that elderly parents do not have a preference for coresidence either with sons or daughters, then the distribution of coresidence with only sons and coresidence with only daughters would be equal (expected values are for each 129). However, the test scores are $\chi^2(1)=3.0^*$ and p=0.081, a weak significant preference for coresidence with daughters.

Our landlady in Giriwungu told us that when a family has sons and daughters, "the man should follow his new wife", and when a family has only sons, "the woman should follow her husband's family". Hence, there is a preference for coresidence with the parents of the newly wed daughter when there is a choice. When there are no daughters in the family, the newly weds should live together with the husband's parents. However, *simbah* Ngatinem's own daughter Rupinem did not want to follow her first husband, who had only brothers, and they coresided with her parents.

Simbah Ngatinem (61, female, farmer), Giriwungu.

Although we did not receive clear answers on our direct question of how people arrange who will coreside with whom, it seems to be arranged or at least discussed between parents from both sides. The following case describes a conversation between a so-called *besan*, the parents of the wife and husband. See the genealogy in Annex 6.2 to understand the kinship ties.

Rupinem remarried with Marjo after the death of her first husband. They live together with her parents, *simbah* Ngatinem and Radiyo. *Pak* Marjo's mother, *simbah* Reso, coreside with a daughter, son-in-law and three grandchildren. She told us: "At the time that my daughter died, Ngatinem was afraid that I would ask Marjo to return. So Ngatinem said to me: 'Let Marjo stay here, he does not have to go home.' Then I answered: 'I will not ask Marjo to return, because I have already given him to you. I will just think of my problems later. You do not need to worry that I will ask Marjo to return.'" [...] Reso asked her son-in-law to remarry but he did not want to, because he wanted to take care of his children and parents-in-law.

Simbah Reso (-, female, farmer) about *simbah* Ngatinem (61, female, farmer), Giriwungu.

Although other studies and some respondents reported a preference of older parents for coresidence with a daughter, we only found a weak preference for coresidence with daughters in the total sample. When we study the sample more closely, we see that fathers especially have a preference for a daughter. Since parents older than 65 years and those who live in Giriwungu have a significant preference for coresidence with a daughter, we might conclude that it is a more traditional preference.

Table 9.3 I. Proximity of all children in sample compared to residence of elderly parent;

II. Proximity of at least one non-coresiding child by sex, age and residence of elderly parent (%)

Proximity of children (est. max. distance ^a)	I		II (N=397)									
	Freq.	%	Sex		Sign ^c	Age group			Sign ^c	Village		Sign ^c
			Male	Female		55-64	65-74	75+		KA	GW	
			N=162	N=235		N=148	N=123	N=126		N=194	N=203	
Parent(s) with coresiding children	413	31.1	81.0	72.6	*	75.6	76.6	76.0	n.s.	68.0	83.7	***
Parent(s) with non-coresiding children in:												
- same village	340	25.6	43.2	54.0	**	43.9	54.5	51.6	n.s.	44.3	54.7	**
- same regency (15/45 km)	144	10.9	21.0	31.9	**	25.0	27.6	30.2	n.s.	38.1	17.2	***
- municipality Yogyakarta (15/25 km)	28	2.1	5.6	6.8	n.s.	10.1	4.1	4.0	*	7.7	4.9	n.s.
- other regency D.I.Yogyakarta (55/50 km)	30	2.3	6.2	6.0	n.s.	4.7	7.3	6.3	n.s.	7.2	4.9	n.s.
- Central Java (110 km)	21	1.6	3.7	3.8	n.s.	2.0	4.1	5.6	n.a.	4.6	3.0	n.s.
- other area on Java (450 km)	186	14.0	34.2	26.0	*	38.5	27.9	19.8	***	30.4	28.2	n.s.
- other area in Indonesia (3,500 km)	154	11.6	25.3	24.7	n.s.	26.4	22.0	26.2	n.s.	19.6	30.0	**
- outside Indonesia	11	0.8	3.7	2.1	n.a.	3.4	4.1	0.8	n.a.	5.7	0.0	***
Total	1327 ^b	100.0										

^a Estimated maximum distance possible between the residence of the elderly parents and the children who do not live in the same village measured in a straight line in kilometres. The first figure stands for the village of Kebonagung (KA), the second for the village of Giriwungu (GW). As from Central Java the distances are so large that the difference between the two villages are negligible.

^b Total does not sum up to the total sample (N=397), because the respondents could have more than one child.

^c Chi-square test: *** p < 0.01; ** p < 0.05; * p < 0.10; n.s. no significant difference; n.a. not applicable because the cell filling of expected count is less than five.

9.1.3 Proximity of children

Table 9.3 presents the findings regarding the proximity of children. It gives an indication of the distance between parents and their potential sources of support. Part I of the table shows that more than half of all the children in the sample live in the same village as their parents, 31.1% in the same household and 25.6% outside their parent's household. Part II of the table presents the proximity of at least one child per type of residence of the child. Parents can have several children who live outside their household in the same village or beyond, but we did not distinguish according to the number of children in the second part of this table. The percentages represent the proportion of the whole sample (N=397) that each category of the children's residence occurs for at least one non-coresiding child per elderly household. The Chi-square test was carried out for each category distinguishing between no child(ren) and at least one child.

The sex of the parent has a weakly significant effect on having coresiding children. Men live together a little more often with child(ren) than women do. Perhaps women can take care of themselves better than men because of their experience in performing household chores. This effect is opposite to the effect that gender has on having non-coresiding child(ren) in the same village, where mothers have more often non-coresiding children in the same village than fathers. Mothers also have more frequently several children living outside their household in the same village.

Residence also has a significant effect on both coresiding and non-coresiding children in the same village as their parents. People from Giriwungu more frequently live together with a child, have at least one other child living in the same village and have several children living in the same village. This, again, is contrary to our expectation that people in Giriwungu would experience more out-migration of the younger generation and that they would be left behind without any child who would take care of them more often than in Kebonagung.

The other data in Table 9.3 indicate the distances between the parents and the children who live outside the study villages. When we consider the distances in kilometres, we have to keep in mind that Giriwungu and a large part of its regency Gunung Kidul is a mountainous area, which complicates travelling. Besides, local public transport is much better in the lowlands around Kebonagung and its regency Bantul than in Gunung Kidul. Parents in Giriwungu have significantly fewer children living outside their village in the same regency than parents in Kebonagung. The regency Bantul is one of the poorest regencies in the Special Region Yogyakarta (*Daerah Istimewa Yogyakarta*). Therefore, when children move for economic reasons, they are more likely to do so to other areas rather than within the same regency.

We expected that the city Yogyakarta would be a pull factor for labour migration of the younger generations especially from the poor village of Giriwungu. However, this hypothesis is not supported by the survey results. Perhaps we cannot prove our

hypothesis, among other things because people commute between the city and the home village, and people did not (yet) register in the city if they do live there most of their time. Only age has a weakly significant effect on non-coresidence of children in the municipality Yogyakarta. The older the parents, the less frequently they have children who live there. The youngest elderly people more often have at least one child living in the city of Yogyakarta.

The 'other area on Java' includes the capital Jakarta, which we also expected to be a pull factor for labour migration of the younger generations. Again, no significant difference in this respect was found between Kebonagung and Giriwungu from which we may conclude that the distance between and the different economic situation of these villages do not have an important effect on the out-migration of children to other areas on Java. Age has a highly significant, negative effect on the residence of children in other areas of Java. Becoming older is accompanied by having fewer children living in other areas of Java. Perhaps it is still a relatively new trend that young people migrate for work that is influenced by the higher levels of education nowadays.

The other areas in Indonesia consist of the islands other than Java for which one has to travel at least some days by boat or airplane and other public transport. Travelling is time-consuming and expensive, which complicates the contact and support between the child and elderly parent. Residence has a significant effect on at least one child living in other areas (than Java) in Indonesia. Elderly parents in Giriwungu more often have children, who live this far away, because there were several transmigration projects in the past⁵. Since the transmigrated people usually are economically better off, this still forms a pull factor for relatives who live in the poor village of Giriwungu.

There are not many children living outside Indonesia in the survey sample, but their elderly parents all live in Kebonagung. The fact that people in Kebonagung have more economic opportunities may be attributable to their ability to send some children abroad, as it costs a lot of money to do so. While the children are still abroad they usually send remittances home, which were unbelievably high by local standards.

9.2 Living at a distance

In this section we describe children and parents, who live at a large distance from their home village to illustrate how it can affect the lives of older people. Firstly, we describe cases of labour migration to Jakarta; secondly, cases of transmigration to Sumatra. Thirdly, we present a case of labour migration abroad.

⁵ Transmigration projects are part of a governmental program for redistributing the population between the densely populated island of Java and the much less densely populated so-called 'Outer Islands'. These projects are targeted at (resource-) poor areas.

9.2.1 Labour migration

Some of the older respondents migrated for work when they were younger and some still do. They are more tied to their birthplace than their migrated (grand) children, because these migrating elderly people return after they stop working in the city, or visit the (broken) family frequently and plan to return after they stop working.

"In the past there was nobody who looked for work in Jakarta. If there had been when I was young, I would have wanted to look for work too. The generation of my children started to look for work in Jakarta. I looked for work myself, because my oldest child Pahijo already worked there and he asked me to come to Jakarta. He found work for me as a household servant. [*Simbah* Rejo was then about 45 years.] I went to Jakarta because there was no work here with which one could earn money. Money was very difficult. I asked Wagijan [the second child] to come with me, but he did not want to follow me.

In Jakarta I was not allowed to leave the house [of her boss], because they were scared that I would get lost. For several years I worked for these people, which was very difficult because I had to do everything alone in the household. Then I went home [Kebonagung] for about ten days and returned again to Jakarta to look for Pahijo at Muda Mudi near the market. I stayed with him until I found work that was not so hard. I only had to cook for the family of *Ibu* Bebi that had two children and two other servants. I stayed for two years and earned 12,500 Rupiah per month."

Then Rejo worked for Bebi's older sister for two years. She worked once more for a family in the Kebayuran Lama area [Jakarta] for three months and finally returned home when she was approximately 53 years old. After that she only went to Jakarta to visit Pahijo, who is a tailor and helped him to iron shirts. She did this until three years ago.

Simbah Rejo (±72, female, retired), Kebonagung.

Our neighbours in Kebonagung are an example of what migration can do to the composition of households and care for older people in the village. Figure 9.1 presents the genealogy of the Winarto family and the map of their residential quarters.

Bapak Winarto (60 years) is married to *Ibu* Sepi (55 years) and they have five children. *Bapak* Winarto is a farmer and lives in a house next to his older sister *Simbah* Joyongadikem (62 years). They inherited a lot together and divided it into two equal parts. *Ibu* Sepi works as a masseuse and stays with family in Jakarta. She alternates one month of work in the city with one week free off in the village. Although *simbah* Joyongadikem lives in her own house, she cooks for her brother Winarto. The living arrangements of the Winarto children are as follows.

- The son Mulyono (35 years) works as a construction labourer and lives together with his younger brother Rejo in Jakarta. Mulyono has inherited half of the lot of his father and built a house on it where his wife and children live.
- The son Tarno (30 years) lives with his family on the house lot that he (informally) inherited from his aunt Joyongadikem. She gave the lot to him, because she does not have children of her own and she had taken care of him since he was a little baby.

- The son Rejomulyo (25 years) is still single and usually lives with his older brother Mulyono in Jakarta. At the time of the interview he was unemployed and stayed with his father and aunt.
- The daughter Satin (21 years) lives with her family in a high quality house with glass windows and a television next to her parental home in Kebonagung. Her husband works in Jakarta. Sometimes this household lives together in Jakarta.
- The daughter Kartimeli (20 years) lives with her husband and child in Jakarta.

Ibu Sepi has an older sister Rono (65 years), who works as a small trader of food (*pakul makanan*) in Jakarta. She purchases the products in Kebonagung and surrounding villages. *Simbah* Rono stays with her brother-in-law Winarto when she is in the village. The life of *simbah* Rono is described in Chapter 9.4.1.

Fieldnotes Kebonagung, 9 February 1997.

As we observed, the house of *bapak* Winarto consist of a coming and going of relatives who migrated for work to Jakarta, but who are still considered to be members of a household in the village Kebonagung. The houses of *simbah* Joyongadikem, *pak* Winarto, Mulyono and Satin are so close to each other (see map in Figure 9.1) that they walk in and out as if it were one household. According to our definition, we consider *simbah* Joyongadikem, *pak* Winarto and *ibu* Sepi as one household. Mulyono and Satin each have separate households. The relatives who migrated for work in Jakarta are considered to be members of the household in Kebonagung if they contribute to that household for the largest part of their income.

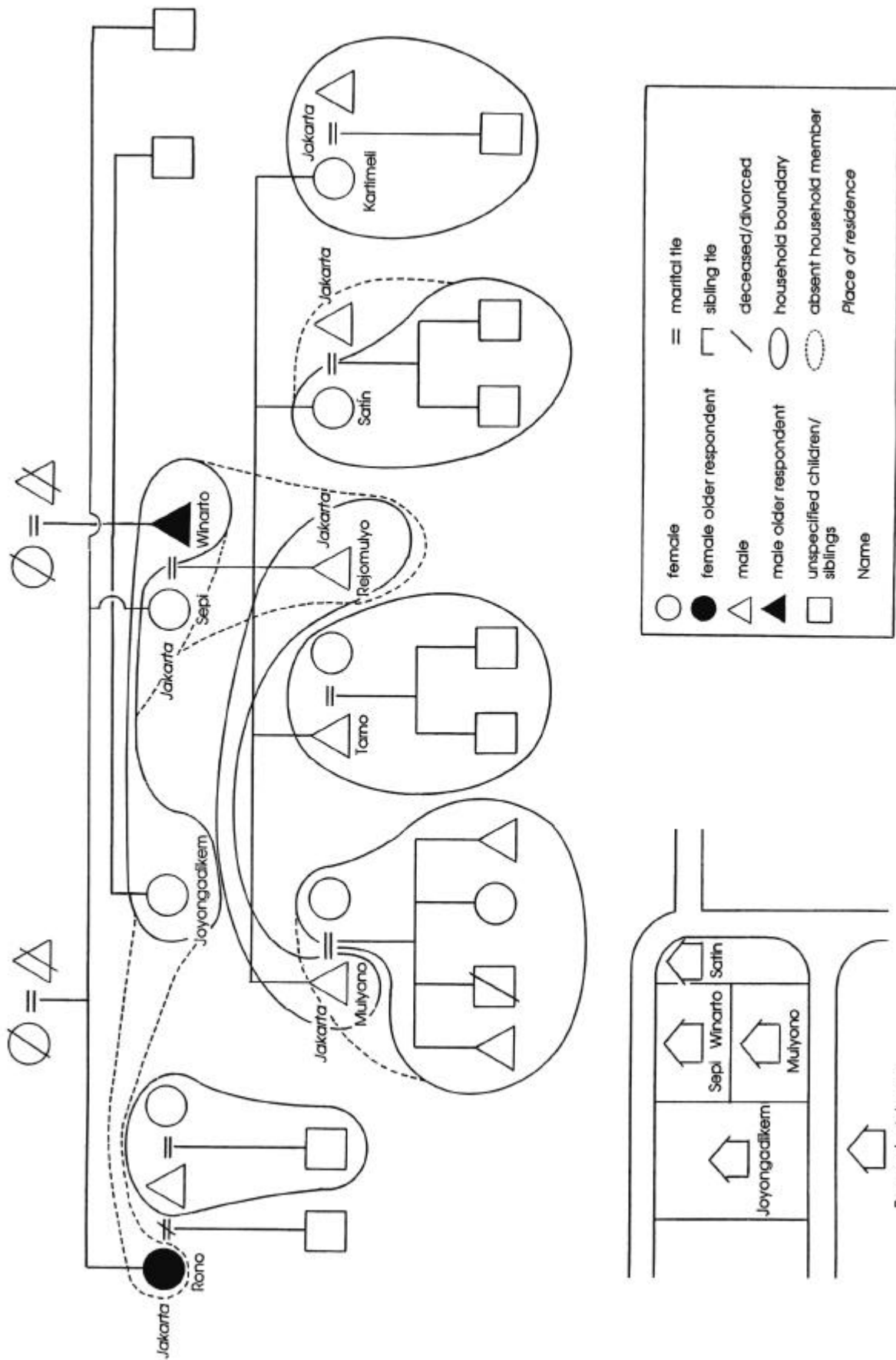


Figure 9.1 Genealogy of the Winarto family and map of their residential quarters in Kebonagung

9.2.2 Transmigration

Many people from Giriwungu and other villages in the sub-district Panggang migrated to Sumatra. In the beginning there were rumours that the entire village would be moved (*Transmigrasi Bedol Desa*) and many people who worked in Jakarta and so on returned to join the programme. In the end that was not the case and one had to meet certain requirements such as good health, being married or dependent on relatives who migrated etcetera. The head of the hamlet Petung told about how they left for Sumatra.

"In the year 1983 I accompanied the transmigrants to Pematang-Panggang II once. About a hundred family heads from the Special Region Yogyakarta joined the transmigration programme. I accompanied the transmigrants to there, because I was part of a governmental delegation together with other officials from the sub-district. Before we departed to the location, the officials and transmigrants were accommodated at the Tugu station in Yogyakarta. We were just five days in Yogya when my youngest child missed me very much. He cried all the time. So, Mrs Kadus (Ibu Kadus) took him to Yogya to meet me. [...] We left with fifteen buses to Sumatra. I accompanied them in order to report on the families of the transmigrants [in Giriwungu] later as to whether they arrived at the location. As a governmental representative I was given 100,000 Rupiah, but for that time it was plenty."

Bapak Kadus (Head of the hamlet Petung), Giriwungu.

Some of the older respondents had joined a transmigration project themselves when they were younger. Such was the case of *Bapak Dwijo* who migrated with his wife and son to Gemawang (*PK9*) in South Sumatra in 1971. His case also shows that children are expected to take care of their parents.

"After only two years we returned, because my parents-in-law asked us to. They had said: 'Here the house is empty, take care of your parents'. I took care of my parents[-in-law] Jowirono until they died. Mother died in 1978 and father died in 1985." They had lived together and *pak Dwijo's* wife inherited the house after her parents' death.

Bapak Dwijo (64, male, petty trader and labourer), Giriwungu.

It is obvious that the portion of the family that stayed behind in the village did not always like the (trans-) migration of a part of the family. *Simbah Niti* expressed it as follows. See the genealogy of *simbah Niti's* family in Figure 9.2.

"Rutini [granddaughter] had already moved to Bogor. She had just become a servant for people of the upper class, had not yet found work of her own. Then there was an order for transmigration and Rutini was taken home. Sukini [daughter] together with her children and husband would transmigrate. So, only Ngatini [granddaughter] who was seven months pregnant and I would be in this house. Then there was a call for Wasimin [son-in-law], a message from the organisation that his body was not healthy. So, I applauded and played a

small *kendhang* drum. Because before I had said: 'When will my request to become well-off be granted?' I always prayed and hopefully my requests would be granted by God (*Tuhan*). Although later my grandchildren departed for transmigration [to get a better life], those who were in the area of Bogor were urged to join the transmigration, I hoped that my request failed. I begged morning and evening, and when Wasimin was told that his health lacked on the morning that they would leave, it just did not happen. [...] Nobody went [to Sumatra], only [my grandson] Sugimin.

Simbah Niti (±90+, female, retired), Giriwungu.

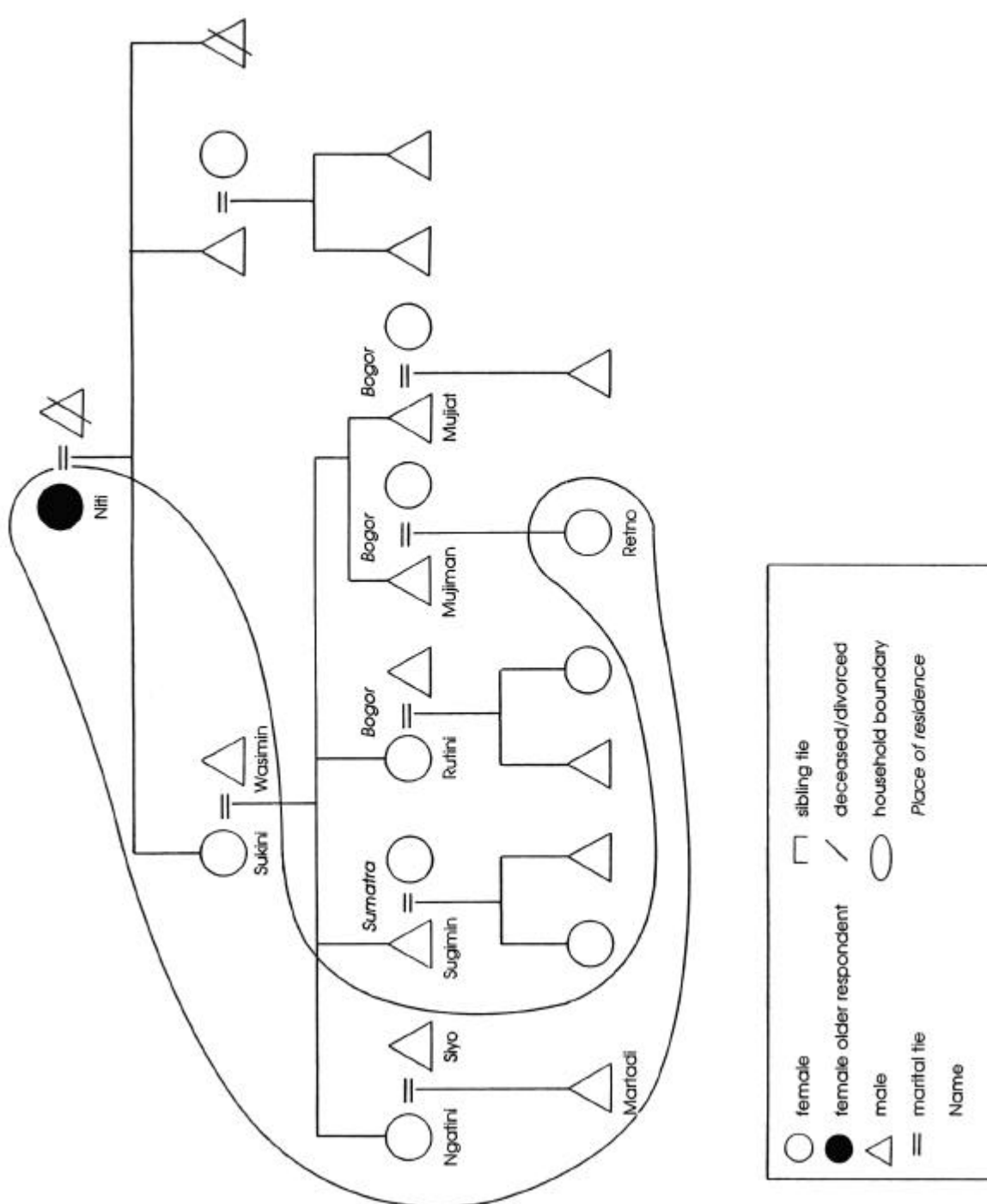


Figure 9.2 Genealogy of *simbah* Niti's family

People joined a transmigration project in the hope of finding a better life. Many respondents confirm that their (grand) children earn a higher income, have a good house sometimes even with upper floors or own many cows. Although communication is very difficult at a distance, the relationships with the family that stayed behind are still maintained. The following fieldnotes illustrate this point. Figure 9.3 presents the genealogy of my neighbour's family.

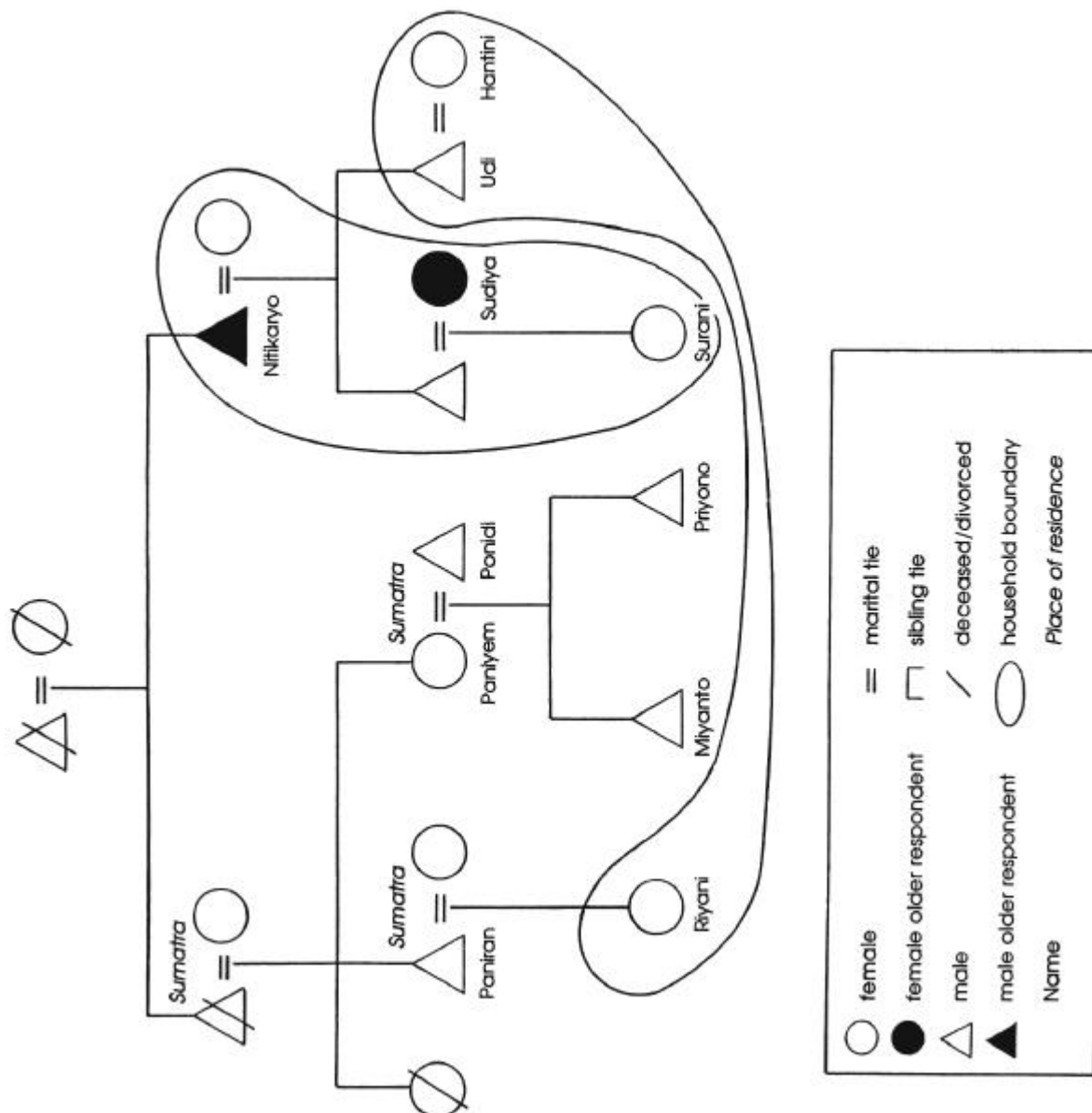


Figure 9.3 Genealogy of *simbah* Nitikaryo's family

In the morning I am talking to my neighbour Sudiyah and her cousin-in-law Paniyem who visit them from Pematang, Sumatra. (Sudiya's father-in-law, *simbah* Nitikaryo, is Paniyem's father's brother.) They arrived on the weekend: cousin Paniyem with her husband Ponidi and two children Miyanto and Priyono, and her brother Paniran and his daughter Riyani. They are here to bring Riyani to Petung [hamlet of Giriwungu]. She will stay with Sudiya to go to the secondary school in Panggang, because the schools in Pematang are not yet developed that good.

Fieldnotes Giriwungu, 8 July 1997.

I talked to the neighbour, *simbah* Nitikaryo, and *bapak* Paniran from Sumatra. Life is better for a farmer in Sumatra [than in Giriwungu]. Although they cultivate the same, the price is higher. Besides, they work for a co-operation of London and Sumatra at a rubber plantation now, with which they are assured of an income and receive a reasonable stable price for their agricultural side proceeds. They have a problem with wild pigs and Lonsum offers a price per tail. After which they may still sell the pig meat themselves. However, the schools are not so good yet. That is why Paniran's daughter will stay in Petung to attend the secondary school in Panggang. She will not stay with Sudiya, but with *mas* Udi, the youngest son of *simbah* Nitikaryo, and his wife Hantini.

Fieldnotes Giriwungu, 13 July 1997.

Communication between children that have migrated and their parents was not by letters, because the older people usually do not read and write, and the postal services were bad. They also did not communicate by telephone because there were not any telephones in the village. Communication was maintained by passed-on oral messages and gifts.

At the end of an interview with our respondent *simbah* Marto, she gets ready to walk with us to our neighbour *simbah* Niti *kaum*. [She calls *simbah* Nitikaryo like that, because he is a traditional healer and religious leader.] She wants to meet the 'friends' from Sumatra who visit their family and stay at the house of *simbah* Nitikaryo in Giriwungu. They are neighbours of her children who live in Sumatra. *Simbah* Marto wants to entrust (*titip*) them with clothes for her grandchildren. "Although my grandchildren live far away, I constantly think of them!", she said.

Simbah Marto (±65, female, retired with pension), Giriwungu.

The persons who joined a transmigration project are not expected to return to their birthplace when they become older, because they usually take their children with them or had children while living there. The daily care in old age can become a problem for those parents who stayed behind in the village and from whom all children have migrated away for good. These older persons live at a large distance from their children, who are supposed to be the primary care givers.

9.2.3 *International labour migration*

Simbah Muh told us about his daughter Estu, who worked abroad several times and sent her large earnings home. See the genealogy of *simbah* Muh's family in Annex 8.3. Although she urged her parents to use the money, they did not dare, because they said they did not need it. That is what we often heard from older people. They do not need much in the village, whereas livelihood, especially the rent and school costs, are very expensive in cities like Jakarta. Therefore, older parents say that they do not expect their children to take care of them financially, at least when they are still capable of earning a living themselves.

"After Estu finished secondary school she left to work as a nurse for infants in a hospital in Singapore. She came back after four months, because there was a 'friend' who threatened to kill her if she did not hand over her wages. She stayed home for five months and then left for three years to work in a plywood factory in Malaysia. After this she returned for eighteen months, because her older sister Espangati would not allow her to go away again. Estu just traded at home. Espangati wanted her to marry, but Estu wanted to go away again. At the Ministry of Labour (*Depnaker*) in Jakarta she applied for work in Taiwan. The expenses for the application procedure, tests and plane ticket were 7,5 million Rupiah! She went to Taiwan and worked in a computer electronics factory for two years. Now she does not want to extend her contract anymore and will come home in January 1998.

Estu earned a lot of money in Taiwan. She sent up to nineteen million Rupiah home in the last eighteen months! It is used to buy a scooter for the youngest daughter Siti, Espangati borrowed some to buy a rice field and the rest is in the bank. There is still ten million rupiah for Estu. She already said that it is for her parents, but Juminem [wife] said: 'I do not dare'. Estu said to me that I should buy a golden ring, but I thought: 'A ring, for what?' So I bought a spray tank for 80,000 rupiah. Esty told her mother to buy a new bicycle, but she thought: 'For what? To look for dried leaves? [*Simbah* Muh is a collector of palm sugar juices and *simbah* Juminem produces the palm sugar, which they wrap in dried leaves.] It is safer when there is no one who wants to take my bicycle and it does not show off.' So, she rides preferably on the bicycle that we bought for Estu when she was in the fifth class of the elementary school. When Estu comes home she will stay here, at her parents' house and will probably be a trader again."

Simbah Muh (58, male, palm sugar collector), Kebonagung.

Persons who migrated abroad for labour usually return to their homeland, because they only get a temporary work permit and no residence permit in the foreign country. Hence older parents of children working abroad are not automatically deprived of care.

9.3 **Role of children in daily care**

In this section we discuss the care for the personal activities of daily life (ADL) and support for the instrumental activities of daily life (IADL) provided to the older person usually within their own household. These activities were already described in Chapter 7.1.2 and only shortly presented here and illustrated with some cases.

Finally, the implications of children, who live at a large distance from the parents, for the parents' daily care are described.

9.3.1 *Personal activities of daily life*

The personal or physical activities of daily life (ADL) that we asked about consist of washing oneself, using the toilet, dressing and undressing, standing up from and sitting down in a chair, and walking outdoors for five minutes without resting. On average people can perform the personal activities of daily life without difficulty. Surprisingly, the large majority has a very high ADL score and only six respondents have low or moderate ADL scores (N=396). The very few who cannot or have great difficulty performing the personal activities (1.5%) are mainly helped by a coresiding daughter.

The loss of capacity in performing the personal activities of daily life is of course a gradual process. The following cases describe that process of gradual capacity loss and take-over of care by others.

"My older sister Amat can still take a bath with some difficulty if her husband, Sismanto [nephew] or I fetch the water. And she can still walk to the river herself to 'go to the toilet'. She can still put on her clothes, stand up, sit down and walk to the river or shop (*warung*) without difficulty."

Simbah Arjo, about her sister *simbah* Amat (±80+, female, retired, decrepit), Kebonagung.

The next case also describes the reciprocity with which care of older parents is performed.

"Two years ago *nyai* Suto could still bathe and eat alone. Now she cannot anymore because she is senile (*pikun*) and I take care of her (*merawat*). I take care of mother, because mother took care of me in the past. Now I return it [this care] to her. I think that I started to take care of mother two years ago, which is since mother started to become senile. [...] Now mother can still walk near the house by herself. She cannot walk the streets or very far from home. Usually she just sleeps the whole day."

Ibu Ngatirah, about her mother *simbah* Suto (±100, female, retired, demented), Giriwungu.

Why do so few people need help with the ADL? The respondents could have given socially desirable answers pretending to be healthier than they were or perhaps did not understand how to respond to the answer categories. However, during our qualitative fieldwork we looked specifically for people who were bedridden or demonstrated symptoms of dementia. We found only a few. The personal activities of daily life are usually the last activities that others will take over. Apparently, when people reach the stage where they cannot perform these activities themselves anymore, they are near death.

9.3.2 Instrumental activities of daily life

The instrumental activities of daily life (IADL) that we asked about consist of shopping for daily groceries, cutting firewood, fetching water, boiling water, cooking meals, doing the laundry, sweeping the yard, cleaning the house and feeding the livestock. On average elderly people can perform the IADL without difficulty.

Annex 9.1 shows who usually give support for the different IADL. For the few people who need IADL support, it is mainly given by female household members (66.2%) of whom the daughter usually is the primary support giver. Less than a third of the IADL support is given by male household members (29.2%). Male household members help most often with the heavier tasks of cutting firewood and feeding livestock. Non-household members provide little IADL support.

If we look at the IADL score by household type, it can be noted that the few people who live alone (N=15) all have a high IADL competency. This suggests that only persons who can take care of themselves live alone. Persons who cannot take care of themselves will either live together with others or do not survive. The majority of the older people who have a low IADL competency and need support (N=26), live together with others (73.1%). These people, who have probably outlived their spouses, are older and therefore more needy.

It is striking that so few people need help with the IADL. Moreover, we did not come across many frail elderly people during our qualitative fieldwork. People who live in the rural areas of Indonesia do not have a fixed moment in time for retirement after which they abruptly stop working. We believe that these elderly retain their capability of performing instrumental activities because they are still active every day (also found by Caldock and Wenger, 1992). Besides, the majority of the older people live with child(ren) in a three-generation family. When the younger generation gradually takes over activities from their elderly (grand) parents and performs them for the whole household and not especially for the older people, the older people perhaps do not feel that they cannot perform them anymore.

The household chores are usually allocated among the household members.

Simbah Niti: "Who ever has time does it. Granddaughter Ngatini can do it. I can do it. Siyo [grandson-in-law] sweeps too sometimes. Now there is *bapak* Wasimin [son-in-law], he sweeps sometimes too. Before you [the researcher and assistant] came I did not sweep the house, because I had already swept the yard. So, granddaughter Ngatini swept the house."

Pak Wasimin: "That is called division of labour. Just who has time can do it." [...]

Simbah Niti: "Yes, we are one family (*Ya, orang satu keluarga*)".

Simbah Niti (±90+, female, retired), Giriwungu.

One day we followed *Ibu* Rupinem on her weekly trip in the back of a truck to the market in Legundi at four o'clock in the morning. Women mainly occupied the truck and we did not see many older women. As Rupinem's daughter Martini said: "Only *simbah* Arto, who lives alone, does her shopping at the market". We believe that shopping is one of the first IADL activities that are passed on from the older mother or mother-in-law to the daughter(-in-law).

9.3.3 Implications of distant children for daily care

The hypothesis is that when children migrate to earn a living at a large distance from their parents, these parents have difficulty providing for their daily care if they attain old age. Especially those older parents that lose all children to migration should experience problems. However, only few older persons appeared to need help from others with the personal or instrumental activities of daily life. Twelve respondents need help with the ADL. Most of them receive help from a coresiding daughter or wife. One respondent receives help from a non-coresiding daughter-in-law and granddaughter who lives next door. Sixty-two different respondents receive help for at least one IADL. Most of them receive help from a co-residing daughter or son. Some respondents receive help from a non-coresiding child, other kin or neighbour/friend who live in the same village. Hence, most daily care is still provided by children who usually live together with their older parent(s) or live in the same village.

The large distance at which some children live does not seem to have implications for the providers of daily care to older persons. Most care is still provided by coresiding children. We did not find a significant difference for respondents who (also) have children living in the same village. Just as many respondents with or without non-coresiding children in the same village receive help for the IADL. Nevertheless, we did find a significant difference for respondents who do not have children living further away. Respondents who do not have children living outside the Special Region Yogyakarta on Java receive most IADL support. This may imply that only older persons, who can receive support from children living close by, respond that they need help with the instrumental activities of daily life. Older persons who would like to be helped but only have children living at a large distance, may not confess to need help with the instrumental activities of daily life.

9.4 Case studies

In this section are presented case studies that show how the care for older parents is changing. The case of *simbah* Rono shows how hard life can be for an older woman who migrated for work to Jakarta and whose children still ask for financial help despite the norm that children should take care of their older parents. The case of *simbah* Ngatinem's family describes the dilemma for parents, who choose to have one child and invest much money in her education, and the insecurity that it causes for their care in the future.

9.4.1 A case of labour migration and parental support: 'Scratched off by my child'

Simbah Rono (65) is a small trader in Jakarta. She purchases the merchandise in her birthplace. She divorced when she was young and has two children who still live in the village of Kebonagung.

"Previously I was a small trader (*bakul*) in the mountains, but the proceeds were little and not enough to fulfil the daily needs. At that time I worked alone to fulfil the daily needs of my family, because I was already divorced from my husband. I was a small trader in Wates for five years, but because the proceeds were also only small I returned here again. Then my nephew who worked as a pedicab driver in Jakarta said to me: 'Aunt, if you want to trade in Jakarta you can make much profit when you buy the food products here and sell them cooked in Jakarta'. I was interested and wanted to follow my nephew. The people here said: You cannot read or write. You cannot talk the Indonesian language. Why do you dare to go to Jakarta?' But I decided to go to Jakarta. It was the *Gestok* period [the time of the alleged communist coup d'état in 1965]. My child who lives in Jakarta now was still young, still at the secondary school (*SMP*). There were not yet people from here who went to Jakarta before.

When I went to Jakarta for the first time I was silent, because my nephew went to the market everyday. I waited at home and did not dare to go to the neighbours, because I could not speak Indonesian. I was silent in the house like confused people, like *Togog* [a *Wayang* character that is stupid - assistant's explanation]. There was a neighbour who often saw me only being silent in the house who called me to visit her. She was from Purworejo (Central Java), so we could speak Javanese. The neighbour said: 'When you are in Jakarta do not only be silent'. So I offered to help her to make rice flour and she gave me commission in rice and corn, not money. I felt happy (*senang*) because the money that I had brought was almost finished.

Because I was bored at home, I tried to sell *nasi pecel* (a rice dish with blanched vegetables and peanut sauce) walking around in the quarter (*kampung*). But I did not yet know the way and I could not yet speak Indonesian, so I did not sell much and I got lost. My house was in *kampung* Ratna, but I returned to *kampung* Minangkabau. I knew that it was the wrong street, but I did not dare to ask, because I was afraid that people would not understand Javanese. Although there were many people I was just silent and prayed: 'Hopefully I will safely manage to stay alive'. Then I heard a schoolchild who spoke Javanese with a friend and I asked that child: 'Nak (child), I want to go home to *kampung* Ratna but I do not know the way. That child was shocked and said: 'Aduh *simbah* (oh old woman), you are lost and very far away! This is *kampung* Minangkabau. Later tonight I will go to *kampung* Ratna. When *simbah* wants to, we can go to your home together.' I liked that and I just came home at nine o'clock in the evening. My nephew was very confused, because I should already have been home at five o'clock in the afternoon.

From that time on I was taken to trade *nasi pecel* at the market. Because I still could not speak Indonesian, I asked a rice trader who came from Tegal (Central Java) to teach me Indonesian. She said: 'When there are people coming and want to buy then that is called *tuku*. When you ask how much, that is *pinten*.' So, when there were people coming who wanted to buy and I asked how much, she answered: '*sepicis* (one piece)'. I was still confused. I said to the rice trader: 'Help me? I do not understand. You talk and I will just sell.' When I could speak Indonesian, that rice trader said: 'Do not sell here if you want to earn much money, but sell there in front of the Gembira cinema. There are many people. Every day it is crowded.' So I moved to sell in front of the cinema. I traded until seven o'clock in the evening. Then I went straight to the market to buy ingredients and prepared it for the next morning at home. In the

morning I cooked the rice, made *pecel* and noodles (*bakmi*). When you do not have the talent to become rich it is your fate not to be rich. So I will not be rich. While that nephew of mine is rich and lives in Semarang.”

Nowadays *simbah* Rono buys food products in the village and sells them in Jakarta. She tells how she does that. “I send the trade goods in packages by bus to Jakarta on Tuesday. I go by bus to Tungkak (Yogyakarta) and by train to Jakarta on Wednesday. So when I arrive in Jakarta the packages are already there. Then I take a horse car (*andong*) to the place for packages. The costs are approximately Rp 20,000 for the packages, Rp 5,000 to pay the carrier... the total costs together with the expenses for the train can be Rp 50,000. I had planned to go home on Sunday, but I did not yet receive all the goods. So, I will go home on Wednesday. I have just bought cassava flour (*tepung gaplek*), chips (*emping telo*) and a specific kind of coconuts (*kopyor*). The price for *kopyor* was Rp 5,000 per piece and I only got seventeen. I do not yet know for how much I can sell them, because before I could buy them for Rp 3,000 or Rp 4,000 and sell them for Rp 5,000. Later I will pack these goods, while I will take the eggs from *kampung* chickens and salty eggs (*telur asin*) with me in the train. I already have people who provide these goods for me. So, when I go to the market, I entrust money to a small trader to look for trade goods. Later when everything is there, I just pick them up. When I don't do it like that, I would not get trade goods, because it would be sold to people who go to the market every day.”

When we ask *simbah* Rono where she plans or wishes to stay when she is old, she answers: “Later when I am old I want to stay here [in the village of Kebonagung]. The planning is that I stop and not trade anymore after *Lebaran* (day of celebration at end of fasting month). Actually, my child in Jakarta has already said if you do not need to work just stay at home. But I do not want to only sit and wait for what my child gives. When I am here I do not like it because then my other child asks for money. They have to pay Rp 29,000 for school costs and Rp 4,000 for an identification card (*KTP*) photo. My child here then asks me for money, because she⁶ does not have work. Before she worked at the school, but now not anymore because there is no work. Her spouse works as a construction labourer in Yogyakarta and I often think (*pikir*) why am I the one who is 'scraped off' (*dikerek-kerek*) by my child then? Why does she not ask her older sibling-in-law or parent-in-law? The older sibling of her spouse is the one who has the shop over there and his parents are also rich. If she asks them they would have money, because they can sell anything if they do not have it. But my child does not want to, she 'scrapes' me then. I have also often advised my child to sell whatever she has when she does not have money. For example when she needs money to pay the school she could sell the bicycle. I also said this often to my child in Jakarta, but she said: 'When I do not ask mother, who can I ask again?' In fact, I also feel sorry for my child because she does not have work, does not have money and so she has to ask for money. So she is often angry at her child and spouse, because everybody asks for money which she does not have.”

At the end of the interview *simbah* Rono said the following about taking care of relatives: “From the past until now it was always difficult. I am the first child. So, from the time that I was young I already had to help my parents and work for the livelihood of my parents and younger siblings. (The mother of Satin [researcher's neighbour] is my younger sister.) After I grew up, married and got two children, I divorced when they were still very young. My ex-husband remarried and has six children, but I do not feel angry or resentment; I am good with my ex-husband and his wife.”

⁶ We do not know whether *mbah* Rono has a daughter or a son living in the village, because the Indonesian term *dia* in the interview transcript does not refer to sex. We have chosen for 'she' for the reason of readability.

9.4.2 The dilemma of putting all your eggs in one basket: 'We have not yet thought about future care'

The older persons who live together with a child can be relatively assured of being taken care of in the future when they cannot take care of themselves anymore. We tried to discuss the future with the respondents who do not live together with a child or whose children have all migrated. Most of them responded that they had not yet thought about it, let alone discuss it with their children. Most of them still wanted to live on their own as long as they can provide for their daily needs. They only wanted to live with a child when they become older, less strong and are not able to work anymore. Then they will think about what to do further. Only a few said that they would follow a child who lived in Jakarta. Others emphatically did not want to follow a child in Jakarta, because there is no one at home during the day and they cannot go their own way as easily as in the village.

The situation of having children living far away is new for the parents. This makes them uncertain about their support in the future. Besides, Javanese farmers live by the day and they are not used to planning many years ahead. Parents just do not know what to expect from their children, when they do not live in the same village anymore. The following fieldnotes shows that we could only touch on the problem of elderly care in the future. These fieldnotes all concern the same family, the family of *simbah* Ngatinem (61) with whom we stayed in Giriwungu. She lived together with her husband Radiyo (71), daughter Rupinem (40), son-in-law Marjo (45) and granddaughter Martini (16). Her life history is presented in Chapter 6.2.1 and the genealogical diagram is presented in Annex 6.2.

In the evening our neighbour *mbak* Sudiya dropped by. My landlady *Ibu* Rupi and she were looking at the photographs of the time that we carried out the survey. While I was checking some facts about the household composition of Rupi's mother, *simbah* Ngatinem, in the past, they put forward that they both only have one child. I asked why. Sudiya said that she still wants another child when her daughter Surani is old enough and that Rupi is scared to become pregnant again. Yesterday Rupi also said that children cost so much nowadays, because they go to school. She would not know how to come up with the money if they have more children. [...] Sudiya said: "Ya, how shall it be when they [*Ibu* Rupi and *Pak* Marjo] live here alone and their only daughter Martini goes to work in Jakarta? Sad indeed!"

Fieldnotes Giriwungu, 17 June 1997.

Martini goes to the higher secondary school (*SMA*) in Wonosari, where she also rents a room on weekdays. It is pretty special that she does the *SMA*. In the hamlet of Petung most children stop after finishing the lower secondary school (*SMP*). Martini does not yet know what she will do after finishing school, or whether she will stay in Giriwungu or live somewhere else. She has not yet thought about it...

Martini returned home with the message that she found a new boarding room (*kamar kos*) for Rp 80,000 per year. The reaction of her father *Pak* Marjo was "Wah, expensive" because it is twice the price of last year. But then she had a room made of plaited bamboo walls through which the wind always blew and only two bulbs of five and ten Watt by which she could not

study. I asked Martini whether the yield of mainly cassava and peanuts would produce enough money and she thought it would, because the rent can be paid per month. They will sell an animal if there is no other way.

Fieldnotes Giriwungu, 28 June 1997.

In the evening we were teasing Martini who could not accomplish the one-hour walk to the field, while they had expected that I would be the one who would give up.

Her father Marjo: "Children of farmers are not brave to go to the field. [laughs] She is a school child."

Martini jokes: "Yes, a good scholar". [everybody laughs] [...]

Neighbour Sudiya: "When the children ask anything, we have to give. Ask for money, give. That is why they are spoiled, *mbak*. There is only one problem..."

Martini: "Parents do not have anything".

Researcher: "Yes, because their children have everything. [everybody laughs] A very expensive boarding room..."

Martini: "Not (*nggak*)." [laughs]

Marjo: "School fee is also expensive..."

Research assistant: "Food in Wonosari..."

Marjo: "Requests for money..."

Researcher: "For books, new shoes, [school uniform] blouse..."

Marjo: "When you are not intelligent in the future, how will that be? Much money is already spent." [laughs]

Martini: "That is the risk of the parents, not the child's mistake."

Marjo: "How to look for that care? [laughs] She only learns since elementary school." [laughs]

Sudiya: "Tomorrow the responsibility for the parents will be the same. [Children] return the care when they [parents] already become old."

Martini: "Tomorrow I will only put you in an elderly home." [great hilarity]

Researcher: "Ooh, there are not enough elderly homes here."

Martini: "That is my problem in the future..."

Fieldnotes Giriwungu, 30 June 1997.

9.5 Conclusion

Regarding the specific hypotheses and research questions formulated, the main findings can be summarised as follows. Most of the older persons in our study villages live close to (some of) their children and hence can still receive support from them. However, a large majority of the respondents does not need help with the personal and instrumental activities of daily life, because they can still perform them without difficulty. Mainly a coresiding daughter helps the very few respondents who need help with these activities. Older people appeared to have a weak preference for coresidence with a daughter, although older mothers have a preference for coresidence with sons.

We were unable to prove the hypothesis that the poor village of Giriwungu experienced more out-migration of the younger generation than the more prosperous village of Kebonagung. Respondents from Giriwungu more frequently live with a

child, have at least one other child living in the same village and have several children living in the same village. Neither could we prove the hypothesis that the city of Yogyakarta and the other area on Java including the capital Jakarta are larger pull factors for the people in Giriwungu than for the people in Kebonagung. The distance between and the different economic situation of these villages do not have an important effect on the out-migration of children to other areas on Java. Nevertheless, elderly households in Giriwungu have significantly more children who migrated to other areas in Indonesia as a result of transmigration projects. Elderly households in Kebonagung have significantly more children who (temporarily) migrated outside Indonesia. These children usually send large remittances back to the elderly home.

The distance at which children live from their parents does not (yet) have implications for the daily care that older parents receive. Most care is still provided by children who usually live together with their older parent(s) or live in the same village. However, we found a small indication that respondents do not express that they would like or need to be helped when they do not have children living close by. It seems as if they tend to claim that they can perform the personal and instrumental activities of daily life themselves when there is nobody who could assist.

The case studies show that having no child(ren) living nearby is a particularly new problem to which the people not yet know how to react. Parents had usually not thought about what they would do to provide for their daily care in the future. Until now there are still children who take care of their parents, but the generation that only has one child is insecure about their future care even when they have invested a lot in the child's education. The older persons who have migrated themselves to earn a living in the city, sometimes are asked for money by their children. These older persons feel more closely-linked to their village of birth. They plan to return, even if they do not know where to live or who will take care of them.

10. Support relations in and beyond the household¹

This chapter describes the material, emotional and social support that older persons receive from or give to relations in and beyond the household. The material support consists of monetary support and goods provided to older persons individually and to the whole elderly household. For these kinds of support we analysed the role of children living at a large distance from their older parents. Specific cases of claims to financial support are described too. The emotional support consists of advice, trust and social talk. The possible role of distant children for emotional support of older parents is discussed as well. Additionally, we present the social support provided to the older person and the social activities in which older people participate. The main social networks are illustrated with cases. Finally, two case studies show the important social function of several traditional activities.

10.1 Material support

Material support consists of monetary support and support in goods. In this section we describe the quantities and sources of money and material goods given to the elderly individual and household.

10.1.1 Money

We studied the monetary support at the individual and household level during the year preceding the survey. It was often not very clear to which member of the household the monetary support was given, and if it was given to the oldest member then it was often spent on basic needs for the whole household. Therefore, we did not ask the older persons what amounts of money they received but only if they had received money at all. We also asked them whether they provided monetary support to others themselves. We asked a household member of the older person about the amounts of money that the whole household received.

Almost half of the older respondents (N=355) receive monetary support individually (43.1%). On average they receive money eighteen times a year, which is about every three weeks. Place of residence has a strong significant effect on the number of sources of money. Respondents in Kebonagung receive money almost twice as often and from more sources than respondents in Giriwungu². Since Kebonagung has

¹ Parts of this chapter, in particular the sections 10.1 and 10.2, have been published in Keasberry (2001).

² The numbers of monetary support sources were categorised in nought, one, two, and three to five sources. The test scores were for the variable sex $\chi^2(3) = 2.5$, $p=0.478$, age group $\chi^2(6) = 5.2$, $p=0.519$ and village $\chi^2(3) = 23.9^{***}$, $p=0.000$.

more economic possibilities, the support providers probably also have more access to money in this village. The table in Annex 10.1 presents the sources of monetary support to older persons individually. Children are the main sources for monetary support and are either living within the household (32.9%) or beyond (43.3%). Sons provide a larger proportion of the monetary support to older parents than daughters.

We also asked the older respondents (N=355) to whom they gave monetary support during the last year. Fewer respondents give money (17.7%) than the number of respondents that receive money. Children are the main receivers of monetary support, daughters (22.5%) as frequent as sons (22.5%). Other receivers of money are grandchildren (11.3%), other kin (30.6%) and neighbours or friends (5.1%). Older persons give money on average eleven times per year.

Half of the elderly households received monetary support from people outside the household with an average amount of almost 150,000 Rupiah a year³. Part I in Table 10.1 presents the average amounts of monetary support by gender, age, residence and household composition of the older respondent.

Table 10.1 Value of material support of money and goods given to elderly household per year by sex, age, residence and household composition

Material support given to elderly household	N=397	I Money (mean)	Sign. ^a	II Goods (mean)	Sign. ^a
Sex:			*		n.s.
- male	162	Rp 191,892		Rp 58,511	
- female	235	Rp 118,630		Rp 54,728	
Age group:			n.s.		**
- 55-64	148	Rp 236,331		Rp 62,263	
- 65-74	123	Rp 112,907		Rp 59,066	
- 75+	126	Rp 80,159		Rp 45,950	
Village:			***		n.s.
- Kebonagung	194	Rp 214,539		Rp 56,300	
- Giriwungu	203	Rp 85,438		Rp 56,246	
Household composition:			***		n.s.
- Elderly alone	15	Rp 81,533		Rp 25,857	
- Elderly and spouse	42	Rp 42,381		Rp 51,957	
- Elderly, spouse and others	191	Rp 217,113		Rp 56,781	
- Elderly and others	149	Rp 97,269		Rp 60,068	

^a Chi-square test: *** p<0.01; ** p<0.05; * p<0.10. The four categories of monetary support amounts and material support values were divided in 0; 1-49,999; 50,000-249,999; ≥ 250,000 Rupiah.

Gender affects the amount of monetary support received. Households with older women receive more frequently smaller amounts of monetary support than households with older men. This is similar to the findings of Evans' study on elderly people in the city of Solo. He noted that women especially did not receive transfers or

³ The exact mean monetary support that was given to the elderly households was 148,525 Rupiah. At the time of the Survey the exchange rate was 0.42 US\$ for 1,000 Rupiah. Consequently, the monetary support to the whole household of the elderly was 62 US\$ per year.

only received small amounts of money (1987: 6-8). The higher proportion of widowed women in our sample can cause this effect. The monetary support that married or widowed men and women receive, does not differ significantly⁴.

Place of residence also affects how much monetary support is received. Households in Giriwungu more frequently receive lower amounts than households in Kebonagung. In Kebonagung the average amount received is two-and-a-half times larger than in Giriwungu. Although the mean amounts of monetary support clearly decrease with age, we did not find a statistically significant effect of age.

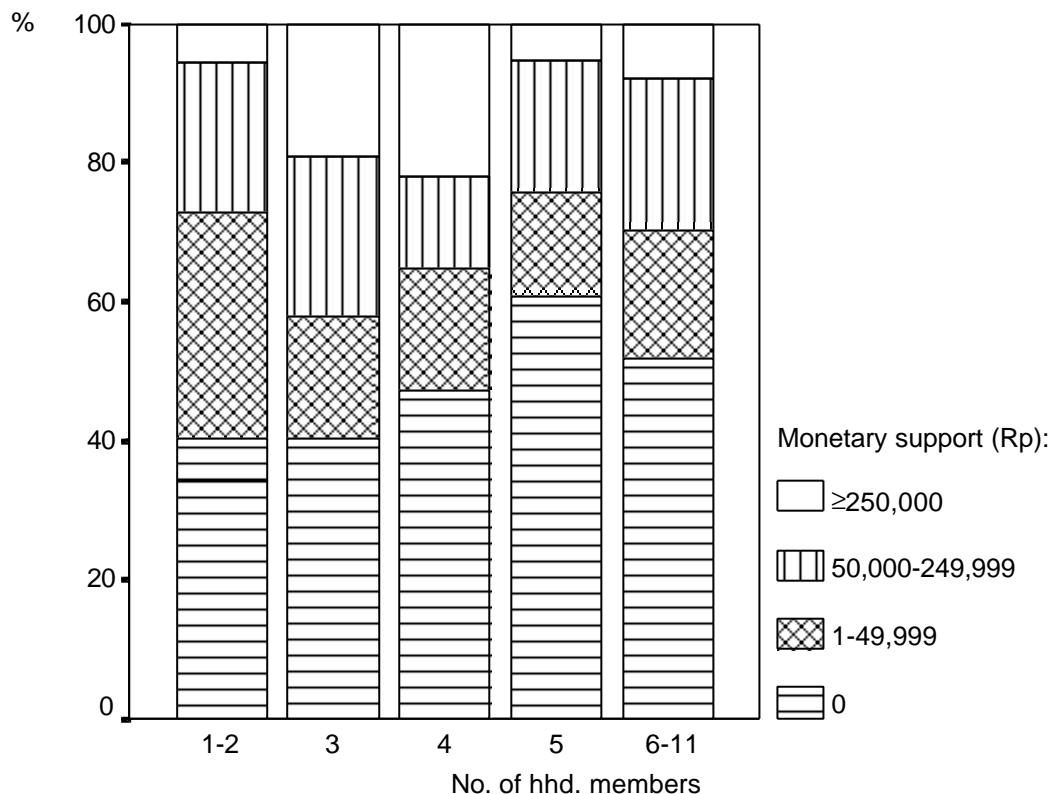


Figure 10.1 Monetary support by household size (%)

As can be seen in Table 10.1, the household composition has a strong significant, though not linear, effect on the amounts received from people outside the household. The majority of elderly persons who live alone (86.7%) and about half of each other household type receive monetary support. There is a relationship between the

⁴ Although the mean monetary support received differed for married men (Rp 215,448) and women (Rp 142,630), widowed men (Rp 95,118) and women (Rp 117,260), and there are much less widowed men (N=17) than women (N=96) in the sample, we did not find a significant difference in monetary support between these categories. The test scores were for married elderly $t(224)=0.787$, $p=0.432$ and for widowed elderly $t(111)=-0.210$, $p=0.834$.

composition and size of a household. We found a significant, though not linear, effect of household size on the received monetary support⁵. Figure 10.1 presents the monetary support by household size in categories. Smaller households tend to receive lower amounts of monetary support. This seems logical, because fewer persons in a household would need less support. However, households of more than five persons most frequently did not receive monetary support. Presumably, because there are enough household members to contribute to the household income.

The table in Annex 10.2 presents the sources of monetary support for the elderly households. Adult children, who do not coreside with their parents are the main providers of monetary support (76.0%). Other kin (12.1%) and non-kin (11.9%) are the other sources. The average amount per year is Rp 133,000 provided by children, Rp 11,000 by other kin and Rp 8,000 by non-kin.

10.1.2 Material goods

The questions about material support were asked in the same way as those about monetary support. Material support consists of food, clothes, medicines, animals, building materials, cigarettes and luxury goods such as a radio, television or scooter. First we describe the material support at the individual level and then at the household level.

The large majority of the older respondents (N=355) do not receive any material support individually (73.2%). A quarter of them receive material support from one to six sources, mainly consisting of food (14.1%) and clothes (11.5%). On average, the people receive material support 38 times a year, which is about every ten days. Sex and age have a significant effect on the number of material support sources⁶. Older women receive material support more often from generally fewer sources (32.5% from 1.5 source) than do older men (18.8% from 2 sources). People aged between 55 and 64 years receive the least frequent material support (17.2%). People older than 75 years have the highest frequency of receiving material support (40.0%) from the highest number of sources. It seems as if older women and the oldest elderly people are the most needy and therefore receive material support more often.

The table in Annex 10.1 presents the sources for material support. Adult children are the main sources of material support to the older parent individually, whether they are living within the household (31.4%) or outside it (47.4%). This is similar to the pattern of monetary support received, although differences in gender of children providing material support are less apparent. Of all the material support that is provided,

⁵ There was a significant difference between the categories of number of household members and the monetary support. The test scores were $\chi^2(12) = 29.7^{***}$, $p = 0.003$.

⁶ The number of material support sources were categorised in nought, one, two, and three to six sources. The test scores were for the variables sex $\chi^2(3) = 11.8^{***}$, $p = 0.008$, age group $\chi^2(6) = 16.3^{**}$, $p = 0.012$ and village $\chi^2(3) = 2.7$, $p = 0.448$.

daughters provided the largest proportion when within the household and sons provided the largest proportion when outside the household.

Half of the households (N=397) receive material support from outside the household with an average value of 56,272 Rupiah per year⁷. They mainly receive clothes and shoes (33.8%) or food (15.6%), and in a few cases building materials (5.5%), livestock such as a goat or cow (1.6%), luxury goods (1.3%), tobacco products (1.0%) and medicines (0.8%). Part II in Table 10.1 presents the average value of material support of goods per year according to gender, age and residence. The material support values are only significantly different for the age of the respondents. Becoming older has a positive effect on the frequency, but a negative effect on the value of the material support. Households with members aged between 55 and 64 years less frequently receive material support (37.8%) with an average value of approximately Rp 62,000. Households with members aged older than 75 years most frequently receive material support (57.9%) with an average value of approximately Rp 46,000.

The table in Annex 10.2 shows that the sources for material support from outside the household are also mainly the children. About three-quarters of the households receive material support from non-coresiding children (76.3%) with an average value of Rp 30,833 in the previous year. Very few households receive material support from other kin (7.4%) while its value is not substantial (average value of Rp 1,000). Only 16.3% of the households receive material support provided by non-kin, especially project aid from Non-Governmental Organisations (NGO)⁸, with an average value of Rp 18,050. The households in the poorer village Giriwungu receive material support from non-kin (12.3%) twice as frequently as the households in the more prosperous village Kebonagung (6.2%). However, the total value of the material gifts does not differ significantly between the villages as is shown in Table 10.1.

10.1.3 Implications of distant children for financial support

We expected that older parents who live at a large distance from their children would experience more difficulties for daily care, but that the children that had migrated would financially support their parents more by sending money home. Table 10.2 presents how the proximity of the children relates to the financial support given to the elderly household.

⁷ The material support that the elderly households received in the previous year had a mean value of US\$ 24 (see exchange rate in note 3).

⁸ The NGO aid consisted of projects to improve the living conditions by building water tanks, breeding livestock etcetera particularly in Giriwungu.

Table 10.2 Proximity of children and value of monetary/material support given by non-coresiding children to elderly household

Elderly parent(s) with ^a	N=397	I		II	
		Monetary support (mean)	Sign. ^b	Material support (mean)	Sign. ^b
Coresiding children:			n.s.		n.s.
- No	95	Rp 140,174		Rp 31,705	
- Yes, at least one	305	Rp 130,685		Rp 30,559	
Non-coresiding children in same village:			***		***
- No	199	Rp 117,628		Rp 17,503	
- Yes, at least one	198	Rp 148,361		Rp 44,231	
Children in D.I. Yogyakarta (55/50 km):			***		***
- No	258	Rp 115,533		Rp 29,497	
- Yes, at least one	139	Rp 165,295		Rp 33,313	
Children outside DIY on Java (450 km):			***		*
- No	270	Rp 60,728		Rp 29,468	
- Yes, at least one	126	Rp 286,087		Rp 34,004	
Children outside Java (3,500 km):			***		n.s.
- No	298	Rp 97,559		Rp 23,241	
- Yes, at least one	99	Rp 239,505		Rp 53,687	
Children outside Indonesia:			n.a.		n.a.
- No	386	Rp 131,304		Rp 31,479	
- Yes, at least one	11	Rp 190,909		Rp 8,182	

^a The nine categories of the children's living distance (see Table 9.3) are recoded into these six separate categories. The estimated maximum distances to Kebonagung/Giriwungu are presented between brackets. The categories are not exclusive. An elderly parent can have at least one coresiding child and one non-coresiding child in the same village and one child in DIY and so on.

^b Chi-square test: *** $p < 0.01$; ** $p < 0.05$; * $p < 0.10$; n.s. no significant difference; n.a. not applicable, because the cell filling of expected count is less than five. The four categories of monetary support amounts and material support values were divided in 0; 1-49,999; 50,000-249,999; $\geq 250,000$ Rupiah.

The fact that respondents live with a child does not affect the mean value of monetary or material support that they receive from children outside the household. Parents with or without coresiding children receive on average Rp 135,000 of monetary support and Rp 31,000 of material support a year. However, respondents who have at least one child living in the same village receive significantly higher values of monetary and material support than respondents without a child in the same village. For children who live close to their parents it is probably easier to support them financially. Proximity also has the opposite effect. Parents with children living at a larger distance receive significantly higher amounts of money from their children than parents who do not have children living far away. This supports the hypothesis that parents, who have children that have migrated, are supported more with money than parents, who do not have children that have migrated. The effect of distance is weaker for material support, probably because it is easier to send money than to send material goods.

10.2 Claims to financial support

This section provides a description of all kinds of claims to financial support based on qualitative data. The first sub-section presents how the situation should be according to the Javanese norms, where older parents are living with a child and her/his family. Responsibilities and power are gradually transferred from the older to the younger generation. In this situation, the coresiding child takes care of the daily care and livelihood for her/his older parents as they become older. The second sub-section describes several situations that differ from the usual situation, because the children are absent from the elderly household. Children are absent because they have moved away for work or because they do not fulfil their obligations of elderly care. The parents of these children experience more difficulties in providing for their daily needs when they become older. The third sub-section shows the rare situation of an older person who is financially independent because she receives a pension. She finds that her children do not take care of her, but even claim financial support from her, since they think that she has enough. The last sub-section describes claims to monetary support from a wider range of relatives. According to the Javanese norms, one is obliged to help relatives in case of calamities. These claims to financial support can be a heavy burden on its provider.

10.2.1 Intergenerational transfer of financial responsibilities

As with the situation in which older household members pass on responsibilities for the activities of daily life to the younger ones, responsibility for the finances is also passed on, but at a much slower pace. First, the physical handling of money (i.e. for shopping and selling at the market) is passed on. Then the responsibility for administrative matters outside the household such as the official household headship, payments of tax and electricity bills are passed on. And much later (some respondents said after they die) the power over money is passed on within the household.

The following case illustrates this. The household consists of *simbah* Niti (±90+), daughter Sukini (60), son-in-law Wasimin (63), granddaughter Ngatini (39), grandson-in-law (44), great-grandson Martadi (14) and great-granddaughter Retno (6) of a (grand) son who lives in Bogor. The genealogical diagram of *simbah* Niti's family is presented in Figure 9.2.

“Nowadays Ngatini manages the money, because she sells the yield at the market. Wasimin and Sukini do not manage the money anymore, because this responsibility has already been taken over. They changed that when Wasimin and Sukini became older. Ya, since they have grandchildren. But only the management of money and sale of yield are passed on, Wasimin and Sukini still hold the power. Ngatini and Siyo [her husband] just carry out instructions. [...] The meaning is like this: although the power to handle the money and expenses are given to Ngatini and Siyo, Wasimin and Sukini still hold the power over this household. [...]

Someone just connects everything together, miss. [...] Although they are not managing the money, the source of each income has to be accounted for. From yield so-and-so much, for daily needs so-and-so much, for governmental services, for the neighbours who plan to have this ceremonial feast (*hajat*) that much. Like that. So, everything is reported to Wasimin and Sukini. [...] I think that when people are Javanese and farmers, they manage the money like that.”

Simbah Niti (±90+, female, retired), Giriwungu.

Simbah Niti is the oldest person in a four-generation family and her case probably reflects the situation of how it should be according to the Javanese norms. She does not have any responsibilities herself for earning a living or taking care of household chores anymore. Her granddaughter Ngatini is even agitated that *simbah* Niti insists on boiling tea water herself while she can get it from her (grand) daughter or neighbours. The daughter Sukini and son-in-law Wasimin, who still work in the fields, have already delegated the physical handling of the money but still keep control over finances. Wasimin is the official head of the family. The granddaughter Ngatini and grandson-in-law Siyo work in the field, carry out (the orders for) the sale of yield and buy daily necessities, which have to be reported to their parents(-in-law). Gradually they will get more responsibilities within and control over the household.

10.2.2 Absence of children and poverty

According to Javanese norms one child should remain and live with the parents and take care of them. The cases in this sub-section all deviate from this norm, because the children are absent from the elderly household. There could be no care given by children, because (some of) the children have migrated for work and live at a long distance from their parents. Other reasons are that the child's own economic situation is difficult, the relationship with the child is disrupted, or a combination of these reasons. We will shortly describe these cases, which reflect an increasingly deteriorating economic situation.

The first case describes the situation of the older parents Yoso (65) and Giyem (±55) who live with their daughter Sumarni (35) and granddaughter Anisa (6) in the village of Kebonagung. Their son-in-law is absent. He works and lives with his own parents in Jakarta. The genealogical diagram of *simbah* Yoso's family is presented in Annex 6.4.

The daughter Sumarni used to live with her husband Sanukman in Jakarta. He worked as the guard at his boss' house, and they lived in that house too. They could not afford to rent a house of their own after this job had ended and they had to live with Sanukman's parents. Sumarni returned to her home village, because her mother-in-law used to talk gruff to Anisa. Besides, she said that it is much easier for Anisa to go to school in the village than in Jakarta, where she could not even play outside, even though the elementary school was opposite their house in Jakarta.

Simbah Yoso and Giyem still have a small plot of rice-field and they own a cow, which Yoso feeds every day. Two to three years ago, *simbah* Yoso stopped working as a labourer. *Simbah* Giyem takes care of the household chores and works as a farm labourer sometimes. They are completely dependent on their daughter Sumarni for monetary support. *Simbah* Yoso: "At this moment I do not have any money. I ask my child for everything, like payment of tax, payment of electricity bills. My child pays it from what she earns with crocheting and from what her husband sends." Sumarni also works as a labourer at the construction project of a dam in the river, which is heavy work.

Simbah Yoso (65, male, retiring farmer), Kebonagung.

This household can still provide for their daily needs and although *simbah* Yoso is not strong, he can still take care of his cow every day. They have not yet thought about the future when the older parents become frailer. Then it will probably become more difficult for Sumarni to care for her parents in Kebonagung and for Sanukman to care for his parents in Jakarta. A double burden resting on the shoulders of a single couple, who do not know whether and when they will ever live together again.

The second case describes the situation of *bapak* Dwijo (64) and *ibu* Marmi (55) in Giriwungu. They do not live together with a child, because both their sons migrated to Jakarta for work.

Bapak Dwijo was a teacher until 1965. From then on he had to farm for a living. For two months he has cultivated the field of his older brother-in-law. He is an agricultural labourer (*buruh*) and trades a little at the market (*dagang*). They own one goat themselves and he takes care of a goat (*nggaduh*) that is owned by the village head. *Ibu* Marmi has a small shop (*warung*) at home with little stock and a small clientele. They have two sons who live together in Jakarta. The eldest son is married and has a son. Although the eldest son is a teacher, they both work as street sweepers. *Bapak* Dwijo and *ibu* Marmi used to have land of their own, but they sold it for the education of their sons. *Bapak* Dwijo about all his jobs: "My life is like a nomad; move, move. There is a saying 'where there is sugar ants follow'. I do not have a pension because I did not save money."

When we asked *bapak* Dwijo who is helping him, he did not mention his children specifically but friends, close neighbours and family. "People have to help each other (*tolong-menolong*). A life must be with help from other people. Helping with physical activities and mental help. Firstly, physical help (*gotong-royong*) to make a house, a helping hand in the field with the harvesting of dried cassava tubers (*gaplek*), cassava (*singkong*). When we see that a neighbour is busy or has difficulties with work, we help (*membantu*). Or for example when we are not strong, we ask help from other people. Secondly, help with thinking is the most important thing. It is important that there are people who remember the right way when we forget something that will cause a mistake. Thinking to smooth life. For example: money, food, and a helping hand. To borrow money; *arisan*. For money needs there are now many community organisations. So, we discuss or talk with friends about how a problem can be solved. For example, he suggested joining a project to get money fast while waiting for the coming harvest that is still a long time away.

The social circle (*lingkungan*) and family (*keluarga*) help physically. The social circle consists of close neighbours. However, even when family is far away and do not meet each other for one year, they still feel close. Far away in the eyes, close in the heart *fauh di*

mata, dekat di hati). All family is close. When they are not close, that is wrong. I have many friends. You have to have many friends. Many families will make our livelihood strong. Although far away, a family needs to keep in touch constantly. More important are the neighbours because we meet them everyday, afternoon and night, and they are closer. Everybody who lives in the social circle is a friend.”

When *bapak* Dwijo's children were born he wished that they: 1. Would become children who were useful to family, nation and land, 2. Could take good care of him and *ibu* Marmi when they are old, 3. Would become pious Muslims. Although his sons live in Jakarta, *bapak* Dwijo still believes that they can take care of their parents: “There must be a way. I do not know yet how we will be taken there [Jakarta], I do not know how we are taken care of, what is important is that we will not be neglected. I like Jakarta because it is a city. Now, we are still happy here. The proof of that is that I have not yet left for Jakarta, because I am still strong. We live happy here and do not make difficulties for the child for too long. I will leave when I am not strong anymore. Meaning physically not able to work alone. I wish my child come round for me and his mother. I would surely leave to Jakarta.” [...] *Bapak* Dwijo and *ibu* Marmi have already discussed their old days with their sons. “We have already been ordered to live in Jakarta, but we do not yet want to because we are still strong.”

Bapak Dwijo (64, male, petty trader and labourer), Giriwungu.

Bapak Dwijo and *ibu* Marmi invested a lot in the education of their sons, which resulted in the present situation where they no longer own land to produce food. The sons both live far away from them and despite their education do not earn much as street sweepers. The older parents try to fulfil their needs by all kinds of work and receive help from friends, close neighbours and family. Hopefully, their sons will take care of them daily and support them financially in Jakarta when they become weaker.

The third case describes the situation of *simbah* Kromo (±62) and Tangsir (±68), who live alone in a small, poorly looking house of plaited bamboo (*gedek*) and non-plastered walls. They have a daughter Ngatijem (45 years), who lives with her husband's family in Karangrejek (Imogiri) and a son Tuginin (40 years), who lives with his wife and children two streets away. They used to live with Tuginin, but do not anymore. The genealogical diagram is presented in Annex 7.1.

When the son Tuginin graduated from the secondary school, he left the village to work as a household servant in Jakarta. When he returned, he married and lived together with his parents in their house. Nowadays Tuginin works as a pedicab driver in Yogyakarta and lives in the good-looking parental house. *Simbah* Kromo and Tangsir only moved to their present house six months ago, because they say they like to live closer to the road [which is only 500 metres difference]. Neighbours told us that when they still lived together Tuginin was fighting all the time with his parents and even has fought physically with his father. It was known as a very noisy household.

Simbah Tangsir needs expensive medical treatment for his leg and *simbah* Kromo has to find money for it all by herself. She asked her daughter Ngatijem who works at the construction for money, but “if Ngatijem has eaten, the money is already finished”. The son Tuginin never helped them. “We asked Tuginin: ‘If we give you one thousand Rupiah would you bring your father for an injection?’ He did not want to... naughty (*naka*). He went working with his pedicab in Yogya. He is naughty, embarrassed that his parents are bad

[meaning poor]. His face is good but... Ashamed. He does not want to take his parents [to the doctor].”

When we asked *simbah* Kromo whether she has received or borrowed money from other people she denied it, but some family members who gave money came up indirectly in our conversations. Like the daughter-in-law Pamina who gives one or two thousand Rupiah sometimes. Nevertheless, *simbah* Kromo said that she never received money, because she can look for it herself, that when a child gives money she gives it to their (grand) father. The neighbours told us that if Pamina feels sorry for her parents-in-law and wants to give them money, she has to hide it from her husband Tugimin because he is naughty and cruel (*kejam*).

Their daughter Ngatijem seldom visits them, but their granddaughter Dina visits them three to four times a month. Dina also gave them 5,000 or 10,000 Rupiah “a hundred times” for the injections of *simbah* Tangsir. Dina also brings her grandfather to the doctor sometimes. “She borrows the motorcycle from her neighbour [to bring *mbah* Tangsir]. Smart. [She went to] school until the third class of secondary school. Now she is finished with school. She married already.”

We asked *simbah* Kromo where she will live when she becomes old and why she will not coreside with a child. “[We will live] here but when we have to eat we will ask a child. [We do not follow (*ikut*) a child because] there is no one who lives here [in this house]. Pity (*sayang*)! Now we look [for a living] alone. Later, when we are old, we will ask help from a child. Now we do not want to follow a child, because we can still take care of ourselves. Later when we cannot anymore, ask a child...”

Simbah Kromo (±62, female, small market vendor), Kebonagung.

Simbah Kromo and Tangsir have large financial debts for which Kromo's income is by far not enough. Their son should take care of them, but refuses to help them and has even driven them out of their own house. Now *simbah* Kromo and Tangsir can just keep their heads above water. Their daily care and financial support will be a problem in the near future.

The last case describes the situation of *simbah* Rejo (±72), who is a widow and lives alone. She is the poorest and worst off among our cases. *Simbah* Rejo has three children. The son Pahijo (46), who is a tailor and lives with his family in Jakarta. The son Wagijan (43), who is single and a pedicab driver in Yogyakarta. The daughter Parjinem (38), who was a supervisor until she married and had a child three years ago.

After *simbah* Rejo had returned from Jakarta (see Chapter 9.2.1.), she built a house in Kebonagung [in ±1978]. In the past the walls of the house were from plaited bamboo (*gedek*) and they changed them into brick walls. Her daughter paid for the material and *simbah* Rejo used the money that she saved in Jakarta too. Her son Wagijan built the house with the help of neighbours, friends and other villagers (*gotong royong*).

Simbah Rejo could not work anymore and Parjinem used to send Rp 10,000 every month or Rp 50,000 per three months with a postal money order until one year ago. Since Parjinem

already has a husband and child, she seldom sends money again. Until three years ago *simbah* Rejo still went to Jakarta to ask for money, but she does not dare it anymore.

“My eldest son Pahijo also sends money. Approximately 30,000 to 50,000 Rupiah, not a definite amount. He has the school expenses for his children and they have many children. Four of them already go to school. The expenses are high in Jakarta. For the first time in five years Pahijo came with his wife and two children to Jayan one and a half month ago. He gave me 100,000 Rupiah, which is already finished, because I paid the tax and bought all the gifts (*oleh-oleh*) for them to bring back to Jakarta. Palm sugar, soybean packages, red and white chips, mung beans, cassava, rice flour, soybean...”

Simbah Rejo officially lives together with her son Wagijan, but he stays in Yogyakarta most of the time. She is financially most dependent on him, but he is a very unreliable and irregular source of income. Therefore, *simbah* Rejo often has to buy food on credit. “Borrow, pay, borrow, pay...” Additionally, she collects dried banana leaves to sell for Rp 200 per pile. In the right season she can find four to five piles every ten days. At the time of our fieldwork the weather was too dry and she could only sell leaves once a month.

“Wagijan used to come home twice a week and give me five to ten thousand Rupiah if he had it. Sunday, Monday, Tuesday, come home. Wednesday, Thursday, Friday, come home. But he has not come home already for three weeks. I do not know if there is something important or not... I asked a friend of his to look him up and ask him to come home, but he did not want to come home until Friday. Wagijan gave this friend 5,000 Rupiah for his mother. When my child does not come home, I do not have anything.”

When we asked Wagijan why he did not come home for such a long time, he answered it was common that he only returned home once per ten days. At that time he stayed four days because he was tired and he did not know when he would go to Yogyakarta again. He did not own a pedicab, but rented it from a boss for Rp 1,200 per day. Sometimes his income was not even enough to cover these expenses. Every day he left at five in the morning and returned the pedicab at nine in the evening. Fortunately, he could sleep at his boss' place and did not have to sleep in his pedicab along the street. Wagijan could barely scrape a living for himself and it is a heavy burden to financially take care of his mother too.

Nevertheless, *simbah* Rejo herself does not think that care for older parents has changed much. “The care for parents is just the same now as it was in the past. Before, I took care of my mother-in-law here and my younger sister looked after my parents. Now, I am taken care of by my child. The only thing that is different is that in the past the child cared for the parent every day. And now I do not live together with my child every day, because he works in a different place. But in reality it is just the same, because in the past I left in the morning and came back in the afternoon because of the work. Because my child works far away now, I have to wait for the money from my child or if it is not yet there, I have to borrow money.”

Simbah Rejo (±72, female, retired), Kebonagung.

Simbah Rejo is financially dependent on her son, who is not home most of the time because he works and stays in the city Yogyakarta. He can hardly provide for his own needs, let alone take care of his mother. Her other children used to send money from Jakarta, but that does not happen regularly anymore. There is nobody around to care for *simbah* Rejo and that will soon become a problem.

10.2.3 Financial independence and insensitivity of relatives

This sub-section presents the case of an older woman, who is financially independent by means of a widow's pension. She lives alone after having many problems with her children, who seem to be very insensitive towards her. None of her sons (can) fulfil the obligation to take care of his mother. On the contrary, they all claim financial support from her. Figure 10.2 presents the genealogy of *simbah* Marto's family.

Simbah Marto receives a pension of 100,000 Rupiah per month. She can live on Rp 80,000 and save Rp 20,000 if her sons do not want to borrow money from her. She is financially independent and works just to pass the time. She farms a little next to her house and plaits baskets or mats from bamboo in the evening. *Simbah* Marto prefers to live alone after a son had broken down a large part of her house.

We asked her to whom she would go if she needed help. She answered: "I have never asked for help (*bantuan*) from anyone. Suppose that I need money but do not have it, I would not ask a child. I would just ask my own relatives. When they understand, it is good. When they do not understand, I will have to work myself. Last *Lebaran* I made a *slametan Nyewu* for my parents, because they had died one thousand days before. The *slametan Nyewu* for my mother was the reason why my child from Baturaja [Sumatra] came here. I did not ask my child for help. I looked for everything myself." We asked her why she did not expect other people to help, was it because they never did or because they should not. *Simbah* Marto: "Firstly, I never expect other people to help and secondly, there is no one who understands. They only ask [for support]." [...] *Simbah* Marto: "There is no help from lineage relatives (*kumpulan trah*)⁹. There is no one who understands. Everybody says: 'She receives money [from a pension]'. People far away [*trah*] say that and people nearby [children] say that. Nobody understands *simbah*. When relatives come they bring gifts, but when I visit them I take gifts too. It is exactly the same. I do not expect gifts from other people. My own child never gave [me anything], he only asks often."

Simbah Marto tells bit by bit how her (step-) children took advantage of her and how she moved from one relative to another after the death of her husband. It was very difficult to check these stories. But even if only some of it is true, *simbah* Marto's situation does not follow the Javanese norm that older people should be taken care of by their children.

Simbah Marto's oldest stepson Nuri was "very naughty" after the death of his father. He stole the pension letter and collected the money himself while he told his stepmother that she would not get it until five years after her husband's death. He also sold the plot of land behind the house and valuable assets like the *gamelan* musical instrument, a box with *wayang* puppets etcetera. *Simbah* Marto's parents had to send food like rice and soybeans, because it was so difficult to make a living. Nuri also withdrew money from her bank account and when she asked for it he answered: 'Instead of having to return the money, it is better that I die in hell'. *Simbah* answered: 'Yes, it is better that you die by lightning'.

⁹ *Simbah* Marto's grandmother was 'close' family to *Pak* Sri Sultan of Yogyakarta at the Kraton. Marto speaks of *trah* (lineage) when she means 'relatives' to indicate that she is a descendant from the Sultan. Since the Sultan had many concubines, there are also many descendants in various degrees and it usually does not influence the lives of the distant descendants. As *mbah* Marto said: "Although I have a relationship with the Kraton that does not mean anything when you live on the top of a mountain".

Once *simbah* Marto borrowed Rp 600,000 for her second stepson Guslan from the Pension Bank. He needed it for the wedding ceremony of a daughter. Every month *simbah* Marto repaid the bank Rp 36,000 from her pension until there was no debt anymore. *Simbah* Marto asked Guslan to return most of the money, but he never did. He only gave forty kilograms of rice to make a religious meal (*sedekahan*) for his deceased father *bapak* Guru on Saturday *Kliwon* in the *Ruwah* month. *Simbah* Marto's son Gusto asked Guslan for the rice. If he had not asked for it, Guslan would not have given it.

"Gusto [oldest son] is very crafty (*pinter*). Before, he borrowed money and a ring, but he has not returned them yet. If he had asked (*minta*) for it, I would have given as much as I could afford. When he asked to "borrow" (*pinjam*) something, then I expected that it would be returned. Gusto did that, because he is jealous of my other son Gusdi. He knew that Gusdi borrowed money and had not yet returned it." However, *simbah* Marto also said that none of her children help her, but instead ask her for help, except for Gusto. "Gusto is the only one who understands how to take care of his parent, because he gives me firewood and coconuts. He is also thoughtful. For example, he brought chairs, because I did not have any chairs and he did not like it that we [researcher and assistant] sat on the steps in front of the house the first time. Gusdi has many chairs [and lives nearer by] but he did not bring chairs."

Simbah Marto used to live with her son Gusdi, daughter-in-law Jini and grandson Eko until Gusdi became "crazy (*gila*)" and broke down her house last year. He reused the stones, wood and windows to build a new house at the other side of the road. He also ransacked the house and took things like the chairs and the case with documents. *Simbah* Marto was very disappointed in Gusdi's behaviour and said: "He talks like a cat who wants to claw. He shows contempt towards his parent(s)." She could not stay in her house anymore and made a round among a son in Sumatra, her younger sister Nakem and stepson/brother-in-law Nuri, her son Gusto, her youngest brother Pahijo in Kretek, and Nakem again. Finally, she returned home because village people had said that if she did not they would demolish the rest of the house also. Strangely enough just before she started to live on her own in the remains of her house, *simbah* Marto stayed a week at Gusdi's house to take care of Jini who had given birth to Bangkit.

Simbah lent Gusdi Rp 70,000 to enroll his son Eko in school. He promised to sell the television to pay her back, but that has not yet happened. *Simbah* often paid Gusdi money to buy water. Last year she gave Rp 100,000. Everybody in Gusdi's household uses the water from her tank. The water runs out fast, because it is used for the cow of Gusdi too. Yesterday he said to her: "Mother, the water is almost running out. Do you want to buy or what?" *Simbah* answered: "I will not buy water. When the water runs out, I will ask my neighbours at the east and south side." Then he bought a tank of water himself for Rp 25,000. *Simbah* said: "Usually I give money to help, but not yesterday, because I seek a way with him. My money, which he borrowed for Eko's school, is still on Gusdi. I use the way like this in order to get my money back. After this [tank] I will support half of the costs when we need water again. Like I did before." Although Gusdi financially disappointed *simbah* Marto often, she nevertheless said: "I just surrender to God, but I trust Gusdi for everything like tax and government administrations. Gusdi is already in charge of everything." He said himself that he is the head of the family, including her.

Simbah Marto's youngest sons Masriki and Masini live with their families in Sumatra. When she once visited Masriki he was concerned and said to her: "Ah, once *simbah* took care of me when I was young. Now you just stay at home, do not work anymore, but there is no one who takes care of you." At the time that she left every child gave her Rp 20,000. "I got much money from Sumatra. [laughs] From three children [including ex-stepdaughter-in-law Pajjem] already Rp 60,000!"

Simbah Marto can provide for her daily needs, but she has difficulties refusing people's requests for monetary support, which endangers her financial position. Direct refusal of a request goes against the ideal of harmony in Javanese culture. Hence, *simbah* Marto developed some strategies in order to keep her money for herself and to get back the money that she lent. These strategies are described in Chapter 11. Besides, she does not lend money to everybody. "I just lend money to my children or to people who are already familiar. Like Wagirah [close neighbour] to whom I usually entrust money to buy betel ingredients at the market. She borrowed Rp 5,000 for the school of her child before. I do not give money to everybody who wants to it. If I lent money to everyone, my needs would be neglected (*kapiran*) later. [...] I still have many needs. I will use the money to make a gravestone in Ngare (Kretek). My father's gravestone is not yet changed. It is still made of wood and I will change it to stone."

Simbah Marto (±65, female, retired with pension), Giriwungu.

The (step-) children of *simbah* Marto are not showing respect to their mother or acknowledge her authority, which they should do according to the Javanese culture. They do not have to support her financially since she is financially independent, but they could be more considerate towards her needs for daily care, practical support and not the least of all, her need for emotional support. They could show that they care for their mother by not diminishing her economic position and at least keeping their promises when they borrow money from her.

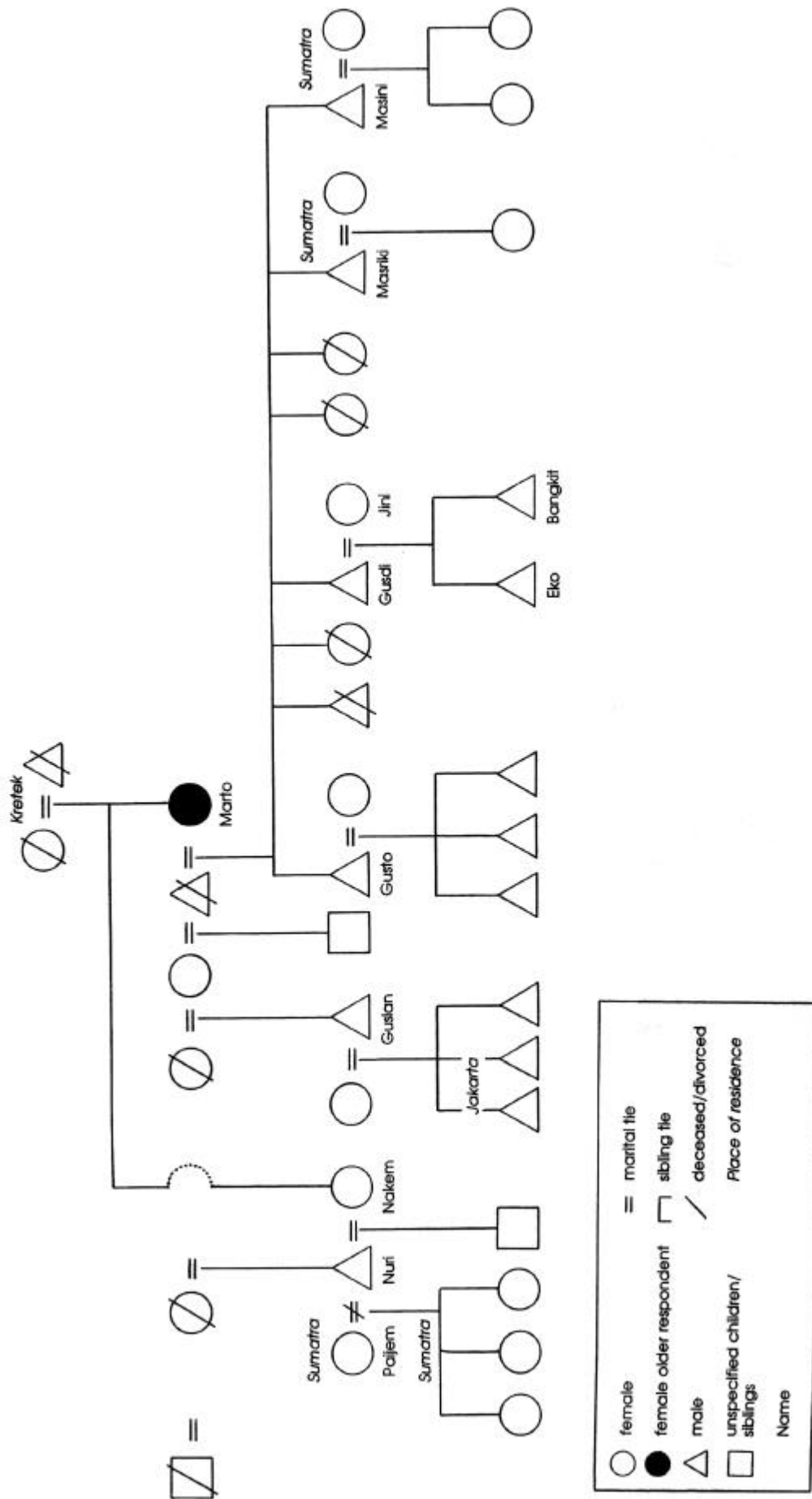


Figure 10.2 Genealogy of *simbah* Marto's family

10.2.4 Monetary support to relatives in case of calamities

Children should take care of their older parents, which is usually done by the child and child-in-law who coreside with the parent(s). Everyone is firstly responsible for their own household. However, when the need for support is very large then other relatives are supposed to help too. We asked *bapak* Marjo which relatives could ask for monetary support from him. He said every relative including grandparents, parents, siblings and children of both his wife and himself could ask for money. For relatives like uncles, aunts, nephews, nieces and so on it is not possible. Hence, one is financially responsible for the lineal descendants of the first degree. The following case illustrates this. The genealogy of *bapak* Marjo (and his mother-in-law *simbah* Ngatinem) is presented in Annex 6.2.

Bapak Marjo lives with his wife Rupinem, daughter and parents-in-law at their house. His older mother, *simbah* Reso, and father live with their son-in-law and two grandsons in their own house. *Bapak* Marjo's sister and *simbah* Reso's daughter passed away. Their oldest grandson lives in Bogor. We asked *bapak* Marjo whether his parents would ask for money when they need it. It seems they would first ask their coresiding son-in-law and if he does not have it they would turn to their son Marjo. *Bapak* Marjo: "They themselves take care of the small business like the sale of coconuts, goats, cows. I take care of big business like the sale of land, because I already farm on the land although the property papers have not yet been formally transferred. Their son-in-law cannot do that, because he is not equal and will not inherit land from them. He will inherit from his own parents in Girimulyo. For the inheritance I am equal to my parent's first grandchild." [...]

Not very long ago *bapak* Marjo's sister-in-law Karyati had to go to the hospital where she needed expensive surgery. We knew that he had financially supported them and asked him how that was arranged. He thought that was a strange question and the whole matter was not discussed elaborately. "I sold a cow, because Karyati was in the hospital. I gave them one million Rupiah without asking why they could not afford it themselves. If a relative quickly needs money then that will be arranged quickly. It was already certain that that had to be paid, so I gave it to them. I could not ask questions then. They manage the money themselves."

Fieldnotes Giriwungu, 23 July 1997

Not only the younger generation has to help the older generation. According to the Islam, parents are also responsible for the welfare of poor needy children even after their coming of age (Hammudah 'Abd al 'Ati, 1977: 200). The following case shows that parents will always help their children if they can. Figure 9.2 presents genealogical diagram of *simbah* Niti's family.

"*Pak* Wasimin [son-in-law] has already been one month and *ibu* Sukini [daughter] for one week in Bogor to take care of their son Mujiat. He had an accident with a factory car and broke his foot three months ago. The whole situation has already cost ten million Rupiah. Mujiat sold land for 4.5 million. His boss gave 500,000 and his family [Niti's household] gave three million Rupiah." Niti's granddaughter Ngatini tells that they had to sell two young cows and three goats. Now they do not have any livestock except for some chickens and she

wonders: "When we need money again that is for my son's school, how will we do that? I am being tested by God."

Simbah Niti (±90+, female, retired) about *bapak* Wasimin (63, male, farmer) and *ibu* Sukini (60, female, farmer), Giriwungu.

Claims to financial support are mainly focused on the members of the household or family of procreation. Children should take care of their older parents when they are in need. In case of calamities financial support can be claimed from a wider range of relatives, namely the lineal descendants of the first degree. Older parents should also take care of their needy children when they can afford it.

10.3 Emotional support

This section describes the emotional support that the older person receives from relationships beyond the household. The frequency of and sources for advice, trust and social talk indicate emotional support provided to the older person. Finally, we describe the implications of children living farther away on the availability of emotional support.

10.3.1 Advice and trust

To indicate the emotional support we asked to whom the older respondent would go for advice or whom s/he would take into confidence. Only a few responded to this question (N=15) and the responses did not differ significantly by gender, age or residence. The respondents mostly received emotional support from a neighbour or friend (27%). We also asked to whom the respondent gave advice or took into confidence. There was even a lower response to this question (N=2). Only a grandson and a co-member of an organisation were mentioned as receiver of emotional support from the respondent.

The interviewers might have put less emphasis on the above questions since it was asked in combination with the monetary and material support. The last subjects are easier to understand and to answer, which may have resulted in neglecting the part about emotional support. Another explanation can be that Javanese people do not like to talk about their personal worries and sorrows. Hence they do not ask for advice or take someone into confidence, not to mention tell an interviewer about it.

The next cases show that the concepts of advice (*nasehat*) and trust (*percaya*) have a heavier significance and are used in other situations than in Western cultures. We noticed that on the one hand people say that they have such a simple life that they do not need advice from or trust someone other than their spouse. On the other hand only people who have a higher status as determined by skills, education, occupation, wealth or descent say that they give advice.

Interviewer: "With whom do you exchange advice?"

Simbah Muh: "For what?"

Interviewer: "For example for important matters. If you want to discuss something important with other people with whom do you do that? Or if you do not know what to do with something important, who do you ask for advice?"

Simbah Muh: "I ask advice from my wife for important matters. When not with your wife, with whom else? What is important, is to talk with your wife. And then have a discussion on how to get a good solution."

Interviewer: "Whom do you take into confidence to discuss importance matters?"

Simbah Muh: "If it is necessary, it is only thought through with my wife. Never with other people."

Simbah Muh (58, male, palm sugar collector), Kebonagung.

"Old people never talk about advice. When we meet each other, we just say: 'I do not have chilli pepper. I do not have vegetables.'" [...] "I entrust everything to [my closest friend/neighbour] *nyai* Mangundrono. When I go to the field and my house is empty, then I entrust it to her. I would say: 'I entrust the laundry [to you], the house is empty.' Then later the laundry is taken into the house." [...] "For taking someone into confidence, there is no one. Never."

Simbah Ngatinem (61, female, farmer), Giriwungu.

Simbah Yoso said that he never received or gave advice to other people. He discusses situations of others with his friends from the Stable's group (*Kelompok Kandang*¹⁰) for example when someone had a fight. They discuss who was right. He never experienced problems with family himself. They are very harmonious (*rukun*). So, he does not need to discuss this with others. "For important matters, for example I talk to relatives so that they have a good relationship, and this avoids fighting (*cecongkrang*). One has to be good, patient, mutually co-operative (*gotong royong*) and mutually harmonious (*salang rukun*). I was never wrong with relatives for example about the ownership of land. Own a little, divide a little. Never fight. Most important is harmony."

To the question of whom *simbah* Yoso would take into confidence, he immediately answered that he does not trust anyone other than himself. After asking insistently to whom he would go if there is something important (*kepentingan*) he answered: "Oh, if it is something important then I go to *mbah* Asmo [direct neighbour]. He knows when it is a good date to marry and so on." During his life *simbah* Yoso has gone three times to *simbah* Asmo for advice about building the house and the marriages of his two daughters. "I trust *mbah* Asmo to decide a good day for making the house and for marriages. If one chooses a good day, one will be happy (*selamat*). For example for a marriage, one has to look at the day of birth."

Simbah Yoso (65, male, retiring farmer), Kebonagung.

¹⁰ In Kebonagung, people used to keep their livestock near the house. The government has forbidden this practice since January 1997. Therefore, the group for livestock breeders (*Kelompok Tani Ternak*) 'Madiya Agung' was founded. Stables for buffalo and goats were built with financial subsidy outside the hamlet on village land. Farmers had to rent these stalls.

We already described how the (step) children of *simbah* Marto misbehaved financially in sub-section 10.2.3. Her son Gusdi demolished a large part of her house, borrowed money that he did not return and keeps on asking for material support. Nevertheless, she still trusts him. Apparently because he is the one who should take care of her and who officially is the head of the household. What she did not say here was that she did not trust him with her pension and that she had certain ways to hide her money from him.

“*Kyai* Nitikaryo [traditional healer and religious leader] taught me: ‘If Gusdi asks for something, do not give it. Because he already left his parent before, but now he often asks for [money etcetera]. So, do not give it to him when he asks for it.’ People in this village also advised me: ‘Do not think about your children. When you have something, use it for yourself. They are children when they are still young. When they are mature, they are not children [who need to be taken care of].’ [...] “I just surrender to God, but for everything I trust Gusdi. Like for tax, governmental administrations... Everything is already Gusdi’s.”

Simbah Marto (±65, female, retired with pension), Giriwungu.

“When we drop by for a visit for talking, for sure we give advice. We give advice to people, who lack experience. When we visit a sick person, we give advice treatments for a fast recovery. Give understanding. Moreover, for example with a familial relationship between husband and wife, which does not fit well, a lack of harmony, we give advice. I give advice to everyone. I do not choose the people. I do not discriminate. There must be someone who gives advice, because humans have certainly shortcomings. A shortcoming means that humans need advice. The one who often gives advice is the village head. Because he is the village head he has to give advice when we need it. Yes? Advice is given. Although he is the village head, a man with a life like that has to be accessible.”

“People who are taken into confidence are mister *RT*, mister *RW*, the hamlet head and the village head. We have to trust them, because they are the leaders. When there is a family problem that we cannot solve ourselves, we have to go to them because they are the leaders. ... My older brother, who lives in Wonosari, was also a person who I took into confidence in the past. Now he lives far away. Far away, but still close in the heart.”

Bapak Dwijo (64, male, petty trader and labourer, former teacher), Giriwungu.

It is said that Javanese people do not discuss emotions. Therefore, survey questions about advice and trust do not result in the desired response. Nevertheless, we learned from in-depth interviews that the concepts of advice and trust have deep significance and that people do exchange these kinds of emotional support in cases of delicate family problems.

10.3.2 Social talk

Fortunately, the response to the survey question; “whether people talk often to someone outside their own household” was higher than the response to the question about advice and confidence. Social talk can be a source for emotional support. Three-quarters of the respondents (74.9%) talk often to someone outside their own household. Among these responses, we did not find differences by sex or age but we did for residence. In Kebonagung people talk significantly less often with someone

else (63.7%) than in Giriwungu (86.4%). Perhaps the higher prevalence of televisions in Kebonagung causes this trend. People have less entertainment other than visiting each other and talking about the latest news in Giriwungu. Whether one talks to someone else or not, does not depend on the composition or size of the household. On average people talk 196 times per year, this is approximately every other day. People usually talk to a neighbour or friend (69.2%) approximately every three days, to non-coresiding child(ren) (4.2%) approximately every month and to other kin (23.1%) approximately every nine days. The respondents talk on average to 1.2 persons outside the household.

The quarter of the respondents (25.1%) who never talk to anyone outside the household give the following main reasons: 'I do not have time' (30.3%) particularly in Kebonagung; 'There will be gossip/talking/secrets later' (18.0%); 'I am already old and not strong' (16.9%); and 'I never pay visits or go out in the evening' (14.6%) particularly in Giriwungu. Whether people do not have time to talk because they have to watch television or do something else in Kebonagung did not become clear. The poorly accessible roads in the dark and cold climate in the mountainous environment of Giriwungu probably cause older people to not go out in the evening.

For some people 'talking' (*omong-omong*) had a negative connotation meaning doing nothing, being lazy, or gossiping, speaking badly about others. The question about 'visiting for pleasure' (*main, dolan*) elicited more response in our qualitative interviews. 'Visiting a sick person' (*besuk*) is an obligatory social activity that one should fulfil. The following cases illustrate these different aspects of social talk.

"Instead of visiting, it is better to work. If I visited, there would be no food. I talk at the market. I never talk at home [where she has to prepare the merchandise]."

Simbah Kromo (±62, female, small market vendor), Kebonagung.

"I do not like to drop by for a visit. Talking does not have any result than just to chat, empty words. It is better to make things like that at home. [She points at the bamboo basket that she plaits in the evening.] I do not have a friend to talk to other than my children and grandchildren, because I do not like to go out for a visit."

Simbah Marto (±65, female, retired with pension), Giriwungu.

Simbah Yoso talks to people who he meets in the street, friends from the Stable group (*Kelompok Kandang Ternak*) or people who he meets when he is gathering weeds [for his buffalo]. He never visits neighbours or other people just to talk with them.

Simbah Yoso (65, male, retiring farmer), Kebonagung.

"When I do not do the night patrol rounds (*ronda*), I go to the main road with *pak* Tokarso [direct neighbour]. We are of the same age. So, we talk about older people's experiences. A

neighbour is automatically a friend when we get on with each other. When we do not fit, we only listen. When we do not get on, he is [still] called a neighbour. Right? We pay a visit, although seldom, because that is properly respectful (*segan*). I go to *pak* Karto [cousin] more often, because the familial relationship is closer than with others. I go to *pak* Narto [cousin] more often, because I am already called grandfather (*mbah*) there."

Bapak Dwijo (64, male, petty trader and labourer), Giriwungu.

In the evening we went with *ibu* Rupi to her mother-in-law, *simbah* Reso, because she had fallen out of a tree that afternoon. They had to carry her home, because she could not walk herself anymore. When my research assistant and I returned to the village after having lived in Petung [Kebonagung] for two months, I was afraid that some respondents had died. So, I was relieved that nothing had happened during my absence, but they are falling down by the dozen now! They are not my direct respondents, but still the direct relatives of my respondents. First *simbah* Oyot, now Reso and another two older relatives of *bapak* Marjo, who live next to Reso, are sick. So, it was very busy in the street, because everybody pays a visit to the sick persons. When we entered Reso's house, it was completely full of people. As usual the men sat in the front room. In the back room the women sat on the floor around the bed of *simbah* Reso and the older men sat on the wooden sleeping platform (*amben*).

Fieldnotes Giriwungu, 7 October 1997.

Most older persons talk to someone outside their own household every other day. The different words for social talk (*omong-omong*), visiting for pleasure (*main, dolan*) and visiting a sick person (*besuk*) have different connotations.

10.3.3 Implications of distant children for emotional support

We expected that when older parents have children who had migrated that they would not exchange emotional support often. However, we expected that these children would at least fulfil the obligation to show their respect to older persons and visit their parents in particular at *Lebaran* after the Fasting. At *Lebaran* in 1997, we took the opportunity to interview children (that had migrated) who had returned to their village of Kebonagung. Additionally, we carried out some preliminary interviews with older persons as a preparation for the survey and qualitative interviews. The head of the hamlet where we lived, had inquired which older parents expected (some of) their children to visit them for *Lebaran* and gave us a list of names. When the celebrations had started, we tried to meet children who had returned but parents often replied that their children had not yet arrived. It is through this type of behaviour of the Javanese people, the avoidance of answering questions outright, that it took a while before we realised that their children were not coming at all. The following cases illustrate that children do not or cannot always fulfil the duties towards their parents.

Simbah Amat (±89) lives with her mute husband (±80), her sister *simbah* Arjo (±65) and the family of her nephew (Arjo's son) Heri. For Heri and his oldest brother, who feels responsible, it is difficult to take care of three older persons. The oldest two persons are not working at the field, because they are not strong anymore. Nowadays they make brooms and household utensils, which they sell at the market, in order to provide for their livelihood and meet their daily needs.

We met *bapak* Slamet (65), the son of *simbah* Amat, who visits his family with most of his twelve children. He left for Jakarta directly after graduation of the lower secondary school, because he did not like to farm or make brooms and cooking utensils from coconut. The proceeds of these activities are only small, he said. He became a director in an infrastructure business and enjoys his pension now. He said to us: "I send money to my mother" but she added very quickly: "If he does not forget it." (While they said that she is deaf!) Then he said that he only gives money with *Lebaran* once a year, when he comes home to the village. At which she replied that this was the first time in five years that he had visited them.

Fieldnotes Kebonagung, 9 February 1997 (*Lebaran*).

Although *bapak* Prpto (61) and *ibu* Rosalia (62) are Catholic, all five children came home for *Lebaran* because they have an important family matter to discuss. Usually they do not come home for *Lebaran*, but for Christmas.

- The first child is a single daughter (38), who works as an administrative employee in a hospital in Jakarta. She cannot send money to her parents, because her wage is only enough to meet her own needs. The rent and transportation are very expensive. She often sends them letters.
- The second child is a married daughter (37), who is a housewife in Yogyakarta.
- The third child is a married son (35), who works as a private distributor in Sukabumi. He always comes home for *Lebaran*, because the whole office is closed and he sometimes cannot get free for Christmas.
- The fourth child is a married son (33), who works for the Indonesian Armed Forces (ABRI) in Cilangkap.
- The fifth child is a single daughter (23), who works as a private businesswoman in Surabaya.

Bapak Prpto believes in the principle that their children do not need to send money, because they are with only two persons in the house and they can still provide for their daily needs by themselves. However, when someone sends money he and his wife receive it with full gratitude. In general, they receive Rp 100,000 twice a year from a child. The amount is as much as they can expect, not too big. When they are very old (*jompo*), the children will certainly take care of them. They already discussed that together.

Fieldnotes Kebonagung, 9 February 1997 (*Lebaran*).

By the end of *Lebaran* we had not met many children whose parents (had said that they) expected to visit them. During the rest of our fieldwork, we observed that children who live at a large distance from their parents do not visit them frequently. Not even when the children live in Yogyakarta, which is only approximately 15 km. from Kebonagung and 25 km. from Giriwungu. On the rare occasion that I observed a child visiting his/her parent, it felt as if their relationship was not very affectionate.

Children and especially grandchildren behaved very respectfully and stiff towards their (grand) mother or father and it looked as if they felt uncomfortable. They were often behaving much more open and curious towards me as a stranger than towards their parents whom they had not seen for a long time. We did not observe this reserved behaviour among children who live together with or in the same village as their parents.

10.4 Social support

This section describes the social support that the respondents receive from relationships beyond the household. The social activities in which the older person participates indicate the social network as a potential source for support. Cases illustrate the most important or most frequently mentioned social networks.

10.4.1 Social activities

We asked whether the respondent participated actively or passively in social activities to indicate potential sources of support. Half of the respondents participate actively (49.3%) and a few passively (2.5%) in social activities. Table 10.3 presents the social activities in which the respondents participate. We recoded the participation into one category, because the passive participants were so few. The respondents participate mostly in neighbourhood-based activities and the religious activity of Koran or Bible recitation. We observed that older people do not perform the family-, hamlet- or village-based activities anymore, because usually one member per household participates in these activities. The older people easily hand over the responsibilities for these activities to a younger household member, because these are experienced as familial, community or local governmental duties.

The significant gender effects that we found reveal the typical male tasks of *gotong royong* and *ronda*, and the female task of *Dasa Wisma*. *Gotong royong* are activities of mutual assistance with which neighbours help each other to build or repair a house, the village road, etcetera. *Ronda* consists of patrolling alternately in rounds to guard the village at night. *Dasa Wisma* is an activity to inform women within the neighbourhood and is usually combined with a saving and credit activity (*arisan simpan pinjam*). The youngest older people mainly perform these activities. We did not find significant gender differences for participating in *pengajian* or each of the several *arisan* reported. Although we agree with Niehof that these institutions are important for women (Niehof, 1998: 252), it is probably not more important for older women than it is for older men. For the activities that we found significant age differences, the effect was negative. Becoming older results in declining participation in social activities and probably in declining social responsibilities.

Table 10.3 Participation of older respondent in social activities by sex, age and residence (%)

Type of social activity	Sex		Sign ^a	Age group			Sign ^a	Village		Sign ^a	Total N=355
	Male N=149	Female N=206		55-64 N=145	65-74 N=115	75+ N=95		KA N=179	GW N=176		
Family-based activities:											
- familial saving/credit group (<i>Arisan Keluarga</i>)	4.7	3.4	n.s.	5.5	3.5	2.1	n.s.	5.6	2.3	n.s.	3.9
- kin saving/credit group (<i>Arisan Trah</i>)	4.7	2.9	n.s.	4.8	2.6	3.2	n.s.	4.5	2.8	n.s.	3.7
Neighbourhood-based activities:											
- mutual assistance (<i>Gotong Royong</i>)	74.5	35.4	***	69.7	51.3	25.3	***	57.0	46.6	**	51.8
- saving/credit group (<i>Arisan RT/RW^b</i>)	37.6	44.7	n.s.	60.0	32.2	25.3	***	52.0	31.3	***	41.7
- nights patrol rounds (<i>Ronda</i>)	49.7	3.4	***	31.0	26.1	6.3	***	19.6	26.1	n.s.	22.8
- women's information group (<i>Dasa Wisma</i>)	11.4	20.9	**	30.3	9.6	5.3	***	13.4	20.5	*	16.9
Hamlet/village-based traditional activities:											
- cooking assistance for ceremonial meals at ritual feasts (<i>rewang</i>)	1.3	0.5	n.a.	0.7	0.9	1.1	n.a.	1.1	0.6	n.a.	0.8
- help with making flower offers or carrying deceased to cemetery for family that have a death (<i>layatan</i>)	7.4	7.8	n.s.	9.0	8.7	4.2	n.s.	9.5	5.7	n.s.	7.6
- visit ceremonies e.g. birth, circumcision, wedding (<i>kondongan</i>)	0.7	1.5	n.a.	1.4	0.9	1.1	n.a.	1.1	1.1	n.a.	1.1
- group of <i>gamelan</i> players (<i>Karawitan</i>)	1.3	0.5	n.a.	0.7	0.9	1.1	n.a.	1.1	0.6	n.a.	0.8
Village/sub-district/regency-based governmental act.:											
- farmer's group of water users (<i>P3A^c</i>)	1.3	0.5	n.a.	1.4	.	1.1	n.a.	1.1	0.6	n.a.	0.8
- women's information/educational group (<i>PKK^d</i>)	0.7	1.5	n.a.	2.1	.	1.1	n.a.	1.7	0.6	n.a.	1.1
- saving/credit group at regency level (<i>Arisan Kab.</i>)	3.4	4.9	n.s.	6.9	0.9	4.2	n.a.	7.3	1.1	***	4.2
- wife's group of men who work as civil servant (<i>Dharma Wanita</i>)	1.3	1.0	n.a.	2.1	.	1.1	n.a.	1.7	0.6	n.a.	1.1
- saving/credit group for retired people (<i>Arisan PWRI^e</i>)	2.0	0.5	n.a.	1.4	0.9	1.1	n.a.	1.7	0.6	n.a.	1.1
Religion-based activities:											
- older people's group (<i>Wreda</i>)	2.0	0.5	n.a.	2.1	.	1.1	n.a.	1.7	0.6	n.a.	1.1
- recitation of Koran (<i>pengajian</i>) or Bible (<i>persekutuan</i>)	49.7	43.2	n.s.	58.6	43.5	29.5	***	62.6	29.0	***	45.9

^a Chi-square test: *** p<0.01; p< 0.05**; * p<0.10; n.s. no significant difference; n.a. not applicable because the cell filling of expected count is less than five.

^b *Rukun Tetangga (RT)* is the lowest administrative unit of neighbourhood organisation. *Rukun Warga (RW)* is the administrative unit consisting of several *RTs*.

^c *Perkumpulan Petani Pemakai Air (P3A)* is a farmer's group enforced by hamlet administrative level that makes and maintains irrigation channels.

^d *Pendidikan Kesejahteraan Keluarga (PKK)* is a governmental program at village level to educate women on various aspects of family welfare.

^e *Arisan simpan pinjam Persuatan Wredatama Republik Indonesia (PWRI)* means literally saving/credit group of the Unit for retired people of the Rep. Indonesia.

The residence of older people is significantly different for the activities *gotong royong* (mutual assistance group), *arisan RT/RW* (saving/credit group at neighbourhood level), *Dasa Wisma* (women's information group), *arisan Kabupaten* (saving/credit group at regency level) and *pengajian* (Koran recitation group). Most respondents who participated in these activities live in Kebonagung. Only participants of the women's information group live more often in Giriwungu. Participation in or the number of organised social activities, which are enforced by local governmental officials such as the hamlet head, village head and their wives, probably depend on the zeal of the official. It would mean that the officials in Kebonagung are more zealous than in Giriwungu. This is likely since places closer to the city are more consistent in applying the rules and orders from higher administrative levels. The residential difference in participation in Koran or Bible recitation reveals again that people are religiously more active in Kebonagung.

10.4.2 Social networks

We used the method of Sokolovsky [1986] in the qualitative interviews to get better insight into the social networks of older persons. The numerical information like quantity of relationships or frequency of contacts served as double check of the survey results and did not reveal differences. We were more interested in the content and meaning of social relationships and this method gave a good opportunity to discuss all kinds of relationships. The cited interview texts are a result of this. We had planned to make a Chappati diagram to visualise the social network, but unfortunately that was not possible with older respondents (see Chapter 4).

In this sub-section we describe the social networks other than the household or kin, which are most important for or most frequently mentioned by older people. These are the social networks of *gotong royong* (mutual assistance group), *arisan* and *simpan pinjam* (save and credit group), *ronda* (nights patrol group), *Dasa Wisma* (women's information group), *pengajian* (Koran recitation group) and *lingkungan* (social circle of direct neighbours). Although monetary and material support are seldom received from non-kin, the social activities such as the various *arisan* do provide monetary support in a direct reciprocal and rotating system. We observed that social gatherings like *arisan* and *gotong royong* are the binding ties of the community, the glue that makes individual persons and households stick together.

Gotong royong

In general *gotong royong* can be translated as mutual assistance that community members are morally obliged to provide for each other in a reciprocal way. We agree with Bowen who suggested that *gotong royong* can be distinguished into three types of collective work and nature of reciprocity: labour mobilised as a direct exchange; generalised reciprocal assistance; and labour mobilised on the basis of political status.

- The first type of labour exchange involves a calculation of the amount of work to be accomplished by each participant, and usually balances out in a more or less

precise way. Such work arrangements are particularly common for major agricultural tasks. In contrast with the next type this is often referred to as 'balanced reciprocity'.

- The second type of mutual assistance is based on 'generalised reciprocity'. A villager is obliged to help in events such as building or repairing a house, marriages, or deaths. Generalised reciprocity involves general obligation and the idea of an eventual return.
- The third type of mutual assistance consists of labour that is mobilised on the basis of political status or subordination. Such labour appears as assistance when it is contributed toward the repair of an irrigation system, but it begins to resemble *corvée* when it is commandeered by a village head or other local officer for the construction of a district road (Bowen, 1986).

We did not observe the first type of labour exchange. According to the respondents, this was not practised anymore because agricultural work for someone else is nowadays paid in cash, especially in Kebonagung. In the study sites the phrase *gotong royong* was mostly used for the second and third type of mutual assistance especially for construction of houses, buildings, and roads. One used *rewang* for cooking assistance at marriages and *layatan* for help with preparations of funerals. The work is usually provided in exchange for meals, drinks and snacks. Usually only one member of the household is expected to help and older people are dismissed if they have younger household members.

"To help three days for free is called *gotong royong*. There must be a valuation with more than three days. Indemnity by giving money. There is no differentiation between help. Rich, poor, good, bad, everyone will be helped when they are busy. People help each other. Although they do not like it in their heart, they help. People from here like to help." [...] "The last time that I helped was at the time that we made a building for the house of *Pak Wiroyo* in front of [the house of] the village head *Pak Kades* [one month ago]. I helped five days. Yes, for free but we received meals two times and snacks three times [per day] and drinks. He did not ask me to help him. The process is that when we see a friend is busy, we have to help. It is not necessary to ask."

Bapak Dwijo (64, male, petty trader and labourer), Giriwungu.

Simbah Yoso follows the *gotong royong* if he has no other important things to do. Nowadays he only helps with repairing the roads or like now with improving the surroundings of the mosque. He does not help with making houses (*sampatan*) anymore, because he is too old. He said: "*Gotong royong* is important for the relationship with the neighbours!"

Simbah Yoso (65, male, retiring farmer), Kebonagung.

Simbah Muh about repairing a village road by *gotong royong*: "People from [the hamlet of] Tegal and Talaban only worked for a short time, because it is only a pass through way for them. The most important were the people from [the hamlet of] Jayan. People from Jayan worked for days on the road, because it is a road for the people of Jayan. People from Tegal and Talaban did not yet work for one day and already went home. There are people who do

not want to help with *gotong royong*. They should, but they do not want to. I will not help them if they ask for help.”

Simbah Muh (58, male, palm sugar collector), Kebonagung.

When we visited a wedding and asked Martini, the granddaughter of our landlady *simbah* Ngatinem, why there were so few older women, she answered: “Grandmothers do not go to weddings, because they are too old. It is too far away [to walk]. When older people are the neighbours [of the bride and groom’s parents], *ya* they will visit too. The older mother of [our neighbour] Sudiya attended this evening, because she does not have a daughter [living with her] anymore. Sudiya has already visited this afternoon. So, her mother-in-law with whom she lives does not have to go.”

Martini (16, female, scholar), Giriwungu.

“The children are already in charge of *gotong royong*. The parents (*orang tua*) do not join anymore. We do not join in because our muscles are weaker.”

Simbah Ngatinem (61, female, farmer), Giriwungu.

The phrase *gotong royong* was never used for care of older persons in our study area. We rather observed that people benefit from *gotong royong* as long as someone of the household could fulfil the obligations in return. Therefore, our information contradicts the idea that strong traditions of *gotong royong* ensure community co-operation for the care and maintenance of elderly people without family to take care of them in traditional Javanese communities (Hugo, 1994c: 66). We did not observe older persons receiving assistance by *gotong royong* when they are living alone, not strong anymore or too poor to be able to afford the materials and food necessary for renovations.

Arisan

An *arisan* is a regular social gathering. Participants contribute to and take turns at winning an aggregate sum of money. It is often combined with a *simpan pinjam*, which literally means save-and-borrow. Saving (*arisan*) and credit (*simpan pinjam*) activities are practised by all kinds of groups like families (*arisan keluarga*), neighbourhoods (*arisan rukun tetangga*), several neighbourhoods together (*arisan rukun warga*), hamlet inhabitants (*arisan dusun*), farmers (*arisan kelompok tani ternak*), or market traders (*arisan pasar Imogiri*). Usually money is saved, but we also observed the saving of hulled rice (*arisan beras*) (see sub-section 10.5.1). The members are often of the same sex and most *arisan* groups are female, which is similar to Hospes' study on Ambon (Hospes, 1996: 185). One member from each household contributes to the *arisan* that are enforced by the local governments. Although almost half of the respondents answered that they participate in an *arisan RT/RW*, we did not observe many older persons at most of the *arisan*. They probably

meant that this is delegated to a younger household member, who represents the household.

In Petung approximately 71 women participated in the *arisan dusun*, which was held in the public hamlet building (*Balai Dusun*) once per month on every Wage Rabu day¹¹. One *arisan* had a stake of Rp 1,000 and one of Rp 2,000 per person or household. Every meeting one put the stake in the cash box and two or three names on lottery tickets were pulled from a jar. Each person could 'win' Rp 15,000 one time until the jar no longer held name tickets and then they started again.

The *simpan pinjam* is not obligatory and its participants are women who need to borrow money. They could borrow up to a maximum of Rp 20,000, but when there were more people who wanted to borrow than there was money in the cash box, then they had to divide the money. The loan had to be repaid in ten payments plus two percent interest each payment. Many women could not meet this condition, because they did not have enough money yet.

Fieldnotes Giriwungu, 18 June 1997.

Although the amounts of money that one could win or borrow appeared small, this system is useful, because one can save or borrow a reasonable amount by spreading the payments into very small amounts. For farm households in a subsistence economy this is a welcome addition to their yield. Perhaps in Giriwungu the members participate in *arisans* more frequently and with more dedication than in Kebonagung.

Whether *arisan* is more important for the financial or social support probably depends on the economic situation of the member. The following cases show that the *arisan* and *simpan pinjam* are financially more important for the poorer *simbah* Kromo than for *bapak* Dwijo.

Simbah Kromo joins her neighbourhood's *arisan* twice per Javanese month (*selapan*) on Wednesday (*Minggu Kliwon*) and *Minggu Wage* evening. The stake is Rp 500 and the jackpot is Rp 40,000. She also borrows Rp 10,000 at the *simpan pinjam*, which she pays off in eleven payments. After paying off her debts she borrows the same amount again.

Simbah Kromo (±62, female, small market vendor), Kebonagung.

Bapak Dwijo: "The *arisan* with my trade friends at the market in Imogiri is held once per Javanese week (*pasaran*). Men and women. Twenty-five members. The stake is Rp 2,000. The *arisan lingkungan* with the friends of my social circle is once per month (*pulan*). Twenty male members. The stake is Rp 1,000.

Interviewer: "What is the most important reason to follow an *arisan*? Money or social contact?"

¹¹ The day that Wednesday (*hari Rabu*) coincided with a *Wage* day of the Javanese calendar.

Bapak Dwijo: “The savings, but only supplementary. What is most important is to meet your friends. If there are certain problems friends should be helped.”

Interviewer: “Who helps you?”

Bapak Dwijo: “Friends, social circle [the six direct neighbours] or family. Family that is automatically help. Friends who share the same fate (*teman senasip*) or colleague friends (*teman sekerja*) help with labour, thoughts and money most often. An example for [giving] energy is when there are trade goods that are not yet taken. We help to fetch that. Help with lending money when a friend is already finished.”

Bapak Dwijo (64, male, petty trader and labourer), Giriwungu.

An *arisan* has an economic as well as a social function. It depends on someone's economic situation what function prevails. Some *arisan*, usually the ones organised by local governmental organisations, are obligatory. For poor persons the condition of payment of the stake is even difficult to meet. For wealthier persons participation is nothing more than a time-consuming duty, because they could easily afford the jackpot themselves. Nevertheless, for the large majority *arisan* still has importance.

Ronda

Ronda consists of men patrolling alternately in rounds to guard (a part of) the village at night. *Ronda* can be seen as an activity of *gotong royong*. In the village of Kebonagung *ronda* is combined with collecting a ferrule of rice grains (*jimpitan beras*) of each household every night. The rice yield is sold for a fixed low price per kilogram of which the money goes into the cash box of the hamlet, or the rice is cooked and eaten when there is a hamlet meeting.

“*Ronda* is carried out by all household heads with the exception of the heads of the neighbourhoods (*kepala RT/RW*) and village officials. There are two neighbourhood posts of law and order (*pos kamling*) here. [The hamlet of] Petung has one hundred household heads, deducting the village officials, so [*ronda* for] every post is about forty people.”

Bapak Dwijo (64, male petty trader and labourer), Giriwungu.

“We also form a *ronda* [with the group of livestock breeders]. Each *Kliwon* day I have to stay awake with two other men to guard the group (*Kelompok Tani Ternak*) [at the stables]. Nevertheless, every owner is still guarding his own cow, because the *ronda* is too small to guard the whole group and the men fall asleep sometimes.”

Simbah Yoso (65, male, retiring farmer), Kebonagung.

Simbah Muh said he follows the *ronda* to collect the *jimpitan beras* (literally small amounts of rice) every Thursday. He said that he is the main collector in contrast to the few men who join the rice collecting. He always buys the rice for Rp 1,000 even if it is less than one kilo, because it was already agreed like that. Our neighbour said that only persons who need the rice are still helping with collecting it. *Simbah Muh* also said that the [other] men gather at the post until four o'clock in the morning, but that he only has a look at the post and then

collects the rice. Before it was not safe [in the village], but it is safe [now]. They only do it to follow the old rules.

Simbah Muh (58, male, palm sugar collector), Kebonagung.

Respondents said that the activity of *ronda* was set up at the time that the villages were attacked by stealing gangs. Nowadays, that does not happen and we can assume that men are still performing it because of its social function. They like to talk and smoke with each other.

Dasa Wisma

The *Dasa Wisma* is a group of women that is usually mobilised by the wife of the village head (*Ibu Kades*), the wife of the hamlet head (*Ibu Kadus*) or the wives of the neighbourhood heads (*Ibu RT/RW*) in order to give information and organise activities. The difference with *Pendidikan Kesejahteraan Keluarga (PKK)* activities are often not clear, because these are also ordered from higher administrative levels and organised by the same local officials. The *PKK* is a governmental program to educate women on various aspects of family welfare at the village level. *Dasa Wisma* and *PKK* can be seen as *gotong royong* activities of the third type.

We witnessed a meeting of women in which several activities and announcements were combined in the public hamlet building (*Balai Dusun*) of Giriwungu. These were the activities of *arisan* and *simpan pinjam* that were already described above. The announcements concerned small industry activities (*industri kecil*) to improve the family welfare, registration for birth certificates, the village results of the votes for the political party of *Golkar* at the General Elections, and registration for sterilisation. Most participants were younger women.

“The relationships with people are the same now as they were in the past. [Although] community relationships (*srawung*) have already increased, because there are meetings like the neighbourhood (*RT*) and *MKJ* meeting now. *MKJ* is the *Manunggaling Kampung Jayan* (Community Unit of the Jayan quarter), the gathering of families in the hamlet of Jayan. All household heads are members. The *MKJ* has spoons, plates, glasses, rice cooking pots, kettles and teapots for the purpose of the people's needs like weddings, circumcisions or funerals. So, people who have 'work' need many plates, spoons, glasses etc. So, they can borrow them from the *MKJ*. People from Jayan do not have to pay, but people from outside Jayan have to pay if they want to borrow. The *MKJ* can buy these tools, because there is a meeting at which each household head pays Rp 200 on every Monday *Kliwon*. And every night there is the collection of rice (*jimpitan beras*) of which the yield is sold for Rp 1,000. The money goes in the *MKJ* cash box. Money from this *MKJ* cash box is used for the hamlet's needs for example to buy street lamps. I still follow the *MKJ* meetings, but delegate it often to my child [who is usually not present because he works in Yogyakarta].”

“Furthermore, there is a small *arisan* of which every member pays Rp 1,000. This meeting is for women and they also have utensils like four dozen enamel bowls, tablecloths, mats and rice spoons. This association meets every Sunday *Wage* and Sunday *Pon*. Each member pays Rp 100 for the savings and credit (*simpan pinja*). When there is much money it can be

used to buy tools. I was a member of this *arisan* in the past, but not anymore because I cannot look for money. If I stayed a member of the association but did not have money, my friends would be angry later. I have not been a member for two years. I am already old. Before, I had a uniform, skirt and blouse, of this association, but that is already finished now. Because I am already out of the association, I am not given loans, but that does not matter...”

Simbah Rejo (±72, female, retired), Kebonagung.

Although *simbah* Rejo does not admit it, it would probably help her to manage the hard economic circumstances if she could benefit from the association's support. This case shows that becoming older can be accompanied by withdrawal from social activities and organisations. When a younger household member is not taking over membership, the older person is excluded from the benefits, such as financial and other kinds of support. The gains by networks of mutual assistance seem to be valid for the whole household as long as one household member participates. It is not that if one has participated during the productive life period, one is assured of support after that. We may conclude that most social networks do not have much value for elderly persons who live alone.

We heard about a special program for older people (*lansia*) at the Social Department (*DepSos*) in the capital city Wonosari of the regency Gunung Kidul. It is called the Non-institutional Program (*Program non-panti*), which aims at development of small enterprise skills of older people aged 55 years and over who still have potential. The program consists of an occasional aid of Rp 40,000 per person per year to stimulate enterprise activities like weaving sleeping mats, producing hair oil from coconuts, making food snacks and breeding goats. The financial aid was for 15 to 20 persons per regency per year and had reached six villages in the whole regency from 1991-1995. The program did not (yet) reach the village of Giriwungu. This is typically the kind of program that would be implemented through the *Dasa Wisma* or *PKK* in the villages and can be useful for elderly persons.

Pengajian

The high response to the question about participation in the religious activity of Koran recitation (*pengajian*) or Bible reading (*persekutuhan*) surprised us (see Table 10.3), because we did not observe much religious practice in the field. A reason may be socially desirable answers similar to what we already discussed for religion in Chapter 6.1.3. Another reason may be that the respondents did not perform this activity regularly but only at holy days like Ramadan or Christmas. The following field note is the only observation that we had of the *pengajian* activity among our case studies.

At five o'clock this morning *simbah* Joyo [our landlady] had already gone on her bicycle to a *pengajian* in [the hamlet of] Tlogo. They have a kind of Koran school (*Pondok Pesantren*) there. This evening she went again from 19.45-21.00 hours. The *pengajian* is every Sunday. Sati [neighbour] said that *simbah* Joyo used to go to the *pengajian* in the Kraton in Yogya

too before. It is remarkable that people are much more religious here than in Giriwungu. There we seldom saw adults go to pray. Men were only praying when there was a ritual and communal feast (*sedekahan*). Only children went to the mosque, probably because they were told that they must by their school teacher. Here [in Kebonagung] I saw fathers with their little son on the back of their bike or by foot return from the mosque this evening. Also the older woman from the other side of the street went to the mosque. The call for prayer (*adzan*) is also consistently five times a day and never too late like in [the hamlet of] Petung [in Giriwungu]. This morning they also called over the loudspeakers of the mosque that someone from another village had passed away and people were asked to make a condolence visit (*layat*), because a child of the deceased lives in Kebonagung.

Fieldnotes Kebonagung, 19 October 1997 (Sunday).

Niehof observed that in some parts of Indonesia attending *pengajian* is for women a way to get out of the house, to relax, gossip and have fun additionally to performing religious duties (Niehof, 1998). *Pengajian* indeed has both a religious and social function. The latter is even more important when it is the only legitimate reason for women to go out. However, in our study this does not apply, because women have enough freedom of movement. But the social function remains important.

Lingkungan

The *lingkungan* is not a social network as the ones in Table 10.3, because the members are not a formal group who organise specific activities with each other. For every household the *lingkungan* consists of other people, because it usually refers to (the persons in) the houses that directly surround the house in reference. The *lingkungan* is very important. It means 'social circle' of direct neighbours with whom one often has a close relationship.

Interviewer: "Who are your friends?"

Bapak Dwijo: "Neighbours, *lingkungan* and colleagues from the market."

Interviewer: "Who are more important the social circle in the hamlet (*lingkungan dusun*) or the social circle at the market (*lingkungan pasar*)?"

Bapak Dwijo: "The *lingkungan dusun*."

Interviewer: "Are these the same people as the neighbourhood members (*RT*)?"

Bapak Dwijo: "No, the *lingkungan dusun* are the six nearby neighbours." [...]

Bapak Dwijo: "We are equally in exchange with my neighbouring niece Bawuk and direct neighbour Tokarso. For example, s/he comes from the field carrying vegetables and passes here. S/he stops for a talk at my house and gives me vegetables. Later I give her/him packages of fermented soybean (*tempe*) or cooking spices. The main thing is to feel the sharing. When you do not have *tempe*, I will give you one [package]. Then s/he gives me vegetables."

Bapak Dwijo (64, male, petty trader and labourer), Giriwungu.

"With the *lingkungan* I just say the usual [things] like 'I do not have chilli, I do not have betel to chew (*kinang*)'. Then someone says: 'Oh, I have'. Then the one who does not have comes to the one who has. It is ask and give." [...]

"I only visit ceremonies (*kondangan*) of my family and *lingkungan*. I have already delegated the ones further away [ceremonies] to my child."

Simbah Ngatinem (61, female, farmer), Giriwungu.

Of course the relationship with the neighbours is not always harmonious. We did not find many of these cases, probably because it is not how it should be according to Javanese culture and hence people do not like to talk about it. The following cases present relationships with neighbours that were not so good.

Simbah Rejo does not have a toilet, bathroom or well. She takes some buckets of water from the well of the neighbour to wash herself behind three very low walls made of piled up bricks in front of her house. She also uses the toilet of her neighbour Sari. *Simbah* Rejo paid for the cement when they built the toilet.

Simbah Rejo draws off electricity from the neighbour at the back of her house. She has one light bulb, which she hardly uses. Her son Wagijan pays Rp 1,000 per month for it. *Simbah* Rejo said that they are bad people, especially the man, because they turn off the electricity while they know that she has visitors.

Simbah Rejo (±72, female, retired), Kebonagung.

Simbah Kromo cooks the food products at home in the evening and morning before she goes to the market to sell them. Then several neighbours pass by to ask for some without paying directly, which *simbah* Kromo can hardly refuse. She commented: "How come she [a neighbour from whom it is known that they have money] has to borrow from me to buy dried cassava (*gaplek*) and cassava snacks (*tiwul*)? Neighbours often say 'tomorrow' when they have to pay. Only people at home borrow, people at the market pay directly!" [...]

Later that day another neighbour asks if she can borrow money from *simbah* Kromo. *Simbah* Kromo just got Rp 3,000 from her daughter-in-law Pamina, which she hides in her waist sash, saying that she does not have money. To us she says that she does not want to lend money, because already four persons borrowed Rp 400, Rp 600 and two times more than Rp 1,000. As her husband arrives, she gives him the money that they will use for the village excursion.

Simbah Kromo (±62, female, small market vendor), Kebonagung.

Although relationships with direct neighbours are not always good, we never observed a big argument, fight or confrontation. They always kept their self-control, in accordance with Javanese norms, and only showed their dissatisfaction by silences and avoiding contact. A good contact with the *lingkungan* is important, because neighbours depend on each other in periods of need.

10.5 Case studies

In this section we present case studies of the social activities of *arisan beras*, *rewang*, *layatan* and *kondangan*. The first sub-section describes how the greed of a wife of the hamlet head disrupts the savings and credit activities, which is detrimental to the mutual bonds in the community. The second sub-section describes how support activities at traditional, special moments can strengthen the community.

10.5.1 *The arisan beras and the greedy Ibu Kadus: 'Dig a hole to cover a hole'*

This case describes the activities of a rotating credit-and-savings association, an *arisan beras* that exchanges in rice. Furthermore, it describes how a wife of the hamlet head can misuse her (husband's) position for her own benefit.

Last night we observed the saving and crediting of rice (*arisan beras*) at the house of the head of a hamlet (*Kadus*) in Giriwungu. We did not understand how it worked. It looked very illogical to me, because the women bring rice of their own and take the same rice back, but mixed with the rice of other's, for which they also pay. A neighbour explained it today.

"The *arisan beras* is on every Tuesday coinciding with a *Legi* day, so once per month. Each female household head of the three *RT*'s participates in the *arisan beras* at the house of the *Kadus*. The members can borrow one kilogram of rice in exchange for one little cup (*cangkir*) of rice for interest. Thus, when you borrow ten kilogram, you have to return ten kilogram plus ten cups of rice. The rice that is compiled will be sold among the members for Rp 600 per kg. This price is cheap since the price in the shop is Rp 900 per kg. As a tool to measure one kilogram of rice, we use a set of specific bowls to transport meals (*rantang*). One *rantang* is one kilogram of rice and one *rantang* is eight *cangkir*.

The process is as follows. Every member comes and brings the rice that she borrowed the last time plus the interest. The rice will be gathered, mixed and measured. Then it is sold. Every member who wants to buy rice has to buy the same amount. When one wants to buy two kilograms, everybody has to buy that. When there is more rice that can be bought, that also has to be bought together. When someone wants to buy, it has to be paid for immediately. The money is used for credit distribution (*simpan pinjam*) to the members. When we borrow Rp 10,000, we have to pay Rp 500 interest. So that is five percent a month.

The one who is the most in debt is the wife of the hamlet head (*Ibu Kadus*). The other day, she borrowed thirty kilograms of rice. She did not return it in rice with interest, but with money. So that was much cheaper, because she only paid Rp 600 per kg. The people did not like it and were angry about her methods, but only talked about it behind her back. *Bu Kadus* likes to get credit everywhere. So, she borrows here to pay off there. That is called 'digging a hole to cover a hole'. Sometimes, the money of the *simpan pinjam* is compiled to pay activities of the hamlet. For example, when money is collected for the community. So, when it is not much she can take the money from the cashbox.

On Wednesday morning my daughter (8) passed the house of *Bu Kadus* when she went to the shop. *Bu Kadus* asked her: 'Your mother is making peanut chips (*rempeyek*), is she not?' My daughter answered: 'Yes, but our relatives want to take it to Sumatra.' She lied to *Bu Kadus*. I did not make the *rempeyek* to take to Sumatra, but for the religious meal (*sedekahan*). Because my daughter lied, she did not dare to pass the house of *Bu Kadus* on her way home and took another road. She was afraid that if she passed *Bu Kadus*' house,

she would ask for *rempeyek*. *Bu Kadus* often asks for something. Small children like my daughter already know her habits. Before, my daughter experienced that when she returned from the field, passing the house of *Bu Kadus* with *pete* beans, *Bu Kadus* asked: 'Dik, what did you take?' My daughter answered: 'Cassava'. If she had answered *pete*, *Bu Kadus* would certainly have asked for it. *Bu Kadus* often asks for something from my daughter. She says then: 'I ask this on credit. Later that money will be for your daughter when she leaves the village to go to school.' However, I never experienced *Bu Kadus* repaying money."

Fieldnotes Giriwungu, 15 July 1997.

10.5.2 Cases of traditional support: 'The woman is responsible for maintaining social relationships, with relatives in particular'

This sub-section presents several instances of traditional support, namely *rewang*, *layatan* and *kondongan*. The cases show that participating in these kinds of activities is not only an exchange of social support or practical help, but it is also a means of strengthening kinship ties and communal bonds.

Rewang

Our landlady *simbah* Joyo (±58) lives alone since her daughter died and the son-in-law and grandchildren moved to one of her other houses. Her husband lives in a neighbouring village near the second daughter's family. Their son lives with his family in Yogyakarta. *Simbah* Joyo used to trade, but is retired now and can provide for a livelihood by the yield of her ricefields. The following fieldnotes describe a request for help with *rewang*, cooking assistance for ceremonial meals at ritual feasts.

Thursday afternoon around 15.45 hrs a cousin of *simbah* Joyo dropped by. He came to tell her that he is going to marry on Sunday and he wanted to ask her to help with cooking for the party (*rewang*) beginning on Friday. Hearing that *simbah* Joyo started to cry, because she felt so happy that family was still asking her to *rewang*. She said: "Although your parents and my parents already passed away [referring to their joint kinship tie], you still want to be related (*berhugungan*). When you have work for a celebration, you still remember your family."

Previously, the older brother of *simbah* made a *slametan* to commemorate their mother who died one year before. *Simbah* Joyo and her younger sister were not asked to *rewang*. She felt offended (*sakit hati*) and sad, because he asked other people to *rewang* while he had not asked his own relatives. She felt that her older brother, younger sister and she were not in harmony (*kerukunan*). When he did not ask her to *rewang* she thought that he was not going to make a *slametan* for their mother. So, she made a *slametan* herself, which was only small. He made a big, complete *slametan* for which he invited people to pray together and made a ritual meal (*kenduri*).

Fieldnotes Kebonagung, 13 November 1997.

The case above shows that social activities are not only an exchange of practical help, but participation in social activities also strengthens kinship ties. Being asked to help is a recognition of the mutual relationship. To older persons it probably also means that they still count, that they are respected and that their help and attendance is solicited and appreciated.

Layatan

Simbah Yoso (65) lives with his wife Giyem (\pm 55), daughter Sumarni (35) and granddaughter Anisa (6) in Kebonagung. He is a retired farm labourer, but still takes care of their cow and chickens. He describes the traditional activity of *layatan*, the support to families that have a death which consists of making flower offerings, preparing the grave and carrying the deceased to the cemetery.

"The older men usually dig the hole at the graveyard while the younger ones go around to tell everyone that someone has died. If the young men were to be busy at the cemetery, there would be no one to go around. It is better that only the old men are at the cemetery, so that they do not have to walk far away. Last year I participated in *layatan* four times. [The interview was carried out on 28 November 1997.] People are asked to attend *layatan* just by the neighbours and door-to-door (*jawil-jawilan*). Everyone who you meet in the street will tell you who has died. Passing along the message of who has died and the request for help is like *gotong royong*."

Simbah Muh (58) lives together with his wife Juminem (55) and daughter Siti (19) in Kebonagung. He is a palm sugar collector. He describes the people for whom he helps at *layatan*.

"Nowadays we use the speaker system of the mosque to let people know who has died. Sometimes they also announce the death of a person from another village. If I know that person I will go, otherwise I only go to *layatan* of people from Kebonagung and relatives in our sub-district [Imogiri]. Last time I went to the village of Mangunan [adjoining to Imogiri]. *Mbah* Jum [wife] often participates in *layatan*. I seldom do. Only if Jum is lazy then I go. The woman is responsible for maintaining social relationships, with relatives in particular."

These cases show that helping each other with the preparations of a funeral is seen as mutual assistance in the community. There is a difference in actively participating in the funeral preparations and visiting the bereaving family to pay your respect. Helping with the preparations is usually done for kin, close neighbours, friends and inhabitants of the same hamlet. To visit the family is usually done for people in the same village and acquaintances in a wider area. There is also a gender-based division of labour to *layatan* activities. Men prepare the grave and carry the deceased to the cemetery. Women make the flower offerings and pay home visits.

Kondangan

Our landlady *simbah* Ngatinem (61) lives with her husband Radiyo (71), daughter Rupinem (40), son-in-law Marjo (45) and granddaughter Martini (16) in Giriwungu. The following case describes the practise of *kondangan*, attending ceremonies such as a birth, circumcision or wedding.

Simbah Ngatinem: "I only come to *kondangan* for my own family and close neighbours. For people far away, I have already delegated *kondangan* to my daughter."

In the evening, everyone dressed up in her/his best clothes to go to the wedding. Around eight we left with a whole bunch of people that consisted of *ibu* Rupinem, *bapak* Marjo, Martini and some neighbours (mainly women). The older persons did not go except for an older woman, who lives with her husband and adolescent son. The wedding was of Rubyanti and Timbul in the neighbouring village of Girimulyo. We did not have to walk very far; it was just over the top of the hill to the left. On arrival, we first waited outside the area that was set off for the wedding until the *gamelan* orchestra started to play. Hantini, the aunt of our neighbour girl Surani, was selling snacks behind a stand. Surani helped her and had not wanted to go home for the whole day. Many cheeky boys were constantly asking to take a picture of them.

The women handed over the basket with unprepared food that they brought in a sling cloth. Later they picked up their own basket again, which was filled with prepared food. *Ibu* Rupinem gave 500g rice, 10 packages of fermented soybean (*tempe*), 250g chips (*krupuk*), 250g noodles (*bami*), half a litre of cooking oil and one cabbage. This is the usual amount for non-kin. For kin usually twice as much is given. In return she received 3kg of cooked rice, 100g fried noodles, 5 *tempe*, fried spicy sauce (*sambal goreng*) and 100g fried chips (*krupuk goreng*). Every household that knows the bride and groom or their parents should send a female member with a *gendong*. Men usually give money if they have it. If they do not have it, it is not necessary.

After handing over the *gendong*, the women went inside and just sat on the floor in front of the bridal couple for a while. They did not talk to each other and did not congratulate them. The men were just smoking outside. People thought it was strange (everybody told each other about it) that I went to the back of the house to see the preparations of the food. They were cooking huge pots with rice on fireplaces and I saw large piles of cabbages. The food in the handed over *gendong* was just cooked and returned to the giver.

Around nine the shadow play with leather puppets (*wayang kulit*) finally began. However, I was bored very quickly, because the narrator (*dalang*) told quite a long story in Javanese without moving his puppets. I could not understand anything, so I went home with Martini at half past nine. The shadow play would go on for the whole night.

Fieldnotes Giriwungu, 29 June 1997.

This description of the *kondangan* shows that the activities and duties differ for men and women. Similar to *rewang* and *layatan*, women are more responsible for paying visits by which they show the respect, sympathy or enjoyment on behalf of the whole household. The older one becomes, the fewer the social obligations one has to fulfil. Becoming older is accompanied with withdrawal from social duties and the reduction

of the network size. Finally, the traditional practice of *kondangan* is an exchange of material support, in this case of food.

10.6 Conclusion

This chapter described the financial, emotional and social support of older persons. Less than half of the respondents receive monetary support and only a quarter of the respondents receive material support individually. In general these kinds of support are provided quite regularly: monetary support approximately every three weeks and material support approximately every ten days. Material support usually consists of food and clothes. The main sources for monetary and material support are either coresiding or non-coresiding sons.

The common situation is that financial responsibilities and power are gradually transferred from the older to the younger generation within the extended households. First, the older persons take care of the younger persons, later the younger persons take care of the older persons. Older persons whose children are absent or who do not have children, are insecure about care in their old age and can be at risk of poverty. It is rare that older persons are financially independent as a result of a pension. The lucky few who have a pension may be faced with insensitivity and claims for support of their relatives. In case of calamities, financial support is expected from relatives in the first degree.

The assumption that processes of social change like industrialisation and urbanisation would have such an effect on the elder care that older parents would be left behind and neglected by their migrated children, appeared to be unfounded. We may conclude that the shift to a money economy and international labour migration of children increases monetary support for older people. Fortunately, the situation of most older people was not as bad as we anticipated. Perhaps it is still too early to establish the possible effects of social change on care for older people in Indonesia. Or perhaps the reality for the elderly Javanese is more complex and we should look at more or different variables than the ones considered here. For instance, the fact that elderly people are mainly farmers in Giriwungu, who can provide for their own subsistence, may decrease their need for monetary or material support from children. We often heard older people say that they do not want their children to take care of them, because the children (who had migrated) need it for their own household, and that food, rent and school are expensive in urban areas. Older people can take care of themselves and will probably stay in the village as long as they can work and earn a living.

However, there are certain groups of people that are vulnerable. The position of women older than 75 years of age warrants attention. Women are statistically seen more likely to live alone and be childless. If they do receive monetary support, the amount will be lower than that received by older men. The oldest elderly people are also more likely to live alone or to be widowed. Moreover, the households with the

oldest elderly members received on average the lowest amounts of monetary support and values of material support.

It was difficult to find out what kind of emotional support the respondents exchanged, because Javanese people do not talk about their emotions. The majority of the respondents talk to neighbours and friends outside the own household almost every day. That neighbours and friends are very important also appeared from the fact that the most popular social activities are organised by the neighbourhood. The main social networks of *gotong royong* (mutual assistance group); *arisan* and *simpan pinjam* (savings and credit group), *ronda* (nights patrol group), *Dasa Wisma* (women's information group), *pengajian* (Koran recitation group) and *lingkungan* (social circle of direct neighbours) provide financial or labour support in a reciprocal way. However, a person is only assured of support from these networks as long as at least one household member participates. These social activities are not beneficial for the oldest people, who cannot participate anymore and who do not live together with a household member who does. Older persons who live alone, do not coreside with a child or only have children living at a large distance are the most vulnerable for lack of emotional and social support.

The case studies show that participation in social activities is not only the exchange of mutual support, but also strengthens kinship and community ties. Most social activities have in addition to an economic or practical function also a social function. When everyone joins the activity as how it should be, the bond between the participants is strengthened. When some persons do not behave as they should and act for only their own benefit, the bond between the participants is weakened.

11. Old-age security and livelihood strategies

In this research the security of older persons is considered to be a function of (nutritional) health security, livelihood security, security about daily care, financial and emotional support. Old-age security is studied through the individual perceptions of older persons about their present situation of need and distress, and anticipation of the future in this respect. Older persons are assumed to be insecure when they feel uncertain about their food supply, health condition, income in cash or kind, access to resources and assets, physical capabilities or when they are emotionally unsatisfied. A way to cope with these insecurities is to obtain satisfying care arrangements and support relations. The security of older persons is influenced by their relationships with household members, kin, neighbours, friends and community members with whom care and support is exchanged. Besides, older persons have expectations based on social norms with regard to their care arrangements and support relationships.

This chapter starts with the description of several variables indicating the subjective security of older persons. With these variables, an old-age security scale is constructed. In the next sub-section, the factors that influence the old-age security are described. The security of older persons is influenced by their socio-demographic characteristics, health, livelihood, daily and social activities. At the end of this section, the most important indicators of old-age security are defined. Then the livelihood strategies to secure old age are described. Finally, case studies illustrate the effects of processes of social change on care and security of older persons.

11.1 An approach to old-age security

In this sub-section is described how we developed a measuring tool for old-age security. The ten-point scale of old-age security is an approach to measure the subjective feelings of (in)security by older persons. First, we separately describe the results for each item that is included in the scale. Secondly, we describe how we designed the old-age security scale. Finally, we analyse the differences concerning old-age security according to gender, age and residence.

11.1.1 Don't worry, feel *tentrem*

Most older persons said they never worry about their food supply (89.0%), health (83.7%), ability to perform personal (94.4%) and instrumental (93.5%) activities of daily life. Older persons also said that they can sufficiently provide for their livelihood, both as an individual (74.6%) and at household level (82.2%). Even the primary caregivers of the 42 non-communicative older persons said that they do not worry about care for the dependent older household member (76.2%) and that they do not

have problems with elderly care (88.1%). Hence, we may conclude that most older persons feel themselves secure. Most of the reasons provided for feeling secure consist of having sufficient resources to fulfil needs. However, it is also in the Javanese culture that one should not worry, experience problems or waste energy on negative feelings. Frequently given responses that are consistent with this norm were phrases like 'one should be content with what one has' (*nrimo*), 'one should feel peaceful' (*tentrem*) and 'one should leave it to God' (*pasrah*).

To indicate emotional security, we asked if older persons ever feel lonely, feel (un)happier than ten years ago and have a peaceful (*tentrem*) life in general. Most of the older persons are positive about their emotional condition. Three-quarters of the respondents never feel lonely (74.1%) a quarter of them sometimes feel lonely (18.9%) while only few respondents often feel lonely (7.0%). The main reasons for feeling lonely are related to being alone and not living near the (grand-) children (66.0%). The minor reasons for feeling lonely are related to lack of support, health problems and worries about all kind of practical things (34.0%). In comparison with ten years before, most of the older persons are happier (58.9%) or the same (25.4%). Some of them are less happy (15.8%), because they cannot work anymore (43.6%), have become older and suffer more (34.5%), or are still worrying about their children who cannot support them (14.5%), or live separate from their family (7.3%). The majority of the older persons said they have a peaceful life in general (92.4%). A minority did not say so (7.6%), because they still have many needs (52.0%), their children are not yet working (16.0%) or cannot yet provide for a good livelihood (16.0%), they are sick (12.0%) or still have to work hard (4.0%).

We tried to reduce the following data into one indicator for old-age security: worries about food, health, economic situation of the individual or household, performance of (I)ADL, worries about and problems with care, feelings of loneliness, happiness and peacefulness. We recoded the variables and computed correlations in order to determine which variables are significantly correlated (see Table 11.1). Based on this we composed an old-age security scale. The strongest significant correlations found are those between the economic situation and economic security of the elderly household, and between worries about ADL and IADL. Loneliness correlates positively with worries about health, food, ADL and IADL. The same correlation applies to happiness, with the exclusion of food worries. Feeling peaceful (*tentrem*) is positively correlated with happiness, loneliness, economic security and sufficient economic situation of elderly household. Hence, there is an emotional and economic side to feeling peaceful. An older person who has a peaceful life is happier than ten years ago, is never lonely and has a household that is economically secure. The variables 'worries about' and 'problems with elderly care by a household member' do not have enough statistical power and thus are removed from the old-age security scale.

Table 11.1 Correlations of variables that indicate old-age security. Pearson correlation, significance (two-tailed). N=355.

	Worries about food supply	Worries about health	Economic situation sufficient for daily needs of elderly individual	Economic situation sufficient for daily needs of elderly household	Elderly household is economically secure	Worries about ability to perform personal ADL	Worries about ability to perform IADL	Feels lonely sometimes	Happiness now compared to 10 years ago	Has a peaceful (tentrem) life in general
Worries food supply	1.000	0.235***	0.189***	0.048	0.214***	0.109**	0.127**	0.142***	0.046	-0.033
	.	0.000	0.000	0.367	0.000	0.039	0.017	0.007	0.389	0.538
Worries about health		1.000	0.093*	0.077	0.101*	0.289***	0.255***	0.243***	0.163***	0.046
		.	0.081	0.149	0.057	0.000	0.000	0.000	0.002	0.391
Ec. sufficient elderly indiv.			1.000	0.241***	0.311***	-0.030	0.031	0.099*	0.007	0.077
			.	0.000	0.000	0.572	0.564	0.063	0.898	0.147
Ec. sufficient elderly hhd.				1.000	0.680***	0.046	0.087	0.016	0.046	0.123**
				.	0.000	0.391	0.104	0.766	0.385	0.020
Elderly hhd. ec. secure					1.000	0.011	0.046	0.088*	0.048	0.145***
					.	0.836	0.389	0.099	0.371	0.006
Worries about ADL						1.000	0.581***	0.106**	0.124**	0.022
						.	0.000	0.045	0.019	0.679
Worries about ADL							1.000	0.105**	0.151***	0.054
							.	0.047	0.004	0.310
Feels lonely sometimes								1.000	0.100*	0.170***
								.	0.060	0.001
Happiness now-10 yrs. ago									1.000	0.194***
									.	0.000
Peaceful life in general										1.000
										.

*** p< 0.01 ** p< 0.05 * p< 0.10

The old-age security scale that was composed consists of the following ten items:

- worries about food supply (0=yes, 1=no);
- worries about health (0=yes, 1=no);
- economic situation is sufficient for daily needs of elderly individual (0=no, 1=yes);
- economic situation is sufficient for daily needs of elderly household (0=no, 1=yes);
- elderly household is economically secure (0=no, 1=yes);
- worries about ability to perform personal activities of daily life (ADL) (0=yes, 1=no);
- worries about ability to perform instrumental activities of daily life (IADL) (0=yes, 1=no);
- loneliness (0=yes sometimes/often, 1=no never);
- happiness compared to ten years ago (0=unhappier, 1=same/more happy) and
- in general a peaceful life (*tentrem*) (0=no, 1=yes).

The items are reasonably homogenous and the old-age security scale is reasonably reliable (Alpha = 0.59). The mean of the scale is 8.46. We can conclude that on average, older persons feel quite secure.

11.1.2 Elderly groups vulnerable for insecurity

We are interested to know what elderly groups are vulnerable to insecurity in old age. We hypothesised that older women, especially widowed women, older age groups and older persons who live in the poorer village of Giriwungu would be less secure. Therefore, we analysed the difference in the experiences of old-age security between men and women, widowed men and women, the age groups and villages. Based on studies by Rudkin (1993; 1992), we expected that there would be differences but we only found significant differences between respondents according to village of residence.

Table 11.2 Old-age security scale by sex

Old-age security scale	Male		Female		Total	
	Freq.	%	Freq.	%	Freq.	%
0-6 Not secure	17	11.4	26	12.7	43	12.2
7-8 Secure	42	28.2	60	29.4	102	28.9
9-10 Very secure	90	60.4	118	57.8	208	59.9
Total	149	100.0	204	100.0	353	100.0
Test scores	$\chi^2(2)=0.3, p=0.875$					

The majority of older persons feel secure to very secure. Only a small part of the elderly population feels insecure about their old age. Older women do not experience their old-age security significantly different from older men. From the literature, we expected that older women would be more insecure than older men. In this study, especially the livelihood indicators at the individual level revealed a significantly lower score for women than for men (see Chapter 8). However, women do not feel less secure, perhaps because they accept the culturally determined inequity. It has always been like that. Rudkin also offered the possibility that women have lower

expectations or are less inclined to complain than men. This study can only partly agree with her conclusion that although older women are economically worse off, older men are less happy.

We also expected that female widows would be a particular vulnerable group among the older persons. Rudkin (1993) found that the gender effect on individual receipts¹ was partially mediated by gender differences in marital status. Widowed persons had lower individual incomes than married persons, probably because they do not receive transfers from spouses. Half of the married women reported receiving material support from their spouses. Evans (1987) found that older women, who were more likely to be widowed, received no or only small money transfers in Solo. He supposed that they would be more vulnerable to poverty. Chapter 8 of this study also shows that individual older women have a lesser economic status than older men, which could be a problem when they live alone. Nevertheless, in this study the hypothesis was not confirmed. We did not find a significant difference between married and widowed persons or between widowed women and men for subjective old-age security. Widowed persons feel the same as married persons about their security in old age. Widowed women do not feel themselves less secure than widowed men.

Table 11.3 Old-age security scale by age

Old-age security scale	55-64		65-74		75+		Total	
	Freq.	%	Freq.	%	Freq.	%	Freq.	%
0-6 Not secure	16	11.1	12	10.5	15	15.8	43	12.2
7-8 Secure	49	34.0	29	25.4	24	25.3	102	28.9
9-10 Very secure	79	54.9	73	64.0	56	58.9	208	58.9
Total	144	100.0	114	100.0	95	100.0	353	100.0
Test scores	$\chi^2(4)=4.5, p=0.339$							

The perceived old-age security is not significantly different according to age. The eldest respondents do not feel less secure than the youngest respondents, which we expected. In this study, the indicators of health status and livelihood show that persons of seventy-five years and older have a significantly worse health and weaker economic situation than persons between fifty-five and sixty-four years old (see Chapters 7 and 8). The same explanation as above is probably applicable here. Persons at an older age expect that they will become less healthy and economically less secure. It comes with old age. Hence, they adjust their expectations and do not feel less secure than the persons of a younger age.

¹ Rudkin (1993: 212) included in the indicator of 'average individual monthly receipts' money and material support received from all sources, including wages, business profits, rents, investment income, pensions, government or charity support, and transfers from friends or family. It represents the resources over which the respondent has control.

Table 11.4 Old-age security scale by village

Old-age security scale	Kebonagung		Giriwungu		Total	
	Freq.	%	Freq.	%	Freq.	%
0-6 Not secure	29	16.3	14	8.0	43	12.2
7-8 Secure	55	30.9	47	26.9	102	28.9
9-10 Very secure	94	52.8	114	65.1	208	59.9
Total	178	100.0	175	100.0	353	100.0
Test scores	$\chi^2(2)=7.8^{**}$, $p=0.021$					

Older persons living in the village of Kebonagung feel significantly less secure than those living in the village of Giriwungu. In Kebonagung older persons feel insecure twice as often as in Giriwungu. A significantly larger proportion of the older population feels very secure in Giriwungu. We had hypothesised that older persons would feel less secure in Giriwungu because their children would have migrated for labour and would be unable to take care of them anymore. In Kebonagung the children would have more economic possibilities and could stay and take care of their older parents. This study showed that older persons in Giriwungu have a poorer health status, work more often or have an income-generating activity, have less household income, a lesser housing quality and less valuable household items compared to those in Kebonagung. However, residents of Giriwungu also own more land and have more livestock. Perhaps these last livelihood indicators explain most of the feelings of security. As long as they own farmland, although of low quality, in Giriwungu they can still provide food for themselves.

11.2 Influences on old-age security

The variables that can influence the security of older persons are analysed in this section. They are combined into theoretically related factors. The studied factors are the socio-demographic characteristics, health, livelihood, daily and social activities of older persons. Some of the factors are represented by more sets of variables. With each independent variable an Ordinary Least Squares Regression (OLSR) analysis was carried out, to measure which variable has a significant bivariate effect on the old-age security scale. We tried to construct one indicator for each set of variables or choose the variable with the strongest effect of the set as indicator. With these indicators an OLSR analysis was carried out. We made these calculations to determine which variable has the strongest effect per set and which set of variables has the relatively strongest effect on the perceived security of older persons.

11.2.1 Socio-demographic characteristics

The influence of the socio-demographic characteristics on the security of older persons is described with three sets of variables. The first set of socio-demographic characteristics consists of the basic variables:

- sex (0=male, 1=female);
- age;
- Islamic religion (0=no, 1=yes);
- education (0=no education, 1=some education);
- married status (0=not married, 1=married);
- widowed status (0=not widowed, 1=widowed);
- place of residence (0=Kebonagung, 1=Giriwungu).

Table 11.5 Regression of old-age security on basic socio-demographic variables.

	Sex	Age	Islam	Education	Married status	Widowed status	Place of residence
Bivariate effect on old-age sec. scale	-0.032 (0.177)	0.000 (0.009)	0.205 (0.361)	0.221 (0.313)	-0.111 (0.181)	0.202 (0.187)	0.473 (0.173)***
R²	0.0%	0.0%	0.1%	0.1%	0.1%	0.3%	2.1%

Unstandardised regression coefficients, standardised regression coefficients, standard errors between brackets (pairwise deletion of missing values). Minimum N=353. *** p< 0.01; ** p< 0.05; * p< 0.10.

Table 11.5 presents the results of the OLSR analysis². Although we had strong expectations with regard to a lower old-age security for women, very old persons, never married and widowed persons, these were not confirmed by the above results. Sex, age, religion, educational attainment, and marital status have no effect on the felt security of older persons. Place of residence, however, has a highly positive significant effect on felt old-age security. Older persons who live in the poorer, agricultural village of Giriwungu feel more secure than older persons who live in the relatively more prosperous village of Kebonagung.

The second set of socio-demographic characteristics consists of household composition and household size variables:

- household type 1: elderly living alone (0=not alone, 1=alone);
- household type 2: elderly living with spouse (0=not only with spouse, 1=with spouse);
- household type 3: elderly living with spouse and other(s) (0=not with spouse and others, 1=with spouse and others);
- household type 4: elderly living with other(s) (0=not with others, 1=with others);
- household size.

² Based on the ordinal level of the dependent variable (old-age security scale), we choose for the method of Ordinary Least Squares Regression. The independent variables in my analysis are measured at nominal level. Officially OLSR cannot be used for nominal variables because it is assumed that all variables should be measured at interval (or at least ordinal) level. However, the appropriate method of logistic regression to measure nominal variables cannot deal with the ordinal level of the dependent variable. Moreover, we are not interested in the log odds ratio measured by logistic regression. We are interested in the effects on old-age security and this constitutes no problem for OLSR when nominal variables are dichotomised. The results can be clearly interpreted. If the coefficients are positive (and significant), this will mean that more of the independent variable leads to more of the dependent variable, in this case, more (felt) security.

Table 11.6 Regression of old-age security on household composition and size.

	Household composition				Household size
	1 Elderly alone	2 Elderly and spouse	3 Elderly, spouse and other(s)	4 Elderly and other(s)	
Bivariate effect on old-age security scale	-0.191 (0.457)	-0.092 0.283	-0.093 (0.174)	0.170 (0.180)	-0.007 (0.045)
R²	0.0%	0.0%	0.1%	0.3%	0.0%

Unstandardised regression coefficients, standardised regression coefficients, standard errors between brackets (pairwise deletion of missing values). Minimum N=353. *** p< 0.01; ** p< 0.05; * p< 0.10.

The effects of household compositions and household size on the felt old-age security are presented in Table 11.6. We expected that older persons living with (adult) children and older persons with a larger household would feel more secure, but household compositions and size have no effect on the security felt by older persons.

The third set of socio-demographic characteristics concerns the number of children of the respondent and their geographic proximity:

- total number of children;
- total number of children who live in same village as elderly parent;
- non-coresiding child(ren) living in the same village as elderly parent (0=none, 1=at least one);
- child(ren) living in the Special Region of Yogyakarta (0=none, 1=at least one);
- child(ren) living outside the Special Region of Yogyakarta on Java (0=none, 1=at least one);
- child(ren) living outside Java in Indonesia (0=none, 1=at least one);
- child(ren) living outside Indonesia (0=none, 1=at least one).

Table 11.7 Regression of old-age security on number of children and their geographic proximity.

	Total no. of children	No. of children in same village	Non-coresiding child in same village	Child in DIY	Child outside DIY on Java	Child outside Java in Indonesia	Child abroad
Bivariate effect on old-age sec. scale	0.110 0.125 (0.019)**	0.159 0.128 (0.066)**	0.298 0.091 (0.174)*	0.036 0.010 (0.183)	-0.039 -0.011 (0.187)	0.115 0.031 (0.201)	-0.706 -0.071 (0.530)
R²	1.6%	1.6%	0.8%	0.0%	0.0%	0.1%	0.5%

Unstandardised regression coefficients, standardised regression coefficients, standard errors between brackets (pairwise deletion of missing values). Minimum N=353. *** p< 0.01; ** p< 0.05; * p< 0.10.

Table 11.7 shows the effect of variables concerning the number and geographic proximity of children on felt old-age security. The total number of children, the

number of children and the non-coresiding children living in the same village as the parents have an effect on the felt security of older persons. What is important for the security of older persons is that they have more children living in the same village. When older persons have children who live outside the parental village, the distance has no effect on the felt security of the parents. Whether children live near to or far away from the parental village does not influence the parent's feelings about old-age security.

11.2.2 Health

In this sub-section, we will describe the influence of health on the felt security of older persons. For this purpose, we constructed the following health variables. (See Chapter 7 for a detailed description of the variables.)

- the food related health score (0=very bad - 24=very good health);
- the general health (1=bad health - 5=good health);
- the health compared to contemporaries (1=worse health - 3=better health);
- the health compared to ten years ago (1=lesser health - 3=better health);
- the total score of sensory capacity (0=cannot use any of the senses - 5=can use all senses);
- the prevalence of a minor illness (0=yes, 1=no);
- the prevalence of a chronic illness (0=yes, 1=no).

Table 11.8 Regression of old-age security on health variables.

	Food health score	General health	Health con-temporaries	Health 10 years ago	Total score for senses	Chronic illness
Bivariate effect on old-age sec. scale	0.050	0.343	0.319	0.251	0.207	0.539
	0.125	0.263	0.142	0.101	0.141	0.165
	(0.021)**	(0.067)***	(0.120)***	(0.132)*	(0.077)***	(0.172)***
R²	1.6%	6.9%	2.0%	1.0%	2.0%	2.7%

Unstandardised regression coefficients, standardised regression coefficients, standard errors between brackets (pairwise deletion of missing values). Minimum N=351. *** p< 0.01; ** p< 0.05; * p< 0.10.

In Table 11.8 the health variables are included together with the old-age security scale. The variable of minor illness prevalence was removed from the OLSR analysis because it did not correlate with the old-age security scale. All other health variables have a positive effect on old-age security. Older persons with a good general health, absence of a chronic illness, a high score for the sensory capability and good health compared with contemporaries experience their security as good. General health condition has the largest effect on and explains the largest part of the variance of the old-age security. With these variables we computed a total health scale³, a scale that ranged from 0 (very bad health) to 41 (very good health). The total health scale had a

³ Although the total health scale is not a very homogenous scale (Alpha=0.29), we preferred this scale and did not choose for general health as a health indicator because the total health scale presents more and different aspects of the older person's health. Additionally, the scale has a highly significant effect on old-age security and a small standard error.

highly significant, positive effect on the security of older persons (Beta is 0.073, standard error is 0.016*** and R Square is 5.5%.) We will use this variable as an indicator for health status in the comparison with the other indicators in sub-section 11.2.5.

11.2.3 Livelihood

In this sub-section, we will describe the influence of livelihood on the level of security felt by older persons by three sets of constructed economic variables. These dichotomised variables are discussed in more detail in Chapter 8. The first set of variables concerns work and income of the older persons and members of their households. It consists of:

- individual work status (0=no does not, 1=yes works most of the time);
- individual farming status (most important general daily activity is 0=non-farming work, 1=farming work);
- annual individual income in cash and kind (amount in Rupiah);
- annual household income in cash and kind (amount in Rupiah).

Table 11.9 Regression of old-age security on work and income variables.

	Individual work status	Individual farming status	Individual income	Household income
Bivariate effect on old-age security scale	0.192 0.056 (0.184)	-0.341 -0.088 (0.270)	0.000 0.135 (0.000)**	0.000 0.090 (0.000)
R²	0.3%	0.8%	1.8%	0.8%

Unstandardised regression coefficients, standardised regression coefficients, standard errors between brackets (pairwise deletion of missing values). Minimum N=211. *** p< 0.01; ** p< 0.05; * p< 0.10.

Table 11.9 shows that, unexpectedly, only the individual income of the older person has an effect on their feelings of security. We thought that work, non-farming work more than farming work, and total income of the household also would have an effect. Apparently, the fact that an older person (still) works does not influence his/her feelings of security. The reason why household income has no effect on old-age security can be that older persons do not have control over the household income and may have no access to it either.

The second set of livelihood variables concerns the assets of house and land:

- house ownership (0=household member owns the house, 1=older person owns the house);
- housing quality index (0=very bad - 21=very good housing quality);
- land ownership (0=not owning land (anymore), 1=owning land);
- farmland acreage (size in hectare corrected for type of land and irrigation facilities);
- landless status (0=never owned land and was landless before old age, 1=has owned land and already distributed it in old age).

Table 11.10 Regression of old-age security on house and land property.

	House ownership	Housing quality index	Land ownership	Farmland acreage	Landless status
Bivariate effect	0.000	0.000	0.186	0.000	0.142
on old-age	0.000	0.006	0.052	0.197	0.036
security scale	(0.182)	(0.022)	(0.190)	(0.000)***	(0.212)
R²	0.0%	0.0%	0.3%	3.9%	0.1%

Unstandardised regression coefficients, standardised regression coefficients, standard errors between brackets (pairwise deletion of missing values). Minimum N=351. *** p< 0.01; ** p< 0.05; * p< 0.10.

Table 11.10 presents the bivariate effects of the livelihood variables of house and land property on the old-age security scale. Owning a house and the housing quality have no effect on felt security in old age. Our assumption, that people who live in a brick house have invested more money in their house and would feel economically more secure than people who live in a house with walls of plaited bamboo, is not supported. Only the farmland acreage corrected for type of land and irrigation facilities has a strong positive effect on the felt security of older persons. Older persons feel more secure when their household has (access to) more land. The older person or one of the household members owns the larger part of the accessible land. The distinction between persons who have never owned land, the true landless people, and persons who have owned land but already distributed the rights of use and property to their children, has no effect on the old-age security. The formal status of ownership of assets is thus not important for the feelings of security for older persons.

The third set of livelihood variables concerns the following moveable goods (resources and assets):

- crop variety (total number of different crops);
- ownership of valuable wood trees (total value in Rupiah);
- ownership of livestock (total value in Rupiah);
- weighted household item index (0=no items available – 29=all items available).

Table 11.11 shows the effect of ownership of resources and assets on the old-age security scale. We assumed that farmers, who have more types of crops, would be less vulnerable for disappointing harvests by plant diseases or attacks of insects and, hence, would feel more secure. We also assumed that having all kinds of assets would have an effect on old-age security. The crop variety (resources of food) and ownership of valuable wood trees and livestock (stores of values or assets) have an bivariate effect on old-age security. Older persons feel more secure when they cultivate a larger variety of crops and have more wood trees and livestock.

Table 11.11 Regression of old-age security on resources and assets.

	Crop variety	Ownership of wood trees	Ownership of livestock	Household item index
Bivariate effect on old-age security scale	0.095 0.183 (0.027)***	0.710 0.136 (0.275)***	0.000 0.105 (0.000)*	-0.000 -0.004 (0.018)
R²	3.3%	1.9%	1.1%	0.0%
Multi-variate effect on old-age security scale	0.084 0.162 (0.035)**	0.461 0.088 (0.327)	0.000 0.078 (0.000)	0.026 0.075 (0.021)
Intercept	7.793			
R²	5.0%			

Unstandardised regression coefficients, standardised regression coefficients, standard errors between brackets (pairwise deletion of missing values). Minimum N=339. *** p< 0.01; ** p< 0.05; * p< 0.10.

The multi-variate analysis shows that the variety of crops is more important for old-age security than the ownership of valuable wood trees, livestock or household items. The proceeds of crops are usually received within one year and variety of crops can thus be considered a relatively short-term livelihood strategy. The proceeds of wood trees are usually received after many years, and growing valuable wood trees can thus be considered a relatively long-term livelihood strategy. The above results indicate that a livelihood strategy aiming at short-term fulfilment of food needs explains more about perceived old-age security than a livelihood strategy aiming at a long-term investment in a store of value like wood trees. Household items of which we assumed that they also are a store of value that can be converted into money in times of need, are not important for the older person's feelings about security.

Table 11.12 Regression of old-age security on livelihood variables.

	Individual income	Farmland acreage	Crop variety	Ownership of valuable trees	Ownership of livestock
Multi-variate effect on old-age security scale	0.000 0.116 (0.000)**	0.000 0.124 (0.000)*	0.038 0.072 (0.036)	0.401 0.077 (0.324)	0.000 0.060 (0.000)
Intercept	7.911				
R²	7.0%				

Unstandardised regression coefficients, standardised regression coefficients, standard errors between brackets (pairwise deletion of missing values). Minimum N=339. *** p< 0.01; ** p< 0.05; * p< 0.10.

The livelihood variables that had an effect on old-age security in the bivariate analysis are submitted to a multi-variate analysis to determine which variable has the strongest effect. Table 11.12 presents the results. When these livelihood variables are controlled for each other, only the individual income and farmland acreage proved to have an effect on felt old-age security. The variable individual income is considered an indicator of resources and farmland acreage an indicator of owned

assets. Both indicators are analysed in comparison with the other indicators in sub-section 11.2.5.

11.2.4 Daily and social activities

The influence of the daily and social activities on the old-age security is described by using two sets of variables. The first set consists of the daily activities.

- personal activities of daily life (ADL) or total ADL score (5=very bad – 25=very good ADL capacity);
- instrumental activities of daily life (IADL) or total IADL score (9=very bad – 45=very good IADL capacity);
- dominant time spending activity (0=household or other activities at home/retirement, 1=farm or other income-generating activities).

Table 11.13 Regression of old-age security on daily activities.

	ADL score	IADL score	Activity status
Bivariate effect on old-age security scale	0.164 0.162 (0.053)***	0.005 0.273 (0.009)***	0.184 0.056 (0.175)
R²	2.6%	7.4%	0.3%
Multi-variate effect on old-age security scale	0.006 0.006 (0.063)	0.054 0.297 (0.012)***	-0.224 -0.068 (0.186)
Intercept	6.207		
R²	7.8%		

Unstandardised regression coefficients, standardised regression coefficients, standard errors between brackets (pairwise deletion of missing values). Minimum N=353. *** p< 0.01; ** p< 0.05; * p< 0.10.

Table 11.13 shows that, although both personal and instrumental care have a strong effect on the old-age security scale, only the instrumental activities of daily life have a significant effect, when controlled for the other variables. The ability to perform the instrumental activities of daily life (IADL) positively influences the perceived security of older persons. When older persons can (still) perform activities like shopping for daily groceries, cutting firewood, fetching water and cooking meals, they feel more secure.

The second set of variables consists of social activities:

- total score of participation in social activities (0=no participation in social activities - 18=participation in 18 social activities);
- older person talks often with someone outside household (0=no, 1=yes);
- number of persons outside household to whom older person talks.

Table 11.14 Regression of old-age security on social activities.

	Social participation score	Talks outside household	No. of talkers
Bivariate effect on old-age security scale	0.052 0.064 (0.043)	0.104 0.028 (0.201)	0.003 0.019 (0.071)
R²	0.4%	0.1%	0.0%

Unstandardised regression coefficients, standardised regression coefficients, standard errors between brackets (pairwise deletion of missing values). Minimum N=353. *** p< 0.01; ** p< 0.05; * p< 0.10.

Participation in social organisations and the frequency of talks with persons outside their household have no effect on the perceived security of older persons (Table 11.14). Hence, only the variable of IADL score is considered the indicator for ability to carry out daily activities.

11.2.5 Main indicators for old-age security

In this sub-section we will compare the indicators for socio-demographic characteristics, health, economic resources and assets, and ability to carry out daily activities, to determine their effect on perceived security in old age.

Table 11.15 Regression of old-age security on indicators socio-demographic characteristics, health, economic resources and assets, and daily activities.

	Indicators of				
	Soc.-dem. characteristics	Health	Economic resources	Economic assets	Daily activities
Multi-variate effect on old-age sec. scale	0.349 0.107 (0.193)*	0.312 0.167 (0.102)***	0.000 0.050 (0.000)	0.000 0.159 (0.000)***	0.044 0.240 (0.010)***
Intercept	4.851				
R²	15.8%				

Unstandardised regression coefficients, standardised regression coefficients, standard errors between brackets (pairwise deletion of missing values). Minimum N=353. *** p< 0.01; ** p< 0.05; * p< 0.10.

Table 11.15 shows that, unexpectedly, the economic resource of individual income no longer has an effect on old-age security when controlled for the other indicators. The ability to perform the (instrumental) daily activities and the health status explain the largest part of perceived old-age security. Besides, the economic asset of farmland acreage explains a part. Being healthy and able to take care of one's own household, in addition to having access to farmland in order to produce food are apparently the most important for the older person's feeling of security. This last indicator probably best explains why the socio-demographic indicator place of residence also has a small positive effect on perceived old-age security. In Giriwungu older persons have access to larger sizes of farmland (corrected for the type of

farmland) than in Kebonagung. Therefore, they are probably better able to provide for a living, provided that one has good health and strength.

11.3 Livelihood strategies to secure old age

People need to have (access to) enough individual attributes such as certain socio-demographic characteristics, health, economic resources and assets, ability to perform daily and social activities (including management and planning capabilities) to achieve an old age that is perceived as secure. People who do not have this need to plan how they will be taken care of when they are too old to care for themselves. They have to arrange for care and support in their old age. We were especially interested in long-term livelihood strategies that aimed for a quiet, care-free and supported old age. It was difficult to reveal livelihood strategies because we could not directly ask what kind of strategies older persons have. Nevertheless, we found some leads to the following strategies that we call the strategies of care arrangement, remarriage, house move, support mobilisation and, finally, delayed property transfer.

11.3.1 Strategy of care arrangement

The usual arrangement is that a child stays with his/her parents after s/he married and has children. This child could be a daughter or a son, given the bilateral kinship system. Within the extended family, the children live together in the house and work the land of the older parents. When the (grand-) parents become older and need more care, the children (-in-law) and grandchildren provide the care within the own household. The decision of whether a child is going to live with his/her parents or parents-in-law is a matter of discussion between the parents from both sides (*besan*) before the marriage is decided. This practice has already existed for such a long time that it is not even recognised as an old-age livelihood strategy, but is regarded as normal. However, when life is changing and circumstances change, people need to develop new strategies. For instance, when children leave the village to find work, marry a spouse from somewhere else and do not return to the place of birth. The consequences of these kind of changes for old-age security are discussed below.

It is often assumed that people in developing countries have many children in order to provide for a secure old age. The Indonesian saying “many children, much prosperity” (*banyak anak, banyak rezeki*) reflects this. The Value of Children Project showed by a cross-national study that old-age support was an important reason for having children, especially in rural areas (Arnold, 1975: 40-98). Unfortunately, the study conducted on Javanese and Nepalese villages did not pay special attention to the value of children for old-age security, as the title of the study suggests. Nevertheless, it concludes that households with a relatively large number of children appeared to ensure themselves of economic ‘success’ during the latter phase of their development. Children probably had a net positive economic value to their parents, aside from the old-age security they provide them (Nag et al., 1980: 263-285). However, more recent studies show that these values are changing in Indonesia and

that having many children is no longer seen as a source of prosperity (Niehof and Lubis, forthcoming).

Table 11.16 Regression of coresidence and old-age security on total number of children.

	Coresidence with children (Minimum N=397)	Number of coresiding children (Minimum N=397)	Old-age security scale (Minimum N=353)
Total number of children	0.046 0.199 (0.011)***		0.113 0.128 (0.048)**
Coresidence with children (0=no, 1=at least one child)			-0.059 -0.015 (0.207)
Intercept	0.606		8.128
R²	4.0%		1.6%
Total number of children		0.155 0.336 (0.022)***	0.119 0.135 (0.050)**
Number of coresiding children			-0.056 -0.029 (0.107)
Intercept		0.512	8.121
R²		11.3%	1.6%

Unstandardised regression coefficients, standardised regression coefficients, standard errors between brackets (pairwise deletion of missing values). *** p < 0.01; ** p < 0.05; * p < 0.10.

We applied the method of Ordinary Least Squares regression to analyse whether coresidence of children or number of coresiding children can (partly) explain the effect of total number of children on old-age security. The OLS regression method is explained and visualised by a path model in Annex 11.1. Table 11.16 shows that the number of children has a positive effect on the old-age security scale. It seems logical that this effect will be partly explained by the coresidence of a child with the older parents. Older persons who live with adult children would be more secure about the care that they need than older persons who live without children. This assumption was not borne out by our study. There is no difference in feelings of security between older persons who live with many or few or without children.

The strategy of having many children for a secure old age can also be explained by receiving care for personal activities of daily life (ADL), support for instrumental activities of daily life (IADL) or social support. We assumed that older persons with many children would receive such support and thus feel more secure. The result of this analysis is presented in Table 11.17. Indeed, the receipt of ADL care explains a part of the effect of total number of children on perceived old-age security. However, the number of children has a negative effect on the receipt of ADL. Older persons

with many children receive personal care less often, which has a negative effect on their feelings of security. The intimate care for personal activities is usually provided to older parents within the household, only when they cannot take care of themselves anymore. One would expect that the number of children and care received would be positively correlated. However, the opposite is the case, although the negative correlation is not highly significant. An explanation might be that when there are many children, the siblings tend to expect each other to take responsibility and do not feel a strong personal commitment.

Table 11.17 Regression of daily care, social support and old-age security on total number of children.

	Receipt of ADL (Min. N=397)	Receipt of IADL (Min. N=397)	Social support (Min. N=397)	Old-age security scale (Min. N=353)
Total number of children	-0.008 -0.090 (0.005)*			0.120 0.137 (0.046)***
Receipt of ADL (0=no, 1=yes)				1.270 0.133 (0.502)**
Intercept	0.998			6.825
R²	0.8%			3.3%
Total number of children		0.004 0.018 (0.010)		0.108 0.122 (0.046)**
Receipt of IADL (0=no, 1=yes)				0.626 0.139 (0.236)***
Intercept		0.832		7.572
R²		0.0%		3.5%
Total number of children			3.729 0.122 (1.523)**	0.098 0.112 (0.047)**
Social support (freq. of talks with children outside hhd.)				0.003 0.106 (0.002)**
Intercept			-2.018	8.099
R²			1.5%	2.7%

Unstandardised regression coefficients, standardised regression coefficients, standard errors between brackets (pairwise deletion of missing values). *** p < 0.01; ** p < 0.05; * p < 0.10.

An older person with many children feels more secure than an older person with few children. Older persons who receive support for the instrumental activities feel more secure than older persons who do not. This is, however, not explained by the total number of children because the number of children has no effect on receiving care

for IADL. The effect of total number of children on old-age security is partly explained by the social support exchanged with children who live outside the older parent's household. Older persons who have more children can talk more frequently to non-coresiding children and that has a positive effect on their feelings of security.

Table 11.18 Regression of material support and old-age security on total number of children.

	Receipt of material support (Min. N=397)	Total material support (Min. N=397)	Mat. support from children outside household (Min. N=397)	Old-age security scale (Min. N=353)
Total number of children	0.054 0.200 (0.013)***			0.114 0.129 (0.048)**
Receipt of mat. support (0=no, 1=yes)				-0.074 -0.023 (0.177)
Intercept	0.329			8.117
R²	4.0%			1.6%
Total number of children		60866.764 0.198 (15127.788)***		0.108 0.122 (0.048)**
Total material support (Rupiah)				0.000 0.014 (0.000)
Intercept		-57532.571		8.095
R²		3.7%		1.6%
Total number of children			61154.164 0.200 (15100.148)***	0.108 0.123 (0.048)**
Mat. support from children outside hhd. (Rupiah)				0.000 0.008 (0.000)
Intercept			-74074.801	8.094
R²			3.9%	1.6%

Unstandardised regression coefficients, standardised regression coefficients, standard errors between brackets (pairwise deletion of missing values). *** p < 0.01; ** p < 0.05; * p < 0.10.

The strategy of having children as a kind of old age insurance assumes that older persons with many children will receive more material support and, hence, will feel more secure than older persons with fewer or no children. Table 11.18 shows that this assumption is not supported by this study. Although the number of children has an effect on (the height of the) material support, the receipt of material support has no effect on old-age security. Whether older persons receive (more) material support from children outside the household or others has no influence on how older persons

perceive security. We checked whether there is an indirect effect of total number of children on old-age security via the total economic status of household income and total receipt of material support, but this was not the case. The number of children has a significant effect on total economic status, but the total economic status has no effect on old-age security. We can conclude that the relatively objective measure of economic status does not influence the subjective feelings of security of older persons.

The strategy of having many children to provide for a quiet, care-free and supported old age cannot simply be explained by the coresidence with children, receipt of daily care, social support or material support. This study shows that material support has no effect on perceived old-age security, but that the rather subjective measures of personal daily care and social support have an effect. For the older person's feelings of security, receiving personal care and communication with non-coresiding children are more important than the receipt of money. It shows that the hypotheses that were formulated on the basis of the literature mainly represent an etic perspective⁴, that of the "community of scientific observers" (Harris 1968: 575). Moreover, it demonstrates the importance of eliciting the respondent's own views, which represent an emic perspective.

11.3.2 Strategy of remarriage and house move

During the preparatory fieldwork, we heard that some older persons, particularly older men who lived alone and were not used to cooking and cleaning for themselves, remarried after the death of their spouse because they wanted someone around who could take care of them. Therefore, we investigated marital frequency. Of the respondents (N=355) 14.4% were married at least twice. We computed the age of the respondents at the time that they had remarried. The lowest age given was twelve years and some other responses were under the ages of twenty. Such a young age is very unlikely for a second marriage. Hence, we can conclude that the question was not always answered correctly and that the results are not very reliable.

In only five cases did the respondent remarry at a high age. We cannot prove the assumption that older persons, especially men, remarried at a high age in order to fulfil their needs for care. We thought then that such a strategy is perhaps more applicable in urban areas where it is more common for older persons to reside without children and the need for care becomes more urgent. Unfortunately, the counterpart study in the urban areas of Yogyakarta does not describe the household composition. Nevertheless, it reports that 19.3% of the older persons married more than once, with no significant difference between men and women (Population Studies Center, 1999: 30-31).

⁴ See for a more detailed description of the concepts of emic and etic Harris (1968); Holmes and Holmes (1995); Fry and Keith (1986); Pelto and Pelto (1978).

A new strategy is that older persons “follow a child”, as they say in Indonesia, and live with that child’s family. We called this strategy the house move strategy. In this case the child left the parental house directly after completing school, usually moved to a city to find work and lived independently for a while. Then the child found a partner, married and started a family. When the parents become older, cannot work anymore and need help with the daily care they arrange to live with that child if they do not have other children available in the village. The child does not return to the village to take over the farm and take care of the parents because s/he is not used to performing agricultural labour anymore and can earn more in the city.

As a consequence of the design of the study, we could not properly study the house move strategy. Because we studied older persons in the village, older persons who had already left the village were not included in the survey sample. Of the respondents in our sample who did not live in their place of birth anymore (N=91), only three respondents had followed a child. It could also have been too early to find evidence of the house move strategy. Most parents who have children, who had moved away, were not very old and still healthy. It would be interesting to compare households in which a child lives with parents (old strategy) and households in which older parents live with a migrated child (new strategy). We assume that older parents would have more power and control within the old strategy and that it would have a positive effect on how secure they feel in old-age. The following fieldnotes describe a case of an older person who had already planned to live with a child that had migrated.

When I went outside our house, the neighbour woman Sudiya was talking with the head of the hamlet (*Pak Kadus*). It appeared that they were kin. After we discussed their blood relationships, I asked how many children *Pak Kadus* had. He has four children and only the youngest daughter Fitri still lived at the parental home. The other children live in Jakarta. I asked whether it was correct that not many children of Fitri’s and Martini’s [my landlord’s daughter] age lived in the village anymore. My observations were right. Everyone who finished school goes directly to Jakarta or Bogor to find work, especially now the summer holiday has started.

Pak Kadus said: “Just like my third child. S/he just left to look for money in Jakarta. S/he ‘followed’ a sibling. It is much easier to look for money there. One day of working in Jakarta is worth ten thousand Rupiah, and here one day is worth only one thousand Rupiah.”

Sudiya: “It is difficult for Martini who is the only child [of my landlord]. If she goes to Jakarta, who will take care of her parents? If she stays here, who will be her friends?”

I asked: “Yes, who will take care of the older parents when all the young ones are gone?”

Pak Kadus answered: “Ya, follow to Jakarta! When I am old and cannot work anymore, I will follow my children to Jakarta and they will all take care of everything. [It is] more pleasant (*senang*) over there. Nobody returns again after they have gone to live there.”

Fieldnotes Giriwungu, 26 June 1997.

The case of *bapak Dwijo* (sub-section 11.4.2) also describes the strategy of house move. The case shows clearly that older parents tend to postpone the move from the village to the city as long as possible.

11.3.3 Strategy of support mobilisation

The manner in which older persons arrange the provision of support by children, kin, neighbours/friends and others outside the household is called the strategy of support mobilisation. This strategy does not include the personal and instrumental care on a daily basis because that is usually provided by household members of the older person. As such, it is part of the care arrangement strategy.

We assume that older persons who are able to mobilise support, or in other words who have supporting relationships, are more secure than older persons who are not able to do so. We applied the Chi-Square test to see whether the strategies of support mobilisation would cause a different level of perceived security in old age. Table 11.19 shows us that there is no significant correlation between the receipt of financial support (goods or money) and the level of security felt by the older person. The receipt of support probably does not say much about the ability to mobilise it. Older persons or elderly households that do not need support will not apply the ability to mobilise support.

In addition to the received material goods and amounts of money, we have also analysed other variables of material support. None of these variables has a significant correlation with level of old-age security, except for the material support provided by other kin (than children from outside the elderly household). Perhaps people need material support when they are less secure, but at the moment that they receive support they feel secure again. Or perhaps older persons also receive material support when they are not feeling insecure, for example from children because the children see it as their duty. That can also explain why there is a significant relationship between material support from other kin and the security of older persons. Insecure, elderly households more often receive material support from other kin than from children or non-kin. Other kin reconsider giving support to older persons when these persons are insecure. While non-coresiding children mainly give material support because that is their duty regardless whether the parents need it or not.

Table 11.19 Livelihood strategies concerning material and monetary support by old-age security scale (percentages)

Livelihood strategies for old age	N=353	Old-age security scale ⁵			Sign. ^a
		0-6 Not secure	7-8 Secure	9-10 Very secure	
Receiver of material goods (individual level):					n.s.
- No	260	12.7	29.6	57.7	
- Yes	93	10.8	26.9	62.4	
Receiver of monetary support (individual level):					n.s.
- No	201	10.0	28.9	61.2	
- Yes	152	15.1	28.9	55.9	
Receiver of material support (household level):					n.s.
- No	172	9.9	32.6	57.6	
- Yes	181	14.4	25.4	60.2	
Total amount of received material support (Rupiah):					n.s.
- 0	172	9.9	32.6	57.6	
- 1 - < 50,000	69	10.1	33.3	56.5	
- 50,000 - < 250,000	72	18.1	19.4	62.5	
- ≥ 250,000	40	15.0	22.5	62.5	
Having relationships of mat. support outside hhd. with:					
- Children	yes= 147	12.2	25.9	61.9	n.s.
- Other kin	yes= 27	25.9	14.8	59.3	**
- Non-kin	yes= 25	20.0	32.0	48.0	n.s.

^a Chi-square test: ***p<0.01; ** p<0.05; * p<0.10; n.s. no significant difference; n.a. not applicable.

Another strategy to prevent insecurity, maintain and improve security in old age is to mobilise emotional and social support. The following variables are analysed here:

- emotional support (advice) received by older person (0=no advice received, 1=yes received advice);
- emotional support (advice) given by older person (0=no advice given, 1=yes gave advice);
- total frequency of talks to non-coresiding child (days per year);
- total frequency of talks to non-coresiding other kin (days per year);
- total frequency of talks to neighbour/friends (days per year).

⁵ Table 11.2 in sub-section 11.1.2 presents the distribution of the old-age security scale.

Table 11.20 Regression of old-age security on emotional and social support from persons beyond the elderly household.

	Received advice	Given advice	Frequency of talks to child	Frequency of talks to other kin	Freq. of talks to neighbour/friends
Bivariate effect on old-age security scale	-0.071 (0.457)	0.038 (1.232)	0.003 (0.002)**	-0.000 (0.001)	0.000 (0.000)*
R²	0.0%	0.0%	1.4%	0.3%	1.0%

Unstandardised regression coefficients, standardised regression coefficients, standard errors between brackets (pairwise deletion of missing values). Minimum N=353. *** p< 0.01; ** p< 0.05; * p< 0.10.

We expected that when older persons receive emotional and social support they feel more secure than when they do not. Table 11.14 already showed that participation in social activities, talking to persons outside their own household and number of persons to which the older person talked have no effect on perceived old-age security. In Table 11.20, we look closer at emotional and social support that older persons receive through social interaction. We show that the type of interaction, talks to non-coresiding children and neighbours or friends, has a significant effect on the perceived old-age security. Older persons feel more secure when they talk more frequently with children who live outside the household. Older persons also feel slightly more secure when they talk more frequently with neighbours and friends.

11.3.4 Strategy of delayed property transfer

The last strategy that we will discuss is that of delaying the transfer of property to future inheritors. Some older persons had already handed over land or the house to (some of) their children. Others are conservative about dividing the property among the children before they would be very old or had died. They said that they would lose their power over the children and the care the children should provide them (see the case of *simbah* Ngatinem in Chapter 8.2.1). If this strategy is true, older persons who already have distributed property to inheritors will feel less secure than older persons who had not.

Table 11.21 shows that the status of the ownership or distribution of the house or land has no significant effect on old-age security. This result does not agree with the assumption that persons who hold on to their property feel more secure than persons who have already handed over their property. The level of security is not significantly different for persons who still own their property compared to those who already gave it away.

Table 11.21 Livelihood strategies concerning property of house and land by old-age security scale (percentages)

Livelihood strategies for old age (N=353)	Old-age security scale			Sign. ^a
	0-6 Not secure	7-8 Secure	9-10 Very secure	
House ownership:				n.s.
- Household member owns the house (N=126)	13.5	27.8	58.7	
- Older respondent owns the house (N=226)	11.5	29.2	59.3	
Land ownership:				n.s.
- No, not owning land (anymore) (N=105)	11.4	34.3	54.3	
- Yes, owning land (N=248)	12.5	26.6	60.9	
Distribution of land:				n.s.
- No, still owns land and did not (yet) distribute land (N=247)	12.6	26.3	61.1	
- Yes, already distributed land (N=26)	11.5	26.9	61.5	

^a Chi-square test: ***p<0.01; ** p<0.05; * p<0.10; n.s. no significant difference; n.a. not applicable.

In summary, the long-term strategies of care arrangement, remarriage, house move, support mobilisation and delayed property transfer were analysed to see whether older persons use them to achieve a care-free and supported old age. We only found significant effects with some of the strategies. This does not necessarily mean that these strategies are not in use, but that they may not yet be generally applied, may not have the intended result or may be considered unmentionable. The care arrangement strategies of number of children intervening with receiving ADL care or talk with non-coresiding children have an effect on perceived old-age security. The support mobilisation strategies of material support from other kin and talks with non-coresiding children or neighbours/friends have an effect on perceived old-age security as well.

Similar to what we found earlier (see section 11.2), the objective factors seem less important for feelings of old-age security than the more subjective factors. Many Javanese people told me that there are no insecure older persons in Indonesia because Javanese people take care of their older parents. They say that even when children migrate to other areas, they will send money home. Apparently, there is a discrepancy between the values and norms regarding elderly care and the actual practices (see also Niehof, 1995). On the one hand, we showed that not all older persons are taken care of by their children and some case studies illustrate this too. On the other hand, material support, ownership of house and land appear to have no effect on the felt security of older persons. Older persons feel secure when they have

(many) children who can take care of them personally when within the same household, and with whom they talk frequently when the children are not part of the household. Moreover, it is important for their security in old age that they talk frequently to neighbours/friends and receive material support from kin other than their children.

11.4 Changing old-age security

We had hypothesised that elderly care is changing through the processes of social change and that would affect the old-age security. We assumed that the usual pattern of older parents who live with and are taken care of by their children would change. Processes like improvement of education, industrialisation and migration would cause the children to leave the village for better work and living circumstances. Processes of improvement of hygiene and medical progress would cause older persons to live longer on average and be more in need of care in old age. We expected that the new pattern would be a problem for older parents, who would be more in need of care, without children to provide it for them. We expected that the new pattern would cause a decline in old-age security.

Therefore, we selected two villages and hypothesised differences in elderly care and old-age security. Kebonagung was selected as the village where we could study the usual pattern. Kebonagung is a more prosperous village with its main employment in agriculture and we expected low or no out-migration. We assumed that the elderly care would not yet have altered much in this area. Giriwungu was selected as the village where we could study the new pattern. Giriwungu is a relatively poor village with limited agricultural possibilities and we expected high out-migration. We assumed that the elderly care would be changing there and that this would have a negative effect on the old-age security. In this section, the two villages will be compared to analyse the effects of social change on elderly care and security in old age.

11.4.1 Comparison of the villages Kebonagung and Giriwungu

Based on theories proposed in other studies, we hypothesised that older persons living in the village of Giriwungu would be less secure than older persons living in the village of Kebonagung. However, this was not what we found in our study. Older persons feel more secure in Giriwungu than in Kebonagung. Hence, we cannot use the situation in Giriwungu as representative to predict a new pattern of care for and security of older persons in the future. Nevertheless, we can still compare the villages and analyse what the differences are in elderly care and why persons in Giriwungu are more secure.

Table 11.22 Regression of IADL status, receipt and old-age security on village.

	Total IADL score (Min. N=394)	Receipt of IADL (Min. N=397)	Old-age security scale (Min. N=353)
Village	-1.813	-0.014	0.554
(0=Kebonagung, 1=Giriwungu)	-0.101 (0.903)**	-0.020 (0.022)	0.170 (0.165)***
Total IADL score (9=very bad – 45=very good IADL capacity)		0.033 0.808 (0.001)***	0.085 0.469 (0.016)***
Receipt of IADL (0=no, 1=yes)			-0.995 -0.221 (0.386)**
Intercept	42.250	1.498	4.503
R²	1.0%	65.6%	11.3%

Unstandardised regression coefficients, standardised regression coefficients, standard errors between brackets (pairwise deletion of missing values). *** p< 0.01; ** p< 0.05; * p< 0.10.

Table 11.23 Regression of children's (co-)residence and old-age security on village.

	Coreidence with children (Min. N=397)	No. of children in same village (Min. N=397)	Old-age security scale (Min. N=353)
Village	0.157	0.064	0.472
(0=Kebonagung, 1=Giriwungu)	0.184 (0.042)***	0.025 (0.124)	0.144 (0.175)***
Coreidence with children (0=no, 1=at least one child)		1.193 0.388 (0.145)***	-0.277 -0.072 (0.221)
Number of children in same village			0.178 0.143 (0.071)**
Intercept	0.680	0.957	8.097
R²	3.4%	15.5%	3.8%

Unstandardised regression coefficients, standardised regression coefficients, standard errors between brackets (pairwise deletion of missing values). *** p< 0.01; ** p< 0.05; * p< 0.10.

The place of residence has no effect on the ability to perform the personal activities of daily life (ADL) or health. Table 11.22 presents the results concerning the ability to perform the instrumental activities of daily life (IADL) and the support received in this. In Giriwungu older persons have a worse IADL capacity and thus receive more often IADL support, which has a negative effect on their feelings of security. The IADL capacity and receipt explains a large part of the variance of the old-age security scale. Nevertheless, the direct effect of the place of residence on old-age security is positive for Giriwungu. Why do older persons feel more secure in Giriwungu while their strength to perform IADL activities is worse than in Kebonagung? We assumed that the availability and proximity of children could perhaps explain that. This

assumption is tested in Table 11.23. However, the place of residence has no effect on the number of available children who live in the same village as their older parents.

Contrary to our hypothesis, older persons in Giriwungu live more often with children than in Kebonagung. Moreover, they also have a larger number of children living in the same village. These aspects have a strong positive effect on the old-age security. The coresidence with a child and especially the number of children who live nearby explain a large part of the feelings of security in old age. Older persons who live with at least one child and also have children living in the same place, feel more secure. This probably explains why older persons in Giriwungu feel more secure although they have a poorer IADL capacity. They have children who can provide IADL support for them. Another explanation can be that older persons do not perceive that they are in need of instrumental support, which would negatively affect the feelings of security, because it is provided by the (grand-) children within the household.

We expected that social contacts and activities would be different in the villages and that it would affect the old-age security. However, place of residence has no effect on the frequency of talks with non-coresiding children, other kin or neighbours/friends. As presented in Table 11.14, the social participation score has no effect on old-age security. However, Table 11.24 shows that the social participation score is related to old-age security when controlled for village. In Giriwungu older persons participate less in social activities, which apparently has a positive effect on their feelings of security. In Chapter 10.4 we described how the difference involved the participation in the social activities of mutual assistance (*Gotong Royong*), saving and credit groups (*Arisan*) and religious groups. These activities all have a more or less compulsive character and the social participation score may indicate a kind of nominal participation. People have to be present, but they feel that they can spend their time and energy more usefully. The activities are probably not so important for them. Apparently, the fewer activities older persons have to participate in, the better they feel about it.

Finally, we assumed that the more agricultural character of Giriwungu would make a difference for the security of older persons. The place of residence has no effect on the individual income. Table 11.25 presents the results for farm work and land property. In Giriwungu older persons are more often farmers and are still farming, which according to the results, negatively affects their perceived old-age security. The hard work and not having the possibility to stop working probably explains this. However, being a farmer has an effect on the possession of farmland acreage, which in turn has a positive effect on old-age security. In Giriwungu older persons are more often farmers and own larger sizes of farm land by which they feel more secure. Although they have to work hard as farmers, they can provide for their own food needs and are not dependent on cash income, which makes them more in control in providing for their basic needs.

Table 11.24 Regression of social participation and old-age security on village.

	Social participation score (Min. N=355)	Old-age security scale (Min. N=353)
Village	-0.731	0.528
(0=Kebonagung, 1=Giriwungu)	-0.180 (0.212)***	0.161 (0.175)***
Social participation score (0=no - 18=participation in many social activities)		0.075 0.094 (0.043)*
Intercept	2.453	8.038
R²	3.2%	2.9%

Unstandardised regression coefficients, standardised regression coefficients, standard errors between brackets (pairwise deletion of missing values). *** p< 0.01; ** p< 0.05; * p< 0.10.

Table 11.25 Regression of farm work, farmland property and old-age security on village.

	Individual farming status (Min. N=211)	Farmland acreage (Min. N=397)	Old-age security scale (Min. N=353)
Village	0.389	11093.329	0.517
(0=Kebonagung, 1=Giriwungu)	0.463 (0.051)***	0.406 (1882.558)***	0.158 (0.267)*
Individual farming status (0=non-farming, 1=farming)		3909.624 0.120 (2242.285)*	-0.856 -0.220 (0.296)***
Farmland acreage (hectare)			0.000 0.192 (0.000)**
Intercept	0.574	1183.598	8.635
R²	21.5%	22.4%	8.0%

Unstandardised regression coefficients, standardised regression coefficients, standard errors between brackets (pairwise deletion of missing values). *** p< 0.01; ** p< 0.05; * p< 0.10.

Older persons feel more secure in the village of Giriwungu, because they coreside with at least one child, have children living in the same village, do not participate in many social activities and much farmland. These aspects are apparently more important for the security in old age than the negative aspects of having a poorer IADL capacity, more often needing IADL support and having to work hard as a farmer. We could not ascribe these effects to processes of social change, as hypothesised.

11.4.2 Case studies

The case studies in this sub-section illustrate some effects of social change processes on the care and security of older persons. We selected the cases according to the variables household composition and residence. The first two cases are about older women who live alone and are not taken care of by their son, who one would expect to be responsible. *Simbah* Rejo is older, less strong and cannot provide a living for herself. She has a female friend, who lives at the other side of the street and they meet almost everyday. Nevertheless, *simbah* Rejo feels lonely in a house without (grand-) children. *Simbah* Marto is younger and still healthy. She receives a pension from her deceased husband, which is more than sufficient for her daily needs. Nevertheless, she cultivates the poor soil to grow vegetables and weaves baskets in the evening, just for the results and to be busy. She seldom talks to other persons or pays visits. She thinks that it is better to live alone and be independent.

The case of *mbah* Rejo shows how a process of social change such as labour migration can cause loneliness and insecurity about livelihood in old age. *Mbah* Rejo is a retired widow and lives alone. Her eldest son and daughter both live with their own families in Jakarta and can rarely spare money for their mother. Her youngest son is single and works as a pedicab driver in the city of Yogyakarta. He said that it is difficult to make a living for himself. He used to come home twice a week and give his mother enough money to live, but that became very irregular. In the dry season *mbah* Rejo collects dried leaves and sells them for a little money. She can cope because she does not need much, eats little, sells dried leaves and borrows money or food from the *Koperasi Unit Desa (KUD)*, store and neighbours. Every time that she gets money from a child or borrows money from the KUD, she pays off her debts first and then buys food. *Mbah* Rejo never complains about her economic situation, but would like to work again to be busy. She is not strong enough anymore and there is no other work available that she can do. Therefore, she only sweeps the house and visits neighbours everyday. She prefers to live with a (grand-) child, as she said: "I do not have a young child. The house is lonely..." [sic].

Simbah Rejo (±72, female, retired), Kebonagung.

The case of *simbah* Marto is not a common one because she was the last wife of a very old teacher who had already had sixteen wives. The marriage with this cousin was arranged under the condition that she would be his last wife and receive his pension after his death. On the one hand it was a very long-term livelihood strategy that secured her with an income for the rest of her life until old age. On the other hand it made her vulnerable for social insecurity because her (step-) sons stole resources and assets from her and people envied her. *Simbah* Marto often said: "They do not understand. Nobody helps me. They always think she has enough...". She gave birth to four living sons. The eldest two live in the same village. The youngest two transmigrated to Sumatra. After the death of her spouse, the oldest sons secretly held back the pension, sold valuable goods and land, and finally ransacked a large part of her house. *Simbah* Marto did not want to live with the son who had done such things to her and went from one family member to another. She even went to her sons in Sumatra, but she had to return to the village or she would have lost the pension. Now she only has the house and a small part of land in front of the graveyard. She cultivates vegetables among the ruins of the house. From her monthly pension she uses eighty thousand rupiah for her daily necessities and can save twenty thousand. In order to protect her money from requests of

sons and others, she directly converts the saving money into gold when she collects the pension.

Simbah Marto (±65, female, retired with pension), Giriwungu.

The next cases describe older persons who live with a spouse and whose children do not (yet) take care of them. The first case shows that contrary to Javanese norms, children do not always take care of their older parents even when they live in the same village. *Simbah* Kromo's and her husband used to live with their son, daughter-in-law and grandchild in the parents' house. The older parents moved to another house some years ago because they could not live with each other anymore. *Simbah* Kromo's daughter followed her husband and lives in a nearby village. The second case shows that in conformity with Javanese norms, children are expected to care for their older parents even when they have moved to the city, where life is expensive and housing is small. *Bapak* Dwijo and his wife have two sons who migrated to Jakarta. *Bapak* Dwijo used to be a teacher until he had to become a farmer in 1965. They invested a lot in the education of their sons, which is the reason they do not own land anymore. Despite their education neither son earns much with work as a street sweeper. *Bapak* Dwijo is convinced that they will move to live with a son when they cannot take care of themselves anymore.

The case of *simbah* Kromo shows how old-age security can be at risk because of family feuds and bad health. The son and his family used to live with *mbah* Kromo and her frail husband, but the son was abusive. So the older parents left their good quality house and moved to another place of poorer quality in the village. The son is not acting according to Javanese norms. He does not take care of them personally, financially or practically. He does not talk to them anymore, he does not help them with money or material goods, and he does not want to take his father to a doctor. He does not even seem to care about them. The daughter-in-law feels sorry for them and helps them sometimes, which she has to hide from her husband.

The older parents cannot enforce their claim to their son's support by 'giving' him the house. Now they (have to) take care of themselves. They are economically insecure, because *mbah* Kromo does not earn enough as a small market vendor to provide for the high medical costs of her sick husband. He cannot work anymore. They have large debts for which they have mortgaged the farmland and pawned their few valuables like golden jewels and batik *kain*. They can cope by just surviving every day. They have still something to eat as long as *mbah* Kromo can perform the laborious work of production and sale of food snacks. They expect to stay on their own and ask for food from a child (they did not say which one) when they are too old to provide for their own livelihood.

Simbah Kromo (±62, female, small market vendor), Kebonagung.

Bapak Dwijo lives with his wife. Their two sons both live with their own families in Jakarta. *Bapak* Dwijo believes that their sons can take care of them when they are old.

Bapak Dwijo: "There must be a way. I do not yet know how we will get there [Jakarta]. I do not yet know how we will be taken care of. What is important is that we will not be neglected. I like Jakarta because it is a city. For now, we are still happy here. The proof is that I have not yet

gone to Jakarta because I am still strong. We have a happy life here. You should not make difficulties too long for the child."

Interviewer: "When will you leave to Jakarta?"

Bapak Dwijo: "When I am not strong anymore, meaning physically strong, and not able to work alone. [When I become like that] I would like for my child to come and get me and his mother. I would surely leave here..."

Interviewer: "What will happen with this house?"

Bapak Dwijo: "When the money is needed there [in Jakarta], this house will be sold. If there are no difficulties with my child, the house will be transferred to my family here."

Interviewer: "Is there enough space for two more adults in your child's house?"

Bapak Dwijo: "There is space enough. With only the two of us extra, there is still enough space."

Bapak Dwijo (64, male, petty trader and labourer), Giriwungu.

The last two cases are of older persons who live with a spouse and at least one child. The case of *simbah* Ngatinem describes a typical Javanese pattern of a three-generation household. The older (grand-) parents live with their daughter's family and all adult household members provide for the livelihood by farming. The tasks of the older (grand-) parents are gradually taken over by the daughter and son-in-law. The other daughter lives with her husband, their two children and her mother-in-law in the same village. The son has migrated to Jakarta, where he lives with his wife and child. Although *simbah* Ngatinem works hard, she is still strong and relatively secure since the older parents own the house and farm land. The case of *simbah* Muh describes a situation that is affected by social change. *Simbah* Muh and his wife have three daughters and a son. The youngest daughter is nineteen years old and still going to school. One daughter lives with her husband and children. The other daughter and the son have temporarily migrated to work in Taiwan and Malaysia, respectively. Large amounts of money are sent home, but the parents are very cautious in using it.

The case of *simbah* Ngatinem is an example of, what we call, the usual pattern of elderly care. Her generation coresides with a child's family. They own several plots of farmland, a large wooden house, a cow and goats. Although they have to work very hard to cultivate the less fertile soil and they can only grow dry rice once a year, they can provide for a living and always have cassava to eat. They are secure and could even help the daughter with paying off a high hospital bill by selling a cow. This pattern of elderly care is changing. Their only son has migrated to Jakarta. They still keep a piece of land for him, but nobody really expects him to return. The co-residing daughter only has one child. Since they provide her with the opportunity for a good education, everybody expects that the grandchild will migrate too. They do not give much thought yet to who will take care of them then when they become old and needy. Nobody knows the answer when this question is asked.

Simbah Ngatinem (61, female, farmer), Giriwungu.

Simbah Muh is one of the last collectors of palm sugar, a profession that he can not possibly carry out until a very old age. His wife produces and sells the sugar. Together they earn a good livelihood but for how much longer? The social change process of labour migration has a huge impact on their lives since two of their children went abroad for several years. The

migrated son usually sends the wages to his wife and child, who live in the same village. The migrated daughter sends the wages home and urges her parents to use the money. However, they say they do not need it. *Simbah* Muh thinks that he will follow the son of his oldest daughter who lives nearby when he stops working. He has already said to his grandson: "Later, when you are grown up and working, you can provide for your grandparents." Apparently, he does not expect that the coresiding daughter or migrated daughter, who both have good opportunities to make a living by respectively the educational attainment and saved capital, will take care of him in the future.

Simbah Muh (58, male, palm sugar collector), Kebonagung.

11.5 Conclusion

This chapter describes the outcomes of the measurement of old-age security. The old-age security scale is a subjective indicator of the older person's feelings of security. With the old-age security scale, we studied groups of older persons who are vulnerable to insecurity in old age. We expected older women, female widows and the oldest persons to be more vulnerable to insecurity, but that is not proven by this study. Gender, age or marital status have no effect on the level of old-age security. We only found a significant difference for residence. We had hypothesised that older persons would be less secure in the village of Giriwungu than in Kebonagung. We found that it was the other way around. This study showed that economic factors are less important than social factors for an older person's the feelings of security. The main indicators for old-age security are the ability to perform the (instrumental) activities of daily life (IADL) and health. Besides, the economic asset of farmland acreage is an indicator of old-age security.

Under changing circumstances, older persons need to develop livelihood strategies to secure a quiet, care-free and supported old age. The care arrangement strategy of having many children to provide for a secure old age seems to have an effect, but cannot be explained by the coresidence of these children. The effect can be partly explained by the receiving care for personal activities of daily life (ADL), which is usually provided within the older person's own household, or social support from non-coresiding children. The strategy of mobilising material support (goods or money) has no effect on felt old-age security. Only the support mobilisation strategies of material support from other kin, and talks with non-coresiding children or neighbours/friends have effect. Again, the subjective indicators are more important than the objective indicators for perceived old-age security. The general idea is that there are no insecure older persons, because Javanese people always take care of their older parents. Children are supposed to send money to their parents in the village, even when they have migrated to the city. This norm was found not to be maintained, because economic factors such as individual income, ownership of house or land, and material support do not have an effect on the older person's feelings of security. Older persons feel more secure when they live with an adult child, who can take care of them personally within the household and when they can talk frequently to children who live outside the household.

We had hypothesised that elderly care is changing by processes of social change and that these would have a negative impact on old-age security. We selected two villages and hypothesised a different effect on the elderly and old-age security. Giriwungu was selected as the relatively poor village with limited agricultural possibilities and no other job opportunities. We expected a high out-migration, because children would have left the village to find work. Hence, we expected that older persons would be without traditional care providers and less secure to a larger extent than in Kebonagung. Kebonagung was selected as the more prosperous village where children would have opportunities to earn a living. Therefore, we expected them to stay in the village. Older persons would feel more secure in Kebonagung because they would be taken care of by children living nearby. Our hypothesis of social change affecting elderly care was mainly based on economic assumptions. We thought that children would stay in or leave the village for economic reasons and that this would affect the elderly care and security. However, contrary to our hypothesis, older persons feel more secure in Giriwungu because they coreside with at least one child, have children living in the same village and own larger pieces of farmland. These aspects are apparently more important for the old-age security than the negative aspects of having a worse IADL capacity, needing more often IADL support and having to work hard as a farmer. We could not ascribe these effects to processes of social change.

By using both quantitative and qualitative research methods, we were able to develop new variables and refine the variables that we had already found in the literature (etic perspective). Above all, we developed variables that were founded in the experiences of the older persons that we studied (emic perspective). The main conclusion is that coresidence with children as providers of (I)ADL support, proximity of children for frequent talks and social contacts with neighbours/friends, and most of all, possession of land to be able to provide for one's own food are most important for the older person's feelings of security. In our study, feelings of old-age security seem to depend less on objective indicators like income and material support than one would expect on the basis of other studies of Indonesia (Mason, 1992; Nag et al., 1980; Population Studies Center, 1999; Rudkin-Miniot, 1992; Sunarto, 1978).

12. Conclusion, discussion and evaluation

This final chapter presents the main conclusions of the research on older persons living in two villages of the Special Region Yogyakarta, Indonesia. We looked at the living conditions, care arrangements, support relations, security and livelihood strategies of older persons, set within the context of social change. In a summary of the findings the answers to the research questions are presented. Then some salient findings are discussed and related to other studies found in the literature and a critical review is given of the applied research methods. Finally, we will evaluate the analytical framework and theoretical concepts that were used in this research in the light of their applicability to Indonesia and countries of similar socio-economic and cultural setting.

12.1 Insight into older person's lives

The first research objective addresses the problem of the inadequate information and knowledge about older persons living in Indonesia, and is, therefore, descriptive. This research aimed to gain insight into the lives of older persons, particularly how they care for themselves and receive care from others at the micro-level (household-kin-community). Moreover, it sought to identify transitions in elder care in order to be better able to anticipate to the needs for elder care in Indonesia in the future. Whether or not we achieved this objective will be answered in relation to several research questions. The central research question reads:

HOW DOES SOCIAL CHANGE AFFECT OLDER PERSONS' LIVES, AND WHAT IS THE SIGNIFICANCE OF CARE ARRANGEMENTS AND SUPPORT RELATIONS FOR OLD-AGE SECURITY?

This question is broken down into a number of subsidiary questions, which will be dealt with in the following sections. Each research question will be answered by summarising the results of the research bearing on that point.

12.1.1 Characteristics of older person's lives

There is a need to know more about the living conditions of older persons, to know more about the socio-demographic, health and economic characteristics of the lives of older persons. The first research question was, therefore, more generally phrased as:

1. HOW CAN THE LIVES OF OLDER PERSONS BE CHARACTERISED?

Chapter 6 describes the socio-demographic status of persons aged fifty-five years and older, who live in the Javanese villages of Kebonagung and Giriwungu in the Special Region Yogyakarta, Indonesia. The age distribution of the sample shows a slightly irregular pattern with relatively few people under 60 years old and more than could be expected above the age of 75. The sex distribution is skewed with more women than men in each age group, except the age group of 70-74. The older persons are 69 years old on average and they have more female than male peers. Most older persons say that they are Muslim. However, in practice they combine Islam with animistic and Hinduistic elements in a syncretic belief system in which the *slametan* plays a central part. The majority of the older persons did not receive any schooling, because there was no school in the village when they were young, and schooling was a privilege for the happy few. Almost two-thirds of the older persons are married and one-third are widowed. Their marriages were often arranged by the parents on the basis of practical reasons. The majority of the older persons live with their spouse and/or others, who usually are child(ren), a child-in-law and/or grandchildren. In general, an elderly household consists of nearly five persons and is a three-generation household. Most older persons have three children still alive of whom at least one lives with them or in the same village.

Chapter 7 describes the health characteristics of older persons. We measured the relatively objective health situation with scales for nutritional health and ability to perform the personal/instrumental activities of daily life. Most respondents have a moderate nutritional health and are usually able to perform the personal and instrumental activities of daily life. However, older persons could improve their health by adding more nutritional value and variation to their diet. Subjective health was measured by self-reports of physical and mental well-being, capacity of the senses, minor and chronic illnesses. In general, older persons are in good health, although they suffer from at least one minor illness and half of them suffer from a chronic illness. Most respondents can use all their sense organs; problems are mostly related to seeing and hearing.

We only found a few cases of demented, bedridden or destitute persons. Although mental well-being is difficult to assess, we hypothesised possible reasons for the low prevalence of dementia. Indonesian people seldom reach the ages characterised by dependency and dementia. Besides, older persons continue to be useful around the house and farm, and, therefore, may retain the capability to perform (instrumental) activities. They gradually reduce their activities and do not abruptly stop working. People generally stay in their own houses and are mentally involved with (grand) children, which may prevent them from becoming estranged from their environment as would occur if they moved to an institution.

Chapter 8 describes the resources and assets that determine the livelihood of older persons. Resources are the immediate means necessary for livelihood generation. Access to work, individual income, household income, food crops, (fruit) trees, and water sources are important for the satisfaction of older person's daily needs. About half of the older respondents spend most of their time on work from which they earn

an income in cash or in kind. A quarter spent most of their time on household activities, and another quarter performed other activities at home. These people could be called retired. Here retirement stands for not spending most of the time on income-generating activities. We found that people retire at the average age of 64 years while the life expectancy at birth is 65 years. Hence, we may say that in the rural areas of the Special Region Yogyakarta older people tend to work until they die.

The individual income of older persons is lower than the officially set mean value of basic daily needs. The elderly household income is higher than the official minimum wage for a standardised household of two adults and two children. However, the research data and formal standards are difficult to compare due to measurement differences concerning rural and urban environments, informal and formal work, income in cash and in kind, and household composition. Nevertheless, for three-quarter of the older persons in the research the individual income is sufficient for their daily needs. For one-quarter it is not sufficient because they have an uncertain income or many needs to fulfil.

Assets consist of a wide range of tangible and intangible stores of values or claims to assistance that can be converted into money if necessary. Ownership of a house made of durable building materials, household items, fertile farmland, and livestock is important for meeting basic needs, and for additional resources in times of need. In Kebonagung the houses in which older persons live are made of better materials and have better facilities than in Giriwungu. More than half of the elderly households do not have access to enough farmland (corrected for type of irrigation) to meet their basic needs. Almost ten percent of the households are considered landless, and most of these are in Kebonagung. People in Kebonagung more often have income from sources other than agricultural production than in Giriwungu.

12.1.2 *Patterns of elder care*

We are primarily interested in the care arrangements and support network relations of older persons; specifically the care activities that older persons provide for themselves, that people in their personal network can provide for them, and the care they can provide for others. The care arrangement is defined as the totality of all settlements about the care and support activities between an older person and others. The support network relations are narrowed down to the supporting ties of the older person with household members, other kin, neighbours and friends, social organisations and neighbourhood groups. The individual care arrangements and support relations of older persons result in patterns of elder care. Hence, the second research question was phrased as:

2. WHAT PATTERNS OF ELDER CARE CAN BE DISTINGUISHED?

Chapter 9 describes the living arrangements and daily care practices within elderly households. The availability, coresidence and proximity of children together make up the living arrangements of older persons. It does not mean that care and support is

automatically provided to an older person when s/he lives with a child or has children living nearby. However, living with children indicates a possible source of care and support, and it influences the perspective and expectations of older persons with regard to support. Very few people have no children, but the majority of these childless people live with other relatives. The childless people who live alone are all women and, given the absence of a social security scheme, they are probably most vulnerable when they are in need of support. Most older persons live with or close to (some of) their children and hence apply for support from them. However, a large majority does not need help with the personal or instrumental activities of daily life, because they can still perform them without difficulty. The few persons who need help with the personal or instrumental activities, are mainly supported by a coresiding daughter. Although other studies report a preference of older parents for coresidence with a daughter, we only found a weakly significant confirmation of this hypothesis. We found that older mothers seem to prefer living together with a son. The distance at which children live from their parents does not seem to have implications for the daily care that parents receive. Most care is still provided by children, who live with the parents or live in the same village. However, we found some indication that respondents who have nobody near who can help, are reluctant to confess that they need help.

Chapter 10 describes the relations of material, emotional and social support in and beyond the elderly household. Material support consists of money and material goods. Less than half of the older persons receives monetary support and only a quarter receive support in kind such as food or clothes. In general material support is received regularly: monetary support every three weeks and support in kind every ten days approximately. The main sources of financial support are sons. It is common practice that financial responsibilities and power are gradually transferred from the older persons to the younger persons in the extended household. We have hypothesised that migrated children would support their parents more by sending money home. Indeed, the proximity of children has implications for the financial care that parents receive. Parents with children living at a larger distance receive significantly higher yearly amounts of money than parents with children living nearby.

Emotional support was operationalised as advice, trust and social contact exchanged outside the household. It was difficult to ask questions about advice and trust, because Javanese people do not easily talk about private matters. The responses to questions about social contact were easier to obtain. The majority of the older persons talked with neighbours and friends every other day. The different words for small talk (*omong-omong*), visiting for pleasure (*main, dolan*) and visiting a sick person (*besuk*) have different connotations and uses. We observed that children who live far away from their parents do not visit them regularly. Not even when the children live in Yogyakarta, which is only fifteen to twenty-five kilometres away from the study areas. They don't even return home at *Lebaran* at the end of the Fasting month (*Idul Fitri*), when children are expected to show respect to older persons and are expected to visit and bring presents to their parents.

The social activities in which an older person participates constitute a social network and create a potential source of support. The social activities, which are most popular among older persons, are organised by the neighbourhood. The social networks of *gotong royong* (mutual assistance group), *arisan dan simpan pinjam* (saving and credit group), *ronda* (nights patrol group), *Dasa Wisma* (women's information group), *pengajian* (Koran recitation group) and *lingkungan* (social circle of direct neighbours) provide financial or labour support in a direct and reciprocal way. However, a person is only assured of support from these networks as long as at least one household member participates. Therefore, these social activities are not beneficial for the oldest people, who cannot participate anymore and who do not live together with a participating household member. Older persons who live alone, do not live with a child, or only have children living at a large distance are the most vulnerable to a lack of emotional and social support.

12.1.3 Old-age security and livelihood strategies

To be able to assess, act on and prevent problems with care for older persons, it is useful to have indicators for old-age security. Old-age security is defined as the relative state of security of older persons, which refers to their food security, health security, physical security, economic security and emotional security. We are interested in how secure older persons feel and what factors influence this security. Hence, the third research question was formulated as follows:

3. WHAT FACTORS AFFECT OLD-AGE SECURITY?

Chapter 11 describes how we developed the old-age security scale, as an indicator of the older person's subjective feelings of security. We hypothesised that older women, female widows and the oldest persons will be more vulnerable to insecurity, but this was not confirmed. Gender, age or marital status have no effect on perceived old-age security. We also hypothesised that older persons will be less secure in Giriwungu than in Kebonagung. However, we found that it was just the other way around. This study shows that economic factors are less important than social factors for feelings of security of older persons. The main indicators proved to be the ability to perform the (instrumental) activities of daily life (IADL) and health. Besides, the economic asset of farmland acreage is a determinant of perceived old-age security.

We assume that persons have strategies to provide for a secure and quiet old age. A livelihood strategy is defined as the ability to maintain and improve (old age) security while maintaining or enhancing the assets and resources on which households depend. The fourth research question was formulated as follows:

4. WHAT LIVELIHOOD STRATEGIES SECURE OLD AGE?

Chapter 11 describes the strategies of care arrangement, remarriage, moving house, support mobilisation and delayed property transfer. The care arrangement strategy of having many children to provide for a secure old age seems to have an effect on the

perceived old-age security. However, the effect cannot be explained by the coresidence of the children. The effect can partly be explained by the care received for personal activities of daily life, which is usually provided within the elderly household or by non-coresiding children. We could not demonstrate the existence of a strategy of remarriage, house move or delayed property transfer. The strategy of mobilising monetary support or support in kind has no effect on perceived old-age security. Only the mobilisation of material support from other kin, and talks with non-coresiding children or neighbours/friends have an effect. These indicators seem more important than several objective indicators for the perceived old-age security. Older persons feel more secure when they live with an adult child, who can take care of them personally within the household and when they can talk frequently to children who live outside the household.

12.1.4 Effects of social change

It is assumed that care arrangements and support relations change under the influence of social change. When care arrangements and support relations of older persons change, this will affect the old-age security. As discussed in Chapter 2, social change is defined as a complex of interrelated natural, cultural, societal and individual transitions. Of all processes of social change, we assume that migration and longevity will have a major impact on familial elder care in rural areas. When young persons leave the village to seek work and a livelihood in a city, older persons stay behind without children who traditionally provided care in old age. When older persons live longer, they will generally need more care in the final stage of their lives. The last research question was, therefore, phrased as follows:

5. HOW DO PROCESSES OF SOCIAL CHANGE AFFECT ELDER CARE AND OLD-AGE SECURITY?

To investigate the effects of social change on older persons' lives, elder care and old-age security, a comparative element was included in the study design by the selection of two villages. The village of Kebonagung with low or no out-migration is more prosperous, but still has its main employment in agriculture along with other paid jobs. The village of Giriwungu with high emigration is poor and, because of its less fertile soils, has limited agricultural possibilities. We assumed that the impact of social change would be most noticeable in Giriwungu. Hence, we assumed that in Giriwungu the lives of older persons would be more negatively affected, older persons would be without traditional care providers and less secure in old age. However, the following results do not support the assumption that Giriwungu is the village experiencing a higher rate of emigration of younger persons than Kebonagung. In Kebonagung, older persons have smaller households, more often live alone, have no coresiding children and less often have a child living in the same village.

In Giriwungu more older persons are still working. They are usually farmer, who gradually reduce their activities without having to stop working. In Kebonagung the

activities of older persons are more evenly distributed between farm and other work. In Giriwungu elderly households cultivate a larger variation of crops and have more different types of livestock. In Kebonagung people have specialised in wet-rice cultivation and there are more landless people. Landless people who are dependent on cash income are more at risk when they become older and can no longer earn an income and provide for their own subsistence. In Giriwungu elderly households appear to invest more in agricultural stores of value, such as livestock and hardwood trees. In Kebonagung elderly households appear to invest in household items and housing quality. Although the household income in cash and in kind in Giriwungu is about half that of Kebonagung, farmland ownership (corrected for irrigation facilities) in Giriwungu is five times that of Kebonagung. Cassava is an important crop in Giriwungu. Although it has low monetary value, it is a buffer crop that is kept in the field and can always be eaten, which makes people in Giriwungu more food secure.

We hypothesised that older persons would feel more secure in Kebonagung, because their children would not need to leave the village and, therefore, could still take care of their parents. Our hypothesis was mainly based on economic assumptions. However, contrary to our hypothesis, older persons in Giriwungu feel more secure because they live with at least one child, have children living in the same village and own more farmland. These factors are more important to the perceived old-age security than the negative factors of having a poor IADL capacity, more often needing IADL support and having to work hard as a farmer. These effects could not be ascribed to the impact of social change.

12.2 Salient findings and applied methods

In this section, we will discuss some salient findings of this study in relation to other studies in Indonesia. We have used studies listed in the overview of Table 4.1 and more recent studies. We will also discuss our findings in relation to the research methods applied.

12.2.1 Gender perspective

Gender-based analysis is often seen as being unnecessarily divisive, as exaggerating women's problems and/or underestimating men's problems. However, a gender perspective implies more than analysing differences between men's and women's problems. It also implies looking at the cultural, social and ideological environment in which gender differences operate. Men and women both become older and biological ageing will largely proceed more or less in the same manner for each person. Nevertheless, the problems that men and women experience with old age will be different, and this may have drastic consequences for individual lives.

In the study population of older persons there are more women than men. The average age of the men is 68 years and of the women 70 years. Generally, men do not become as old as women, which is evident in the oldest age groups. Women

older than ninety years have almost no male companions of the same age group. Older men are more often married and older women are more often widowed. Consequently, men mostly live with spouses and others, while women mostly live with others. Among the older persons who do not live with a child, there are more women than men. Besides, the few persons who live alone are mainly women in the highest age group of 75 and over living in Kebonagung. Because women follow their husbands after marriage, they more often live greater distances from their birthplaces than men. When women become older, they are more likely to live further away from their own family. We hypothesised that all these socio-demographic factors make women more vulnerable in old age.

The relationship between the gender of older persons and coresidence is a relationship that is frequently investigated in empirical work. We found that older women are more likely than older men to live alone or with family members other than their spouse, such as child(ren), child-in-law and/or grandchildren. Older men are more likely to live with spouse and others, or only with spouse. Similar patterns have been observed in other studies of Indonesia (Chen and Jones, 1989; Hugo, 1992a; Rudkin, 1993).

It is generally believed that Indonesians have a preference for living with a daughter (Jay, 1969; Koentjaraningrat, 1957). Parents would more easily ask for personal care and household support from a blood-related daughter than from a daughter-in-law. Then why do mothers prefer to live with sons? Is it possible that when people consider the whole care arrangement, personal and instrumental support are deemed less important than monetary and material support? The former type of support could be taken less into consideration, given the few older people who need it. Given the fact that older women less often have their own incomes, have on average a lower individual income, and less often own the house or land, they are more financially dependent on others than older men. Because men earn more and sons usually provide financial support, sons are probably more solid resources toward a secure old age for mothers than sons-in-law. We could not prove that older women are more vulnerable to perceived insecurity in old age, but they seem to apply different strategies than older men.

In the present study, older persons appeared to have moderate to good (nutritional) health. We did not find important gender differences in this respect. This is in contrast with other studies on health of older persons in Indonesia. Kartari (1993) found that older men had a better nutritional status than older women in the urban area of the Cempaka Putih district. Matulesy et al. (1990) found that most of the elderly respondents were undernourished and that men suffered more from anaemia than women in the regencies of Sleman and Kulon Progo. In the city of Solo, Evans (1990) studied the influence of the economic status of older men and women on their nutritional status. He found that control of funds, or economic status, is a crucial determinant of the nutritional level of older people in the Javanese household. The economic status of the men appears to derive from their responsibility for providing a household income, while that of the women appears to derive from directly controlling

it. He suggests that fewer men than women will be found to show signs of malnutrition. The reason for our contradictory findings is probably that we asked for the older person's perception of their health and the other studies performed biomedical tests. This explanation is supported by the study of Sigit (1988), also on Java, who also interviewed older persons about their concerns about health problems and did not find a gender difference.

Among the livelihood indicators, we found significant gender differences at the individual level but not at the household level. The livelihood situation varies highly for older men and women individually. Older women retire earlier, are less often involved in an income-generating activity and consequently have less individual income. Other studies also found that older women stop work earlier and earn less than older men (Chen and Jones, 1989; Rudkin, 1993; Sigit, 1988). In general, older women individually have a poorer economic situation than older men. However, older women do not feel differently from older men regarding old-age security. Perhaps women accept the culturally determined inequity and have adjusted their expectations accordingly.

At the household level, we did not find gender differences for household income, housing quality, farmland acreage, livestock value or household items. This is contradictory to findings by Rudkin (1993; 1992), who found lower levels of economic well-being for the indicators of household income, housing quality and consumer items available to the household. However, she did find that the gender effect was stronger for individual than for household indicators. Individual older women have a lower economic status than older men. When older women share a household with other people, this is not much of a problem. It can be a problem when older women live alone and cannot rely on other sources of support.

The assets of house and land can be a reason to provide care for older persons. In a fishing village in Madura, daughters can claim the parental house and the parents are entitled to care from their daughter (Niehof, 1985). We found that older women less often own land or the house in which they live, and have more often already divided the land among the children or never owned land. This would imply that women are less certain about care in old age than men. Nevertheless, we did not find gender differences for the support with the instrumental activities of daily life, and for material support and emotional support. We only found a weak significant gender difference for monetary support. Women receive lower amounts of money from outside the household than men. In rural Java, it is common for older people to delay transferring the house, garden and land to their children until they die (Sunarto, 1978). Although we observed some people who applied this strategy to ensure that support would be forthcoming, we could not demonstrate that ownership of house or land had an effect on old-age security.

We did not find gender differences among the receivers of personal care, instrumental support, financial support and emotional support. We only found gender differences for the participation in the social activities of mutual assistance (*gotong*

royong), nights patrol group (*ronda*) and women's information groups (*Dasa Wisma*). These findings are not surprising since these activities are typically either male or female activities. Nevertheless, we did find gender differences among the providers of care and support. It is mainly coresiding daughters (-in-law) that give support for the instrumental activities of daily life (IADL) to the older persons needing assistance. Coresiding and non-coresiding sons mainly give financial support.

12.2.2 Age perspective

Like gender, age is also a crucial parameter in social and economic analysis. Age is a complementary variable to, rather than competitive with, the variables of class, ownership, occupations, incomes, family status and gender. The varying position of people of different age groups, and probably even more varying for people of different generations, points to the necessity of treating age as a factor on its own in socio-economic research. The age perspective is important with regard to the individual interests of 'the young', 'the adult' and 'the older' household members. These individual interests can be different from the co-operative interest of the whole household. The concept of co-operative conflicts (Sen, 1990) provides a valuable tool for understanding household bargaining processes, in which different interests are taken into account. In most Indonesian studies 'the elderly' are considered as one homogenous group.

Although it is somewhat arbitrary to distinguish 'older persons' by a calendar age, we opted for persons aged fifty-five years and above in the sample in order to study the whole range of aging from being able-bodied to being physically dependent on others. We distinguished three age groups for statistical reasons and these age groups concern roughly the following ageing stages:

- Persons aged 55-64 years are married, live with their spouse and others. They have a good health in general. They work, hence earn an individual income, and have access to a household income that is almost twice the official minimum wage. They invest more in housing quality and valuable household items than the persons who are older.
- Persons aged 65-74 years are married, live with their spouse and others. They generally have good health but suffer more from chronic illnesses. They work, earn an individual income, and have access to a household income that is one and a half times higher than the official minimum wage.
- Persons older than 75 years are widowed and usually live with others. They have the worst health of all the older persons but are still generally healthy. They are retired and have access to a household income that is equal to the official minimum wage.

The oldest respondents have significantly larger households (five persons on average) than the youngest respondents (four persons on average). Persons in the youngest age group often live only with sons. Persons in the middle and oldest age group often live only with daughters. This may indicate that the preference for living with a daughter is more traditional. Persons in the youngest age group also coreside

more frequently with a combination of sons and daughters, indicating that there is more than one child left in the parental home. These persons probably have children who are not yet adults. The same age group differs from the oldest age groups in having children living in the municipality of Yogyakarta or in other areas on Java. These children live at a distance of 20 to 450 km. from their parents. The oldest persons have fewer children living at such a large distance, which indicates that out-migration of the young people is a recent development that is not much felt by the oldest persons. The youngest respondents have experienced their children migrating to other areas. However, because these respondents are usually still healthy, they can provide for their livelihood, and do not yet experience problems associated with not having children living in the neighbourhood.

As expected, the health indicators that differ significantly for age show a pattern of declining health with increasing age. However, the proportion of people who reported themselves to be in good health (42.9%) is considerably lower than was found by other self-assessment health studies in Indonesia. In the 1980 Census, about 70% reported themselves as healthy (Adlakha and Rudolph, 1994). In the 1986 ASEAN survey, about 65% reported themselves to be in good to very good health (Chen and Jones, 1989). However, these studies were carried out among the whole population of Indonesia, which partly cause the difference in results. Subjective health is generally reported to be better in urban areas than in rural areas. Two studies emphasise this statement. Good to very good health was reported for 69% in urban areas and 62% in rural areas in Java (Sigit, 1988). The urban part of the present study reported 71% to be in good health in the municipality of Yogyakarta (Population Studies Center, 1999). The respondents of all these studies were on average even older (60 years and over) than our respondents (55 years and over), from which one would expect lower proportions of good health since health declines with age. Hence, the self-assessed general health of the respondents is worse in our study areas than what is usually found in Indonesia.

Not being trained in medicine or psychology, it was difficult to assess the mental well-being of the respondents. The question is why we found so few cases of dementia and no bedridden or needy cases were found at all in our survey sample. At least one specialist reports that there is no reason to believe that the incidence of dementia of the Alzheimer type will be any lower in Indonesia than it is in Australia (Mykyta, 1994). The only study on mental health problems in Indonesia that we know of is the study of Syryani et al. (1988) in the village of Batur Utara in Bali. The persons aged 65 years and older were in relatively good physical health. Most (95%) were vigorous and continued daily farm work. The prevalence of early dementia was relatively low (7%) compared to studies in the USA (16-24% early and middle dementia). Among the Balinese respondents no middle or more severe cases of dementia were found, which is considered atypical and possibly due to limitations of sample size (N=45). We only applied a Mini Mental Test to respondents of whom we suspected were not capable of answering the survey questions (N=42) and we found a higher prevalence of mental disabilities (29%) than Syryani et al. However, if we can assume that the rest of the sample does not suffer from a mental disorder, than

the prevalence of mental disorder is much lower (3%) in the sample as a whole (N=397). Therefore, we doubt that the limited sample size is the cause of the low prevalence of dementia found by Syryani et al. Obviously, more research is needed on this subject and will be of increasing significance as longevity increases.

Households of persons aged 55-64 years received the highest financial support, usually from children, and mainly from sons. On average, the amount of annual monetary support declines with age. The value of annual material support is significantly lower for the higher ages. Why would the age group that we expect can provide for themselves receive the most financial support and the age group that we expect are the most dependent receive the lesser? Perhaps the height of financial support does not depend on the needs of the older person, but on the capacity of their children to provide support. Persons aged 55-64 years probably have some children, who have migrated and earn cash incomes while they do not yet have their own families. Therefore, they can send more money to their parents in the village. Persons aged 65 years and older have less children who have emigrated and the children who did move away probably have their own families to take care of. Consequently, these children have less money left to send to their parents. The study of Cameron and Cobb-Clark (2001) supports the idea that transfers from non-coresiding Indonesian children are not strongly related to parental need. However, they also found that transfers are not strongly related to the ability of the non-coresiding child to give support.

Although the living circumstances decline with increasing age, age has no effect on perceived old-age security. The oldest respondents do not feel differently about security than the youngest respondents. With old age people lose their spouse, become less healthy, stop work, decline in individual income, become physically and economically dependent of others, receive less financial support and participate less in social activities. Nevertheless, the oldest persons do not feel less secure than the younger persons. The reason for this is probably that people adjust their expectations according to their age. People expect to experience all the above mentioned old age problems and take these into account when they consider their feelings of security.

12.2.3 *Living and care arrangements*

In Indonesia most people, especially those whose primary source of income is agriculture, live with their children (Molyneaux et al., 1990). Rudkin (1994b) also found that coresidency is a desirable state for elderly Indonesians. Our results are consistent with these findings, the majority of the older persons live with at least one child. Additionally, about half of the older persons have a child living in the same village. The living arrangement, however, does not refer only to who lives with whom, but also to how people negotiate, plan, agree and prepare to live together. With qualitative methods, we tried to investigate how people arrange the living arrangement but they were not very clear about it. Although there are norms and expectations about living arrangements and care-giving between family, according to Finch and Mason, norms have to be considered as guidelines rather than rules.

There can be legitimate reasons for not giving support and deviating from the norm (Finch and Mason, 1993). In practice, circumstances may determine the extent to which norms are actually implemented.

Knodel and Saengtienchai (1999) suggest that one likely reason why respondents seem unable to articulate the decision-making process or the underlying strategy, which researchers presume to exist, is that some situations are the result of unanticipated circumstances, rather than planned. For example in the case of *simbah* Yoso, whose daughter returned to the parental home. *Simbah* Yoso could not explain the marital difficulties of his daughter or tell if she would ever live with her husband again (see Chapter 6.2.2 and Annex 6.4). Or the case of our neighbours in Kebonagung, whose single son returned to the parental home when he became unemployed in Jakarta (see Chapter 9.2.1 and Figure 9.1).

Another likely reason why respondents have difficulties explaining how one child comes to be coresident rather than another is that it may arise more by chance than through a conscious and coordinated series of decisions. Children move out of the parental household one by one, as they marry or seek work elsewhere. Largely by default, the one who is left may be assigned the role of care-taker (Knodel and Saengtienchai, 1999). This may be the case for *simbah* Sukini, whose oldest daughter could not join a transmigration programme because she was pregnant while her second and third children were able to go (see Chapter 9.2.2 and Figure 9.2). Perhaps, it will be the case for *simbah* Muh. He lives with his wife and youngest daughter, who is still going to school, while all the other children have already left the home (see Chapter 8.3.1 and Annex 8.3).

Finally, the living arrangement can be an emotional topic and hence a sensitive issue to discuss, especially when the accompanying questions deal with the support exchanges. Such inquiries can easily touch on matters with emotional content related to strained interpersonal relations (Knodel and Saengtienchai, 1999). For example, the case of *simbah* Kromo and her husband who, according to the neighbours, stopped living together with their abusive son (see Chapters 7.2.1 and 10.2.2). Or the case of *simbah* Rejo, who responded that her son, who works in the city, comes home twice a week and gives her money. After having observed that he did not return for three weeks, the son responded that it was not agreed that he would come home so often (see Chapter 10.2.2).

Whether having children who live further away is good or bad for the older parent depends on relationships with the children and the children's financial situation (Knodel and Saengtienchai, 1999). We found that the number of children has a positive effect on the perceived old-age security. The number of children who live in the same village as their parents also has an effect. Older parents who have many children are feeling relatively more secure, especially when they have many children living in the same village. Having a non-coresiding child in the same village only has a weak effect and children who live further away do not have an effect on the perceived old-age security. Frankenberg, Beard and Saputra (1999) found that older

persons with larger numbers of children are more likely to live with children. However, we found that coresidence with a child has no effect on the perceived old-age security. Whether older persons live with many, few or no children has no influence on how secure they feel.

Coresidence does not necessarily mean that older parents are receiving support from their children (Hermalin, 1997; Knodel and Saengtienchai, 1999). Our results show that a comparison between older persons who live with or without a child, there is no difference in the height of financial support, which they receive from non-coresiding children. Other studies suggest that the reverse might be the case (Cameron, 2000; Frankenberg et al., 1999). The parent's earnings have no relationship with coresidency. In contrast, the children's earnings are negatively related to coresidency. Parents with children who, on average, have high earnings are more likely to live by themselves, but this effect is quantitatively small (Cameron, 2000). Transfers from non-coresiding children to their older parents do not seem to be strongly related to parental need, characteristics of the coresiding children or the ability to give of the non-coresiding children. Moreover, there is little evidence that transfers are a substitute for the income support provided by the older parent's own labour supply. Only for non-coresiding mothers, are transfers associated with a decline in hours of work (Cameron and Cobb-Clark, 2001). Beard and Kunharibowo (2001) found that living arrangements and support relationships are highly nuanced and that complex reciprocal relationships are involved. Among their case studies in urban and rural areas on Java and Sumatra, the relationship between parent and child is mostly reciprocal.

Receiving financial support does not necessarily mean that older persons are well taken care of. In fact, our study suggests that receiving financial support does not have an effect on the older person's feelings of security. This leads to the question of whether these older persons receive good care? We used Tronto's framework (1993) to assess quality of care. In general, we can answer the question above positively. When we think of the elderly case households¹ and what we have observed elsewhere, in the villages of Kebonagung and Giriwungu most of the older persons receive good care. The cases of *simbah* Muh, Ngatinem, Dwijo and Niti are illustrations of good care. *Simbah* Muh (58 years) and his wife (55 years) are both healthy. They still work and can take care of themselves and the youngest daughter's education. The daughter that has emigrated to Taiwan is attentive to the situation of her parents by urging them to use the money that she sends home, although they responded that they do not need it. *Simbah* Muh's and his wife are economically independent. However for some small things like cigarettes, he goes to the daughter who has a shop in the village. They regularly meet this daughter's family, because they live near each other in Kebonagung (see also Chapter 8.3.1).

Simbah Ngatinem (61 years) and her frail husband (71 years) live with their daughter, son-in-law and granddaughter in Giriwungu. Within the household they are

¹ See Table 5.18 in Chapter 5.4.2 for a short characterisation of the elderly case households.

responsible for and provide good care for each other. The adults work in the fields, although Ngatinem's husband does not perform heavy labour anymore. The granddaughter goes to school and they can afford the high costs of education and boarding. Everyone helps with the household activities. *Simbah* Ngatinem's other daughter lives nearby with her family. When she was hospitalised, Ngatinem's household was able to take the responsibility and pay for her hospital costs. Ngatinem does not have much contact with the son who lives with his family in Jakarta. She does not expect him to provide care when it is later needed (see also Chapters 6.2.1 and 10.2.4).

Bapak Dwijo (64 years) lives with his wife (age unknown but not yet old) in Giriwungu. Although he used to be a teacher and is respected for this, nowadays they have difficulty providing a living for themselves. The two sons both live with their families in Jakarta and have low-wage jobs. Their sons do not yet provide care for them. As long as *bapak* Dwijo and his wife are still strong, they say that they do not need or expect to receive care from them. *Bapak* Dwijo is convinced that when he cannot work anymore, a son will take them to Jakarta and will be able to give good care (see also Chapters 8.1.3 and 11.4.2).

Simbah Niti (±90+ years) lives in a four-generation household in Giriwungu. She is retired and stays at home where she performs some small chores. Usually all adult household members work in the fields and the great-grandson goes to school. Hence, *simbah* Niti is often alone during the day. The granddaughter is concerned about and feels responsible for doing as much as possible for her grandmother. However, *simbah* Niti does not want to receive all the given care and for example likes to boil her own tea water. *Simbah* Niti indicates very clearly what she does not want to be done by others. Therefore, the rest of the given support, such as cooking food, providing clothes and helping with personal care, is good care because it is adapted to the wishes of the care-receiver (see also Chapters 9.2.2 and 9.3.2).

These four different cases can be taken as examples of good care, although some conflicts can be observed. The cases of *simbah* Muh and Niti illustrate the conflict between the needs of the care-givers and the older persons receiving care. The (grand) daughters want to give money or practical help, but the older (grand) parents do not want to receive it. The case of *bapak* Dwijo illustrates the conflict between the available resources of the care-givers and the needs of the care-receivers. The sons do not recognise the needs of their parents (because they seldom come to the village) and/or they have insufficient resources to provide them with good care. However, *bapak* Dwijo has neither expressed a need nor realised that he may need support. All the older persons also have children with whom they do not have regular contact. Although none of the respondents expressed a need for more contact with these distant children, we can imagine that they would consider more attentiveness preferable to what they receive now. Nevertheless, we still consider the above cases as examples of good care, also because the older persons themselves think they receive good, or at least sufficient, care.

Still, we also observed cases in which care is not well provided. *Simbah* Marto (±65 years) lives alone, because she has a conflict with the son who should take care of her. Her son built a new house with materials from her house in which she was supposed to live with him, his wife, children and parents-in-law. The (step-) sons, who treat her badly, do not care about their (step-) mother. Although she is financially independent because of a pension, which provides more money than she needs for daily living, they do not care well for her when they do not return borrowed money or do not help her in other ways (see also Chapter 10.2.3).

Simbah Kromo (±62 years) and her sick husband (±68 years) used to have a good house in which they lived with their son's family. The son was abusive and they had many noisy conflicts. Now they live alone in a poor looking house in Kebonagung. *Simbah* Kromo produces food snacks, which she sells door-to-door and at the market. It is heavy work with which she hardly earns enough to meet their basic needs. Additionally, they have large medical expenses for the treatment of her husband's bad leg, which they cannot afford. They do not have any assets left and do not receive care or support from their children. The son does not want to take his father to the hospital and does not even talk to his parents anymore. The daughter does not have the resources to help her parents and has to take care of her own family (see also Chapters 7.2.1 and 10.2.2).

Simbah Rejo (±72 years) is the worst case in terms of not receiving the care that she needs. After having worked as a servant in Jakarta for many years, *simbah* Rejo retired and returned to Kebonagung. Her unmarried son is supposed to give her money to meet her living expenses and also come home twice a week. But as a pedicab driver he barely earns more than the rent for the pedicab and he stays in Yogyakarta most of the time. The other son and daughter both live with their families in Jakarta and they send money occasionally. She probably experiences hunger as well as loneliness because they do not send adequate food or money and are not physically present. The children do not have adequate resources and they are unable to provide their mother with good care. (See also Chapter 10.2.2.)

In Indonesia 'good elder care' is defined as care provided by children within the household. Against this cultural construction of adequate care, we viewed the elderly case households. We did not consider professional or institutional care because that is not part of 'good care' in Indonesia. However, the Indonesian construction of familial elder care does not provide for care of older persons who do not have children, who have broken with their children or whose children do not have sufficient resources. Other sources of care should be provided for these persons when they become older and can no longer take care of themselves. Health clinics with special services for older persons and elderly homes should also be made available in the rural areas. The construction of good elder care by children does not provide for an adequate situation when older persons become physically dependent or demented. Professional services should be enhanced and information should be given to the families to understand and cope with their parents' physical and/or mental condition.

12.2.4 Support network relations

In the present research we studied the support network relations of older persons with several methods. By applying these methods we experienced some problems, which are briefly described here. In the Elderly Household Survey, questions were included to identify the type of relationship for specific contents of support. The questions were asked in an open way, which after the laborious job of (re)coding data, resulted in sixteen types of relationships within the household (distinguished for sex), four types of kin relationships outside the household and eight non-kin relationships outside the household. We were able to gather a lot of data with this method, but the task of preparing the data for statistical analysis was difficult due to technical restrictions.

To collect data on the respondent's activities, support network and social interaction, we used a Network Analysis Profile List and Format based on Sokolovsky (1986). The older respondents of the case studies had to answer nine questions, such as name of relationship, sex, old, type of relationship, frequency, fluctuation, physical contact direction/balance, for about forty activities (see Annex 5.10 and 5.11). This appeared to be boring for the respondents and the danger of disinterest or rushing through the questions was present. We planned to complement the list of personal activities and support relations with a Chappati diagram (Vishwakiran, 1990) of all contacts. However, making a diagram with older respondents for several reasons proved to be not feasible.

Knipscheer and Antonucci present an overview of the development of social network research in the Netherlands. They conclude that there is no one good measure of social support, social network or social relations. The selected measure depends on the interest of the researcher (Knipscheer and Antonucci, 1990: 166). Our focus was on elder care and we were only interested in the older person's network to know within what type of relationships support is exchanged. We studied the personal network of older persons to know the source and nature of the support. This is labeled by Knipscheer and Antonucci (1990: 165) a 'functional assessment'.

We had planned to give equal attention to the support that older persons give and receive. However, the questions about gifts did not yield responses for all types of support. We do not know the reason for this and thus cannot conclude whether older persons do not give support or do not talk about it. We have the impression that activities, which are performed for others within the household, are not considered as 'support' but as a contribution to the joint household. Each household member has his own tasks, which each are done for another. In general, older persons do not financially support non-coresiding children since it is the duty of the child to support her/his parents in old age. If they can afford it, older persons irregularly give financial support, which is considered more as a 'gift', such as school fees and clothes to grandchildren. In case of calamities one will help as much as possible for the lineal descendants of the first degree (grandparents, parents, siblings, children and grandchildren of both husband and wife).

Beard and Kunharibowo (2001) found that a mutually beneficial relationship is the most prevalent support arrangement among elderly parents and coresident adult children in Indonesia. It is interesting to note that they take into account other types of support for the mutually beneficial relationship than we did. In urban Yogyakarta, for example, an older father offers a part of the house as a strategic location for the daughter's shop. She shops and cooks for her father and provides him with daily spending money. In rural North Sumatra, some older parents provide their coresiding single adult daughter with a social identity. They enable her to classify herself as someone who belongs to a family, which is important in the traditional Batak Karo culture where it is unacceptable for a single unmarried woman to live alone.

We paid special attention to grandparenthood, because we expected that grandparents would support their children(-in-law) by babysitting or childminding. However, there were no cases of older persons taking care of babies and few in which they cared for young children. This is probably caused by the age distribution of the population, grandchildren are not babies anymore when grandparents reach 'old age' and mothers usually take care of weaning babies themselves. When older persons stay at home and keep an eye on older children, it is often not considered as childminding because these children just play around the house by themselves. In the four-generation household of *simbah* Niti, a great-grandchild of a grandson, who lives in Bogor, stayed with the family to go to school in the village. However, this child was probably put into the custody of her aunt (the granddaughter of *simbah* Niti) and uncle rather than in the custody her grandmother or great-grandmother (see the genealogy in Figure 9.2).

This thesis is the first comprehensive study that we are aware of to investigate care arrangements and support relations of older persons in Indonesia with both qualitative and quantitative methods. Other studies investigating these issues in Indonesia, they are either restricted to family relations, in particular with children (Chen and Jones, 1989; Sigit, 1988), or to broad descriptions of relations and support (Population Studies Center, 1999), or to a narrow definition of support and a small research sample (Beard and Kunharibowo, 2001). Generally, also in studies carried out in other Asian countries, it is common to ask about the preferential caregivers or from whom support is expected, instead of asking about support actually received and from whom. It is therefore difficult to compare these studies with ours. An exception is the comparative study of Wenger and Liu (1999a; 1999b; 2000) in Beijing (China) and Liverpool (England). The findings of this study differ from ours in that the role of the spouse, as the preferred provider of instrumental help and emotional support in both countries, is the most outstanding.

Patterns of elder care result from a complex interaction of social and demographic factors. The type and nature of informal support available depends on the individual's type of support network. Three factors influence the formation of support networks: marriage and fertility patterns; migration; and personality. An individual may have little control over most of these factors (Scott and Wenger, 1995: 171-2). We observed that older men are more likely than older women to live in the same village

as where they were born, because women seem to follow their husband more often after marriage than the other way around. Consequently, women live farther away from their own family than men and probably build up a social network that is primarily based on family-in-law ties. It would be interesting to investigate whether a network based on family-in-law ties or consanguine ties has a different effect on the exchanged care and on old-age security. According to Sussman, the adage 'blood is thicker than water' seems to hold (1985: 427).

12.2.5 Measuring old-age security

We have concluded that subjective factors are more important than objective factors for the older person's feelings of security. Firstly, we compared the effects of different indicators on old-age security. The selected indicators were place of residence, total health scale, individual income, farmland acreage and total IADL score. The ability to perform the instrumental activities of daily life and the health status explain the largest part of perceived old-age security. Additionally, the farmland acreage explains a part of the perceived old-age security. Unexpectedly, the individual income had no effect on old-age security when controlled for the other indicators. The individual incomes of older persons were on average less than the officially set value of basic daily needs. This may be due to the fact that the individual income is not a substantial part of all the resources and assets to which an older person has access. Apparently, an older person needs other income sources besides their own income. Namely, the IADL capacity, health status and size of farmland are more important for the feelings of security because older persons think that they are in control of these aspects.

Secondly, we studied potential livelihood strategies that older persons could apply to secure their old age. These included the strategies of care arrangement, remarriage, house move, support mobilisation and delayed property transfer. Older persons feel secure when they have (many) children who can take care of them personally when living in the same household, and to whom they can talk frequently when they are not living together. Besides, older persons feel secure when they talk frequently to neighbours/friends and receive financial support from kin other than their children. We did not find a significant effect for the other strategies, such as the objective factors of material, monetary or financial support, and house or land ownership. This does not mean that such strategies are not in use but that the strategies may not yet be generally applied, not have had the intended result, or be considered inappropriate to talk about. However, we did not explicitly ask for strategies, and looked for clues to see whether we could discover strategies that were being applied to secure old age. Hence, it is still possible that persons do not (consciously) plan for a supported old age.

Finally, the subjective factors seem to be more important than some objective factors for the older person's feelings of security. Generally, older persons feel quite secure (10-item scale mean of 8.46). This raises questions about the validity of the old-age security scale. Did we measure what we wanted to know, that is the older persons' feelings of security? The scale consists of four items concerning worries and three

items concerning emotional security, which were all answered positively. However, according to the Javanese culture one should not worry and does not talk (easily) about emotions. Because of this, the scale with which we measured (subjective) old-age security can be positively biased.

Hugo stated that the well-being of the aged population is influenced by a complex set of interacting factors, such as income, living conditions and arrangements, social contacts and, above all, physical and mental health (1992a). We have investigated all these factors and more, and tried to identify the most important factors that affect old-age security. However, the variety of factors perhaps indicates that old-age security is a much too complex concept to be measured by a single scale. Perhaps, different measurements to assess different aspects of old-age security would result in more valid findings.

Rudkin-Miniot (1992) applied different measurements to assess gender differences in social well-being, level of activity, level of authority, economic well-being, physical well-being and psychological well-being (life satisfaction) of older persons in Java, Indonesia. She argues that differences in definition and operationalisation may lead to contradictory findings. It is, for instance, possible that although women may own less in a material sense, they may still be more content with their life situations and thus be better off emotionally. In short, the results suggest that older women have lower levels of activity, authority, and economic well-being, but higher levels of psychological well-being. Gender has little effect on social and physical well-being. Consistent with and explanatory for our findings is the conclusion that despite their lower levels of activity, authority, and economic well-being, women are more satisfied with their lives. Among the activities, only frequencies of interaction with children and religious activity have significant positive effects on psychological well-being. People who have more authority within the household are happier.

12.2.6 Comparing rural and urban areas

The present study is part of the 'Household and family care for the elderly in an ageing society' project in the Special Region Yogyakarta, Indonesia. We studied older persons of fifty-five years and above in two villages. The Population Studies Center at the Gadjah Mada University studied older persons of sixty years and above in the municipality of Yogyakarta (1999). The goal was to compare the data of the rural and urban areas, which were collected in the same period in 1997. However, the survey and interview questions were not the same because of different interests. Therefore, it is not possible to compare all the results; this section only describes some comparable results. We will add results from other studies when possible.

First of all, we have to point to the different age groups of the studies. This rural study selected persons aged fifty-five years and older (N=397). The urban study selected persons aged sixty years and older (N=429). The rural study contains more persons who are physically stronger, healthier and economically active. We have to bear this in mind when we discuss the results. If possible, we take into account a part of the

rural sample, the persons aged sixty years and older, which results in a smaller sample (N=348).

The average age of the older respondents is 69 years in the rural area (55+) and 70 years in the urban area (60+). The age distribution differs significantly. The rural sample has for the age group of 65-69 years a lower proportion (17%) and 75+ years a higher proportion (36%) than the urban sample (respectively 31% and 22%). The rural sample has an overrepresentation of the oldest persons compared to the whole population of rural Special Region Yogyakarta (see Table 5.12). The urban sample seems to have an overrepresentation of the persons aged 65-69 years compared to the whole population of urban Yogyakarta (BPS, 1992c: 1)². The consequence of these sampling errors is that the rural sample shows a negative bias and the urban sample a positive bias.

Sigit (1988) reports that rural and urban areas have a different pattern of retirement age. He found that older persons tend to postpone retirement in the rural areas, and that most of them retire at the age of 65 and above. Older persons in the urban areas retire mostly at the formal retirement age of 55-59 years. The present study shows that older people in the rural area are more likely to work until the age of 75. The study of the Population Studies Center shows that retired persons are on average 70 years old in the urban area. They do not report the retirement age.

The sex distribution of the urban sample also presents a different picture. The urban sample consists of 53 percent men and 47 percent women. The authors consider 'the fact that there are more men than women among the elderly' an interesting finding (Population Studies Center, 1999: 26). However, we venture to say that this result was caused by a sampling error, and that it is not representative for the whole population of urban Yogyakarta. Indeed, those figures are 45 percent men and 55 percent women aged sixty years and above in 1990 (BPS, 1992c: 1). The sex distribution of the rural sample aged 60+ consists of 41 percent men and 60 percent women. We established that it is not significantly different from the sex distribution in rural Special Region Yogyakarta or rural Indonesia (see table 5.12). The results for the marital status are similar. About two-thirds of the older persons are married, one-third are widowed and very few are divorced or single. Also the marriage frequency does not differ much between areas. In the rural area 16 percent and in the urban area 19 percent have been married more than once.

The average number of children still alive is 3.4 in the rural area and in the urban area 4.4. Compared to the average number of children ever born and still alive per woman aged 45-49 years, which is 3.8 in the rural area and 3.6 in the urban area of the whole Special Region Yogyakarta in 1990 (Kasto and Sembiring, 1996: 23), the results for the urban sample are a little surprising. According to our studies, older

² The urban sample also shows an underrepresentation of the age group 60-64 years. The specific figures are 60-64 years 25%, 65-69 years 31%, 70-74 years 23% and 75+ years 22%. The figures are respectively 35%, 23%, 19% and 23% in urban Special Region Yogyakarta (BPS, 1992c: 1).

persons residing the city have on average more children than those who live in the village. For example, in the urban area 39 percent have six to nine children and nearly 10% have ten or more children, compared to 10 percent and 0.5 percent in the rural area.

Although the questions about health were not asked in the same way in the two studies, the results are still interesting and broadly comparable. In the rural study open questions were asked about minor and chronic illnesses that the respondents (N=355) experienced at the time of the interview. A large majority (81%) suffered from at least one minor illness of which cough, fever and flu were most often mentioned. About half of the respondents (53%) experienced a chronic illness of which rheumatism, high blood pressure and stomach pain were most often mentioned. In the urban study the respondents had to respond to questions about health complaints such as headaches, backaches and tiredness. It is interesting that the older persons do not consider cough, fever and flu an illness. A person is said to be ill when his daily activities have to be interrupted. Also, the respondents had to answer whether they ever suffered from any of the list of seventeen complicated diseases. Only 0.5 percent suffered from one of the diseases.

In both studies the respondent was asked to compare her/his health with contemporaries. Only the answer categories were different. The results consist of 57% better, 29% same and 14% lesser health in the rural area and 71% high/good, 22% fair and 7% poor health in the urban area. This would imply that the health of older persons is in general better in the urban area than in the rural area, especially when the different age groups in the sample are considered. Nevertheless, the question about the ability to perform instrumental activities of daily life (IADL) shows the opposite picture. The majority of the older persons in the rural area could perform the IADL without difficulty. Only a few (1.5%) needed help, which was mainly provided by a coresiding daughter. This was in contrast to the urban area, where nearly half (49%) of the older persons could perform the IADL without assistance. Although, they report that 4 percent was dependent on a family member to help with shopping, cooking and house cleaning.

The findings on educational attainment present a clear difference. In the rural area the large majority (92%) did not receive any schooling or only went to some classes of primary school. In the urban area about a third (31%) did not go to school and the majority had at least primary school (37%) or higher (32%). The effect of the educational difference most likely becomes apparent in the occupation and amount of income of the older persons. However, these issues hold all kinds of measurement pitfalls. We distinguished general daily activities, which the respondent performed most of the time. The Population Studies Center distinguished employment status and retirement, which they do not define. We asked for the income sources in cash and in kind of the older individual and all the household members, not calculating the sources of financial support from outside the household. Additionally, we asked for the income for a whole year to compensate for seasonal effects. The Population Studies Center asked for the income, in cash we assume, of the older respondent

and the household income, which includes support from family members in and outside the household.

Although it is clear that to compare the economic data of the rural and urban area is a hazardous thing to do, we would still like to draw some comparisons. In the rural area more than half of the older persons (55%) spend most of their time on an income-generating activity. In the urban area this is less, 40 percent spend some time on an income-generating activity. The usually more active age group of 55-59 years in the rural sample can partly explain this difference. However, in the rural area it involves most of the older person's time, while in the urban area it is only a portion of his/her time. This indicates that older persons in the rural area more frequently work than in the urban area, which is consistent with other studies (Chen and Jones, 1989; Rahardjo et al., 1994b; Sigit, 1988). Older women work less often than older men, which is similar in both areas. In the rural area, 57 percent of the women and 27 percent of the men spend most of their time on household and other activities at home. In the urban area, 61 percent of the women and 52 percent of the men are unemployed or retired.

Obviously, older persons who work in the rural area are mostly farmers (42%), while 13 percent spend most of their time performing other income-generating activities, 22 percent perform household activities and 23 percent perform other activities at home. Older persons in the urban area work in the trade sector (36%), are self-employed (22%) or work as labourers (20%). Occupations of the rest of the working people are not specified except for the 6 percent who work in the civil service. The average monthly income of working older persons is Rp 72,854 (in cash and in kind) in the rural area and Rp 168,316 (in cash probably) in the urban area. The average monthly income of an elderly household (including the monetary support from outside the household) is Rp 170,559³ in the rural area and Rp 227,186 in the urban area. In the urban area elderly households have more to spend than in the rural area. Unfortunately, the urban study does not report the average household size. Thus we can give no conclusion on the income distribution within the household.

The urban study only briefly describes the non-monetary support provided for older persons and does not distinguish the type of support relationships in detail. Generally, older persons receive material support from children and relatives. They receive social-psychological support, such as seeking opinions or conversations from children and relatives, and sharing joy, sorrow and trust with friends and neighbours. Although older persons said that the attention that they receive from family members and neighbours, is satisfactory, many still have problems. Loneliness is the largest (56%) problem. This is high compared to the 26 percent of the persons who experienced loneliness in the rural area. The most often stated reason for loneliness is similar in both areas; being alone and not living near the (grand-) children. The difference in proportion of loneliness might reflect that older persons more often

³ The total household income per month is calculated by Rp 158,182 average household income added with Rp 12,377 average monetary support (Rp 148,525 / 12).

coreside with a child's family in the rural areas. However, that would be in contradiction to Hugo's (1992a) finding that among elderly Indonesians coresidence is more common in urban areas than in rural areas. Recently, this finding has been confirmed by Frankenberg and Beard (1999) and Cameron (2000). Households headed by elderly respondents are more likely to contain a child if they are in urban areas or in areas where housing costs are relatively high.

12.2.7 *Measuring the impact of social change*

We selected two villages to uncover the impact of the process of social change on elder care and consequently on old-age security. We selected Kebonagung as the more prosperous village with low or no out-migration and main employment in agriculture, assuming that there elder care would not have altered much. We selected Giriwungu as the relatively poor village with high outmigration and limited agricultural possibilities, assuming that there elder care would have been affected by processes of social change. The underlying assumption was that limited job opportunities would cause migration of young people from the rural area to the urban area and leave the parents behind without children, traditionally the primary care providers. Besides, when longevity increases, people need more care in old age, but would have less children nearby to provide care.

At the time, we selected the villages on the basis of one demographic parameter and one economic parameter. In the absence of migration data, the demographic parameter was population composition. The economic parameter was prosperity. However, the results of this study suggest that Giriwungu is not a village that experiences more out-migration of young people than Kebonagung. In Giriwungu older persons have larger households, live alone less often, coreside more often with a child and have more often a child living in the same village than in Kebonagung. Other findings are also not consistent with our assumption that Kebonagung would be the village where elder care has not changed and Giriwungu would be the village where elder care has changed. In Kebonagung older persons earn more, have more access to cash income, invest more in housing quality and household items, and have more children who (temporarily) emigrated abroad (for which much money is necessary to send them abroad). In Giriwungu older persons earn less in cash and more in kind, own more farmland (corrected for irrigation facilities), invest more in livestock and have more children who transmigrated to other areas in Indonesia (by programmes that are targeted at resource-poor areas).

Perhaps we should have used additional parameters to select the villages, such as the proximity to the city of Yogyakarta, poverty and type of agricultural system. Kebonagung is probably influenced by the city of Yogyakarta. People commute back and forth and are exposed to 'modern' developments, while people live more isolated in Giriwungu. Kebonagung probably has always been wealthier and people have more opportunities for development than in Giriwungu. The findings that people are lonelier in the urban area (56%) (Population Studies Center, 1999) than in the rural area (26%), and that people talk less often with someone outside the household in

Kebonagung (64%) than in Giriwungu (86%) may indicate that the social cohesion is stronger in Giriwungu. In Kebonagung commercial rice cultivation and in Giriwungu subsistence farming is prevalent. These parameters may all indicate that people experienced more social changes in Kebonagung than in Giriwungu and that our assumption should have been the other way around. In Kebonagung life has been more affected by processes of social change. In Giriwungu, life has been less affected by processes of social change and elder care has maintained more traditional characteristics.

The city of Yogyakarta and the other areas on Java, including the capital Jakarta, do not exert a stronger pull on people in Giriwungu than in Kebonagung. The distance between and the different economic situation of Giriwungu and Kebonagung did not have an important effect on the out-migration of children to other areas on Java. Nevertheless, elderly households in Giriwungu had significantly more children who emigrated to other areas in Indonesia as a result of transmigration projects. Elderly households in Kebonagung had significantly more children who (temporarily) emigrated outside Indonesia. These children usually sent large numbers of remittances back home. Hence, the monetary support that households received was two-and-a-half times larger in Kebonagung than in Giriwungu.

The assumption that processes of social change, like industrialisation and urbanisation, would have such an effect on the elder care that older parents would be left behind and neglected by their children that had emigrated, appeared to be unfounded. Fortunately, the situation of most older people was not as bad as we had anticipated. Firstly, most older people can take care of themselves. They can provide for a livelihood and are relatively healthy and physically strong. Secondly, most people live with a child or have a child living nearby who gives care when necessary. It is probably still too early to establish the possible effects of social change on care for older people in Indonesia. Therefore, we could not prove most of the hypotheses formulated in Chapter 2.5. We may conclude that the shift to a money economy and international labour migration of children increases monetary support for older people. However, according to Tronto's theory of care, money support is not the same as care-giving and cannot replace face-to-face contact. The next generation of older people, who will have fewer children and experience more out-migration, may face an old age in which personal care-giving by children plays a lesser role.

Is it still too early to establish the effects of social change on elder care through structural changes in household size and composition? Recent studies in Indonesia have shown that there has been relatively little change in household structures (Frankenberg et al., 1999), though household size is decreasing (Jones, 2002). Cameron (2000) also found little evidence to suggest that increases in parents and children's incomes would cause a large movement away from the traditional family structure. Finally, older Javanese prefer to live with their adult children in extended family structures. These findings were robust in both rural and urban areas of Yogyakarta, and, therefore, as yet do not provide evidence that the process of social

change will lead to the abandonment of traditional Indonesian family structures (Beard and Kunharibowo, 2001).

Nevertheless, certain groups of people that are vulnerable can be identified. The position of women over the age of 75 warrants attention. Women are more likely to live alone. Childless older persons are more likely to be women. If women do receive monetary support, the amount will be lower than that received by men. The oldest elderly people are also more likely to live alone or to be widowed. Besides, the households with the oldest elderly members received on average the lowest amounts of monetary support and values of material support. It is clear that as demographic ageing progresses, more research is necessary to understand the situation of the Indonesian elderly people and their needs.

12.3 Developing a theory of elder care

The second objective of the research is theoretical, aiming at the development of a theoretical framework for the concepts of care that will be applicable in Indonesia and countries of similar socio-economic and cultural setting. We will first show that the concepts of care are applicable in industrialised countries as well as in developing countries by comparing the findings of elderly studies in the Netherlands and Indonesia. Then we will evaluate the theoretical framework, which was based on assumptions and concepts found in the literature, against our experiences in Indonesia.

12.3.1 Are Western concepts applicable in Indonesia?

The process of human ageing applies to people irrespective of the country or culture they live in. Therefore, it could be a basis for comparative research. Laslett (1991) distinguishes four life course stages at the individual level:

- the 'first age' of dependency, socialisation and education;
- the 'second age' of maturity, independence, familial and social responsibility;
- the 'third age' of personal achievement; and
- the 'fourth age' of dependence and decrepitude.

The transition of the 'second age' to the 'third age' from the individual point of view is a personal, not a public occurrence: it has little to do with calendar age, social age or even biological age, and above all it is a matter of choice. The 'second age' is described as the stage in which professional work, and the creation and maintenance of a family of children is inevitably allied with the loss of personal control over time. After the completion of raising children and retirement of work, the 'third age' consists of personal fulfilment and a time of freedom. The 'third age' has a doctrine of withdrawal by choice as far as feasible and desirable from those engagements with society, which are the essence of the 'second age'. Disengagement towards the end of the life course has an indispensable social function, that of permitting replacement and renewal. People withdraw to make way for their children, and their children's generation. It is no longer compulsory to work to stay alive, or to associate with particular individuals for political or social purposes, or engage in certain activities to

safeguard a career. Choice of association goes with choice of pursuits, and the decision to direct your efforts henceforth to that which interests you most, in active co-operation with others with similar interests and outlooks.

Niehof (1997) wonders whether the stage of 'third age' is occurring in all ageing societies, regardless of different societal and cultural conditions. We agree with her critique that Laslett's theory of the 'third age' is characterised by having financial security and achieving individual development. In Indonesia, the financial basis for the 'third age' is not a fact, but something that has to be accomplished by work or other means. We did not observe that people made plans in the 'second age' for self-fulfilment in the 'third age' after retirement. In fact most people had to continue working and only stopped because of problems with physical condition and health. Although we observed that many older people withdrew from the responsibilities of household chores, financial management and social activities (see the case studies in Chapters 10.2.1, 10.4.1 and 10.5.2), most of them are compelled to work to stay alive. The situation in Indonesia does not meet the requirements for enjoying a 'third age'. The 'third age' is simply not present in the villages of Kebonagung and Giriwungu. For people in these villages, it would be a luxury to be able to enjoy a 'third age'.

This study is part of the 'Household and family care for the elderly in an ageing society' project. Although one objective of the project was to do comparative research, it became clear that the position of older persons in Indonesia and the Netherlands differs considerably. Hence, the research question and focus of the two research projects eventually diverged. For instance, we studied arrangements of personal care, instrumental, financial, emotional and social support of older persons aged fifty-five and older in Indonesian villages. In this study care arrangement is defined as the totality of settlements of care and support activities between an older person and others. Luijkx studied arrangements of instrumental and social-emotional support of older persons aged seventy-five and older in Dutch non-urban municipalities. In that study, care arrangements are described as the distributions of care among the different types of care providers such as self-care, informal and formal care. Formal, professional care is something that is available to older persons in the Netherlands, not to older persons in rural areas of Indonesia. These differences make it difficult to compare the two studies.

Both studies are based on Tronto's theory of care (1993). This is, therefore, the best way to compare these studies. Luijkx operationalised the phases in the caring process as distinguished by Tronto and we used Tronto's theory of care more as a theoretical framework. Luijkx concludes that it is a theoretical approach that does not do justice to the complexity of care as a social practice. We do not agree with her on this and believe that the objections do not result from Tronto's theory, but from the choices that Luijkx made in her study. She chose, for example, to study only social-emotional support activities and some instrumental support activities, which are usually performed by women. Based on this, Luijkx concludes that Tronto's theory of care is too broad and theoretical to study care in practice. However, if she would

have operationalised the care activities more broadly (as Tronto does) she could have studied the connections between the different care practices. Luijkx also concludes that in general women are providing care, but she did not take into account typical male care activities. We would like to suggest that the whole package of care practices and support relations, which we call the care arrangement, are affecting the well-being of older persons or old-age security. Taking into account all old-age practices will give a better understanding of the complexity of care as a social practice. After all, although an older person is well-fed and living in a clean house, s/he would not feel well if the roof were to collapse or if s/he were to trip over a floor tile and break a hip, because a son had not repaired it. In Indonesia, these accidents and the handicaps they cause, can be life threatening incidents⁴.

When we compare the instrumental and social-emotional support relations, in the rural Netherlands there is no gender difference for the instrumental support received, which is similar to the findings for rural Indonesia. Most older persons can take care of themselves and older women receive as much instrumental care as older men. However, in the Netherlands in general, older women's health is worse compared to older men. In Indonesia we did not find a gender difference for the health situation of older persons. If older Dutch women are in worse health while receiving the same amount of instrumental support as older men, it means that women receive instrumental care less quickly. Women can probably take care of themselves longer, because they have had more experience in caring for themselves during their lives than men.

In the Dutch study, operationalising the social-emotional support consisted of questions about whom the older person would turn to talk about daily worries, to relieve one's feelings, to go out with and to tell about something nice that happened. Women turned more to family members than men. This is probably the result of life-long investing in family relationships. Women usually play the so-called role of 'kin-keeper' (Hareven, 1982) and they seem to reap the benefits of it at old age. Hence, women receive more social-emotional support from family members. Moreover, the social-emotional support that women receive is more encompassing than that of men. In the Indonesian study, the emotional support of advice and trust did not differ by sex and older persons turned mostly to a neighbour or friend. Social talks did not differ by sex either and was usually provided by a neighbour or friend, other kin, or non-coresiding children. The social activities were mostly neighbourhood-based. It seems that older people in Indonesia are more community-oriented for the social-emotional support, and in the Netherlands more family-oriented.

Women and men perform the different types of informal care activities in the same way. The majority of the providers of instrumental support are female in the Netherlands, which is similar to Indonesia. While 20 percent of the (informal) care providers are men in the Netherlands, men in Indonesia provide 30 percent of the instrumental support. The difference is probably caused by the fact that the

⁴ See Evans (1985b).

Indonesian study included typical male tasks such as cutting wood, feeding livestock and fetching water. Interesting findings in the Dutch study are that the characteristics of providers of informal care do not affect the intensity of the care that older persons receive. Moreover, the obligatory character of kin relationships is more important than the quality of the relationship for the care provided. Especially the meaning of reciprocity as a token of appreciation is important for the care provided. Cross-culturally, informal care seems to be more adapted to the older person's needs and wishes than formal care, which reflects the 'task-orientation' of informal care and 'time-orientation' of formal care (Vogel, 1978).

Although both countries have a bilateral kinship system, the typical images about Dutch and Indonesian families and elder-care arrangements are contrasting. In the Netherlands the nuclear family is supposed to be predominant, among whom respect and care for older persons is lacking, because most older persons are cared for in a home for the elderly. The image about elder care in Indonesia is that the extended family is predominant, strong family ties and respect for parents exist and older persons are supported within the family. According to Niehof (1997), the role of kinship relationships in care is underestimated in industrialised countries and overestimated in developing ones. The Dutch study shows that family members, especially non-coresiding children (-in-law) play an important role in informal care for older persons (Luijkx, 2001). These findings are consistent with findings in Europe and North America, where a high degree of willingness exists to provide care for older disabled family members when it is required (De Jong Gierveld, 1998). Hence, in industrialised countries older persons live mostly with a partner or alone, but relatives from outside the elderly household provide much informal care. The present study in Indonesia shows that coresiding children or children-in-law mainly provide instrumental support, children - either coresiding or non-coresiding - provide most financial support, and neighbours or friends provide most emotional support to older persons. Other studies in Indonesia argue that there is little reason to believe that the process of social change will lead to a trend away from the multi-generational household (Beard and Kunharibowo, 2001; Cameron, 2000; Frankenberg et al., 1999). However, the present study also shows that we cannot assume that all older persons are taken care of by their children. There are older persons who cannot rely on their children, because they do not have children, their children live far away or they are in conflict with their children.

Concluding we may say that some Western concepts are applicable in Indonesia and countries of similar socio-economic and cultural setting. Laslett's concept of the third age (1991) does not seem to be applicable in most developing countries. Tronto's theory of care (1993) is applicable in Indonesia and probably in other countries too, because its categories are not cultural-specific. Conceptually, care is both universal and context-specific. All humans have needs that others must help to meet, though the degree of care that others provide depends on culturally constructed norms. A social practice of elder care is present in any country, because sick and infirm people are taken care of everywhere. How people give or receive care varies, is contextual and has to be empirically investigated. The great advantage of using Tronto's

concepts of care is that the results become comparable and lead to insights into care needs and care provisions as universal issues.

12.3.2 An adapted, theoretical framework of elder care

To enable the assessment of Tronto’s theory of care and to study the issues of care in the field, we developed an analytical framework (see Figure 4.2) that consists of the older person’s individual attributes, care arrangements, support relations, old-age security and livelihood strategies. The specific caring activities are operationalised by the personal activities of daily life (ADL), instrumental activities of daily life (IADL), monetary support, material support, emotional support and social support. (See Annex 5.9 for the operationalisation of the total framework.) These concepts of care activities are not culturally specific and therefore, applicable in any country. However, what is involved in the activity of caring, for example in instrumental care, has to be investigated empirically. For example, the Dutch research investigated the instrumental support activities of vacuum cleaning and window wiping. The Indonesian research investigated the instrumental support activities of cutting firewood and fetching water from a well.

When we applied the theoretical framework in our research and investigated the links between the key-concepts, we concluded that the framework should be adapted. Hence, Figure 12.1.

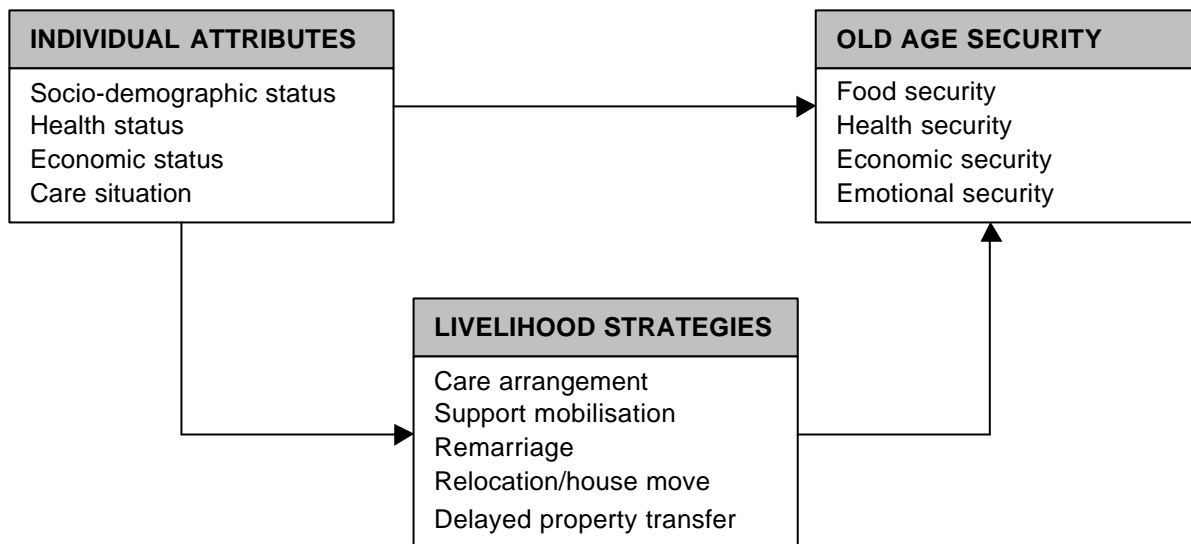


Figure 12.1 Adapted, theoretical framework of elder care

In the original analytical framework (see Figure 4.2), the ‘individual attributes’ affect the ‘old-age security’ directly and indirectly through an older person’s ‘care arrangements and support relations’. When a person is not secure in old age, s/he has to develop strategies to overcome the insecurity and become more secure again. We expected that important ‘livelihood strategies’ are flowing through the ‘care

arrangements and support relations' that an older person can employ to make their old age secure. However, we defined livelihood strategy as the ability to maintain and improve (old-age) security while maintaining or enhancing the assets and resources on which a household depends. Long-term thinking about and acting on the arrangement of care and support for one's old age, as we described livelihood strategies to secure old age, are not congruent with the relatively short-term perspective of developing a strategy to overcome insecurity in old age. The latter is more like a coping strategy, dealing with foreseeable situations of stress, or coping, responding to immediate and inhabitual stressful events, such as handling a handicap after a fall. These kinds of behaviour are not particular to older persons. We were more interested in specific strategies applied by older persons or by younger persons to secure old age. In that line of reasoning, care arrangements and support relations are considered to be a livelihood strategy with which a stress and worry-free old age might be secured. Therefore, 'livelihood strategies' should not result from 'old-age security' and 'care arrangements and support relations' should not be separate from the 'livelihood strategies' in the framework. This is incorporated in the theoretical framework of Figure 12.1.

Summarising, the differences between the original framework in Figure 4.2 and the adapted framework in Figure 12.1 are the position of the 'livelihood strategies', and the assumption that 'care arrangements and support relations' are a kind of livelihood strategy to secure old age rather than a separate concept in the framework. The individual attributes affect old-age security directly and indirectly through the livelihood strategies that an older person has. Investing in relationships and building up care arrangements is a life-long practice, which will result in the provision of 'good care' and a secure old age. As such, it is a strategy that will enhance the chances of enjoying a supported old age.

12.4 Scientific and societal relevance of the study

In this section we will pay attention to the scientific and societal relevance of the present study. The study distinguishes itself from other studies on older people because of the application of sociological-anthropological perspectives, a household and individual perspective, a gender- and age-perspective. We examined elder care as social practice and the impact of social change on elder care. To our knowledge, this is the first comprehensive research about older persons' lives, elder care and old-age security in rural Indonesia in which both qualitative and quantitative methods are used.

Most research on elder care has been carried out in so-called developed countries. This research has been carried out in a developing country, Indonesia, particularly in rural Yogyakarta. It has taken gerontologists a long time to focus on the problem of rurality, although more than half of the older people in the world live in rural areas (Wenger, 2001). This study is part of the 'Household and family care for the elderly in an ageing society' project, which was set up as a comparative research project

including rural and urban Yogyakarta and the rural Netherlands. The different studies are not based on exactly the same research questions. Still, a comparative analysis of the rural-urban areas of Yogyakarta was possible for the aspects of marital status, number of children, health status including instrumental activities of daily life, educational attainment, economic status and financial support (see Chapter 12.2.6). A comparative analysis of Indonesia and the Netherlands was only possible for the instrumental and social-emotional support relations (see Chapter 12.3.1).

An important scientific contribution of the present study is that the application of a combination of qualitative and quantitative research methods. The qualitative methods consisted of case studies, participant observation and key-informant interviews, field notes and a diary. The quantitative methods consisted of an Elderly Household Survey. One part of the questionnaire was designed to be answered by the older respondent and another part by an adult household member. We also collected secondary, mainly demographic, data. By applying both qualitative and quantitative research methods, we were able to understand the caring process in culturally appropriate terms, to obtain accurate information on behaviour of older persons and the persons who are supposed to provide care, and to interpret the meanings behind the behaviours. A great deal of research in developing countries, particularly research using solely quantitative methods, is conducted from the outsider (etic) perspective (Scrimshaw, 1990). We applied both an etic and emic perspective. Through the method of participant observation we were able to study how older persons and the people around them perceive their situation. This thesis tries to weave the two perspectives together, illustrating survey findings with concrete examples, pointing out discrepancies between what people say they do and what they actually do, exploring interrelationships according to theoretically derived hypotheses, and validating qualitative findings with survey data.

“Scientific surveys no less than everyday observation confirm that household affiliations are central factors affecting elderly populations and the consequences of population ageing in all societies. [...] It can be presumed, therefore, that research approaches focused on household concepts have a significant role to play in population ageing analysis” (Stolnitz, 1990: 105). This reference indicates the importance of the household perspective that we applied in this research. To study the elderly household within the entire social network improves one’s understanding of care contributions and the complex dynamics that lead specific members to become caregivers. Our entrance to the household was the older person through whom we met the other household members. For the survey we interviewed an older person and an adult household member. In the case studies, the older person and more household members were interviewed. Through the household approach we gathered valuable information, which we could not have obtained in another way. The household approach allowed us to gain detailed information about older person’s lives, the role they play in the household and the significance of other household members to older persons, particularly regarding care and support practices. In addition, we gathered information about the relations between the household of the elderly and other households.

Very few approaches to old age encompass both traditional and modern contexts (Keith, 1980). We have presented a context of social change and developed a macro-micro model of social change processes to enable the study of presumed changes in older person's lives, elder care and old-age security. There is still insufficient data available to definitely determine whether or not the security of older people has deteriorated over recent years. Although we gathered interesting information with life histories and interviews that focused on social change, it was hard to determine whether responses indicating changes in the living conditions of older persons were a result of the human ageing process or the process of social change, such as economic development. To resolve this lack of information, research on the situation of older people in comparison with other age groups is necessary. Furthermore, a household life course perspective would offer much valuable information on the ongoing interactions between and changing roles of caregivers and receivers within a household. It would enhance our understanding of how social relations influence the individual's everyday experience. We have tried to denote the developments in the household composition and the changing caring roles of the household members by asking questions about the life course of contemporary, older persons. However, in retrospect, it appeared to be impossible to obtain this kind of information from older persons, because years, ages or sequence and cohesion of events were too difficult to recall. Research on elder care from a household life course perspective⁵ is, therefore, a challenge to science.

Literature calls for more detailed data and qualitative information, the construction of culturally 'transportable' items and comparative theoretical approaches to ageing in developing countries (Andrews, 1992; Hashimoto and Kendig, 1992a; Hashimoto et al., 1992b: 294, 303; Hugo, 1992a; Phillips, 1992). The present study was intended to contribute to this information. Detailed data and qualitative information are presented about older person's living conditions, as well as data on the care that they receive from others, their perception of old-age security and the livelihood strategies that they apply. Additionally, case studies illustrate how older persons perceive their lives. The analytical framework that we developed and adapted consists of concepts that are universal and thus are transportable to different cultures. Finally, we have shown that Tronto's theory of care (1993) can be applied to elder care in developing countries and that it is appropriate for comparative analysis.

We hope that the present study is a contribution to societal needs as well. The Suharto government acknowledged the problem of the 'low priority' given to ageing and having 'inadequate information' about older persons and the problems they experience in Indonesia (Nardho Gunawan, Director of Family Health, Ministry of Health, in Hugo, 1994c: 74). However, because of the economic crisis and the political turmoil, the ageing issue and attention paid to older people became less of a priority again. Fortunately, the present thesis and other studies show that there is no

⁵ See Pennartz and Niehof (1999: 151-180) for a description of longitudinal approaches in the study of family households among which the household life course approach is mentioned.

quickly evolving crisis with regard to the situation of older people that requires immediate action (Beard and Kunharibowo, 2001; Cameron, 2000; Frankenberg et al., 1999; Hermalin, 1997: 91). The majority of the older persons are living with children, or have children living nearby, and children are still frequently providing instrumental, monetary and material support. As a result, Hermalin concludes that policy makers still have time to develop a more 'nuanced approach' to the emerging issues and to forge research and policies that will meet the intermediate and longer term needs (Hermalin, 1997: 91). He developed a conceptual framework for research and policy formation in which this study fits neatly. The needed 'personal characteristics and history', 'personal support system', 'activity level', 'economic well-being', 'physical, mental and emotional health' based on which (among other aspects) programmes and policies can be developed (Hermalin, 1997: 92-5), are all present in this thesis.

However, this thesis has also shown that despite the fact that older persons usually live with children and receive (some) support, there are also older persons who are not receiving 'good or sufficient care' in Indonesia. The situation of older people who are childless or who do not receive support from their children, especially older women and persons aged 75 years and older, warrants attention. Policy makers should be aware of the diversity among the older population and the special needs of each group. In addition to the findings of this study, more applied-oriented research is also needed in the rapidly growing urban areas in Indonesia and other developing countries.

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Annexes

Annex 3.1 Household size by hamlet in the villages of Giriwungu and Kebonagung

House- hold size	Hamlets in Giriwungu																	
	Jurug			Pudak			Pejaten			Klepu			Petung			Total		
	Freq.	%	Pop.	Freq.	%	Pop.	Freq.	%	Pop.	Freq.	%	Pop.	Freq.	%	Pop.	Freq.	%	Pop.
1	-	-	-	-	-	-	1	0,6	1	-	-	-	2	1,8	2	3	0,6	3
2	8	14,5	16	7	7,1	14	7	4,5	14	7	6,8	14	8	7,3	16	37	7,1	74
3	10	18,2	30	21	21,4	63	30	19,1	90	19	18,4	57	15	13,8	45	95	18,2	285
4	13	23,6	52	20	20,4	80	39	24,8	156	27	26,2	68	28	25,7	112	127	24,3	468
5	9	16,4	45	17	17,3	85	34	21,7	170	29	28,2	145	25	22,9	125	114	21,8	570
6	8	14,5	48	22	22,4	132	28	17,8	168	10	9,7	60	17	15,6	102	85	16,3	510
7	7	12,7	49	9	9,2	63	10	6,4	70	10	9,7	70	12	11,0	84	48	9,2	336
8	-	-	-	2	2,0	16	4	2,5	32	1	1,0	8	2	1,8	16	9	1,7	72
9	-	-	-	-	-	-	2	1,3	18	-	-	-	-	-	-	2	0,4	18
10	-	-	-	-	-	-	-	0,0	-	-	-	-	-	-	-	-	-	-
11	-	-	-	-	-	-	2	1,3	22	-	-	-	-	-	-	2	0,4	22
Total	55	100	240	98	100	453	157	100	741	103	100	422	109	100	502	522	100	2358

Sources:

Buku Induk Penduduk, Jurug, 1995; Buku Jiwa Penduduk dalam Pedukuhan Pudak, 1995;

Buku Register Penduduk Dusun Pejaten, 1997; Buku Penduduk Klepu, 1995; Daftar Penduduk Dusun Petung, 1995.

House- hold size	Hamlets in Kebonagung																	
	Mandingan			Kanten			Jayan			Kalangan			Tlogo			Total		
	Freq.	%	Pop.	Freq.	%	Pop.	Freq.	%	Pop.	Freq.	%	Pop.	Freq.	%	Pop.	Freq.	%	Pop.
1	15	11,2	15	9	6,8	9	4	2,5	4	11	7,5	11	6	4,0	6	45	6,2	45
2	16	11,9	32	12	9,0	24	15	9,4	30	9	6,1	18	12	7,9	24	64	8,8	128
3	13	9,7	39	15	11,3	45	20	12,6	60	19	12,9	57	24	15,9	72	91	12,6	273
4	31	23,1	124	19	14,3	76	34	21,4	136	41	27,9	164	35	23,2	140	160	22,1	640
5	27	20,1	135	19	14,3	95	39	24,5	195	29	19,7	195	26	17,2	130	140	19,3	750
6	17	12,7	102	22	16,5	132	24	15,1	144	19	12,9	114	22	14,6	132	104	14,4	624
7	6	4,5	42	22	16,5	154	10	6,3	70	13	8,8	91	10	6,6	70	61	8,4	427
8	4	3,0	32	6	4,5	48	6	3,8	48	5	3,4	40	10	6,6	80	31	4,3	248
9	2	1,5	18	3	2,3	27	4	2,5	36	-	-	-	3	2,0	27	12	1,7	108
10	1	0,7	10	4	3,0	40	2	1,3	20	1	0,7	10	2	1,3	20	10	1,4	100
11	2	1,5	22	-	-	-	-	-	-	-	-	-	-	-	-	2	0,3	22
12	-	-	-	2	1,5	24	1	0,6	12	-	-	-	1	0,7	12	4	0,6	48
Total	134	100	571	133	100	674	159	100	755	147	100	700	151	100	713	724	100	3413

Sources:

Buku Induk Kependudukan Pedusunan Mandingan, 1996; KKLKMD Pedusunan Kanten Register Penduduk, 1987

(younger data were not available); Penduduk yang Tersentuh P-4, Dusun Jayan, 1993 (younger data were not available);

Daftar Penduduk Kalangan, 1991 (younger data were not available); Buku Induk Dusun Tlogo, 1997.

Annex 3.2 Household composition by hamlet in the villages of Giriwungu and Kebonagung

Household composition with/without elderly	Hamlets in Giriwungu											
	Jurug		Pudak		Pejaten		Klepu		Petung		Total	
	Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%
1-generation, no elderly	n.a.	n.a.	2	2,0	6	3,8	1	1,0	4	3,7	13	2,8
1-generation, elderly (60+)	n.a.	n.a.	2	2,0		0,0	3	2,9	4	3,7	9	1,9
2-generation, no elderly	n.a.	n.a.	34	34,7	77	49,0	52	50,5	28	25,7	191	40,9
2-generation, elderly	n.a.	n.a.	27	27,6	6	3,8	10	9,7	8	7,3	51	10,9
3-generation, no elderly	n.a.	n.a.	1	1,0	37	23,6	16	15,5	10	9,2	64	13,7
>= 3-generation, elderly	n.a.	n.a.	32	32,7	31	19,7	21	20,4	55	50,5	139	29,8
Total	n.a.	n.a.	98	100	157	100	103	100	109	100	467	100

Sources:

n.a.: Ages or agegroups were not available for Jurug; Buku Jiwa Penduduk dalam Pedukuhan Pudak, 1995; Buku Register Penduduk Dusun Pejaten, 1997; Buku Penduduk Klepu, 1995; Daftar Penduduk Dusun Petung, 1995.

Household composition with/without elderly	Hamlets in Kebonagung											
	Mandingan		Kanten		Jayan		Kalangan		Tlogo		Total	
	Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%
1-generation, no elderly	6	4,7	4	3,0	3	1,9	6	4,1	11	7,5	30	4,2
1-generation, elderly (60+)	19	14,8	10	7,5	10	6,3	9	6,2	8	5,4	56	7,9
2-generation, no elderly	47	36,7	43	32,3	68	42,8	65	44,5	58	39,5	281	39,4
2-generation, elderly	34	26,6	26	19,5	21	13,2	21	14,4	34	23,1	136	19,1
3-generation, no elderly	1	0,8	8	6,0	5	3,1	7	4,8	3	2,0	24	3,4
>= 3-generation, elderly	21	16,4	42	31,6	52	32,7	38	26,0	33	22,4	186	26,1
Total	128	100	133	100	159	100	146	100	147	100	713	100

Sources:

Buku Induk Kependudukan Pedusunan Mandingan, 1996; KKLKMD Pedusunan Kanten Register Penduduk, 1987 (younger data were not available); Penduduk yang Tersentuh P-4, Dusun Jayan, 1993 (younger data were not available); Daftar Penduduk Kalangan, 1991 (younger data were not available); Buku Induk Dusun Tlogo, 1997.

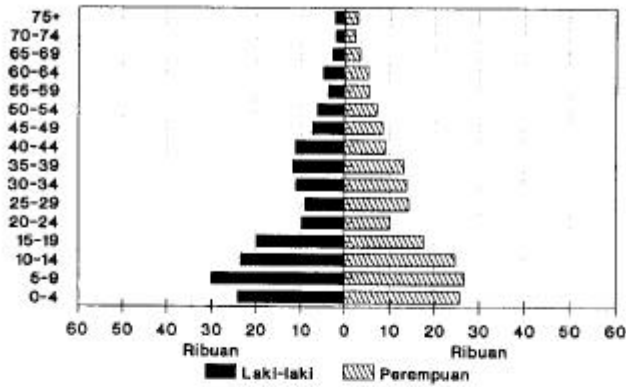
Annex 3.3 Javanese and Muslim calendar

In Java, the Javanese month of thirty-five days is used and not the Western thirty-(one) day month. The Javanese combine their own five-day week (*Legi, Pahing, Pon, Wage, Kliwon*) with the Western-Muslim seven-day week (*Minggu, Senin, Selasa, Rabu, Kamis, Jumat, Sabtu*). They originally had a seven-day week of their own as well as various others, and the present one is merely a case of Islamic names replacing native ones. As seven times five is thirty-five, there are thirty-five possible days, for example *Minggu-Legi, Senin-Pahing, Jumat-Legi, Sabtu-Pahing*, etc. This cycle forms the Javanese 'month'. Actually, however, these 'months' are not fixed and absolute units as ours, but merely the length of time between any one day and its next occurrence thirty-five days later (Geertz, 1960: 38; modern spelling from a calendar).

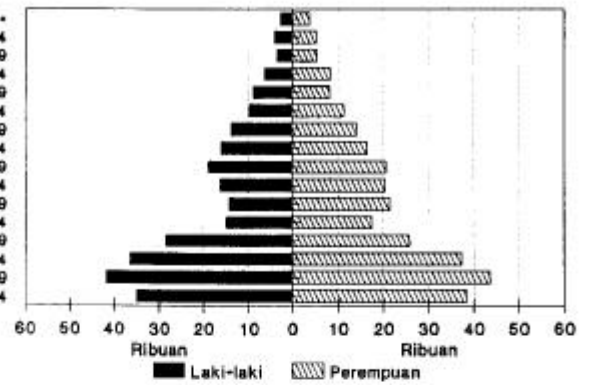
The Muslim year has 354 days (355 in leap years) and is divided into twelve lunar months. In the following list of the months, the Arabic names are given, with the popular Javanese names in parentheses: *Muharram (Sura), Shafar (Sapar), Rabi'ul awal (Maulud), Rabi'ul tsani (Bakda maulud), Jumadil ula (Jumadil awal), Jumadil tsaniyah (Jumadil akir), Rajab (Rejeb), Sya'ban (Ruwah), Ramadhan (Pasa), Syawal (Sawal), Dzulqa'dah (Dulkaidah), Dzulhijjah (Besar)*. Since the Javanese adopted the Islamic pattern of time reckoning by lunar months and the holy days that are attached to it, they celebrate its sacred time periods by giving *slametans*. However, except for the Prophet's Birthday (12 *Maulud*) and the complex of *slametans* centering around the Fast (21, 23, 25, 27 or 29 *Pasa*), these ceremonies have remained simple and rather unimportant and are given only sporadically (Geertz, 1960: 38; modern spelling from a calendar).

Annex 5.1ab Population pyramids of regencies Kulon Progo and Bantul (1971, 1980, 1990)

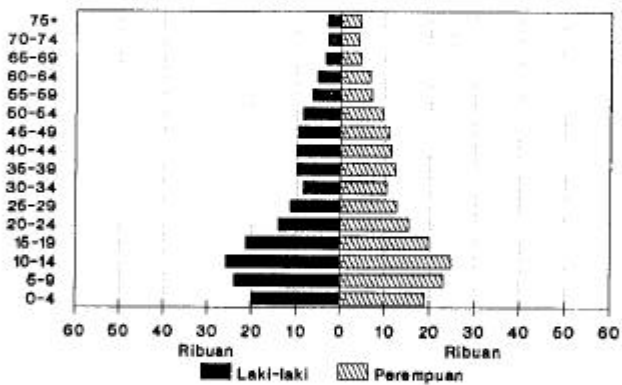
Piramida Penduduk Kabupaten Kulonprogo Tahun 1971



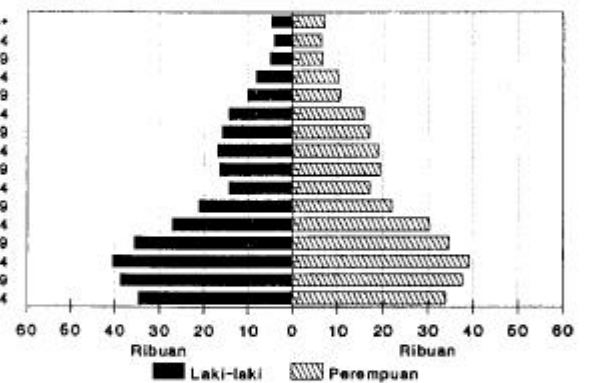
Piramida Penduduk Kabupaten Bantul Tahun 1971



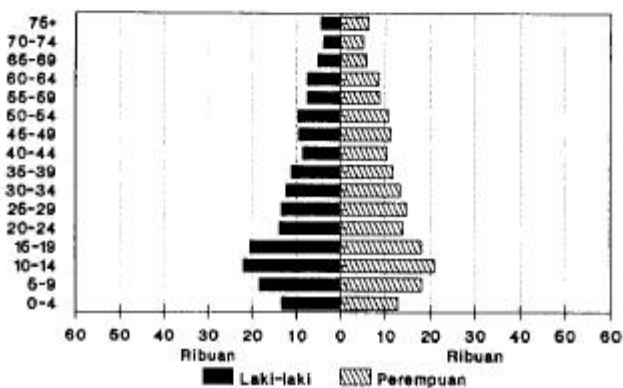
Piramida Penduduk Kabupaten Kulonprogo Tahun 1980



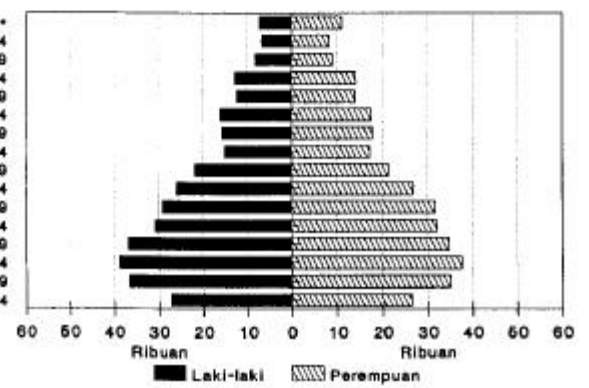
Piramida Penduduk Kabupaten Bantul Tahun 1980



Piramida Penduduk Kabupaten Kulonprogo Tahun 1990



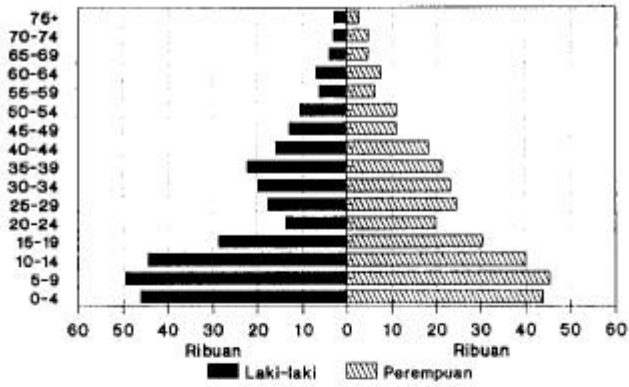
Piramida Penduduk Kabupaten Bantul Tahun 1990



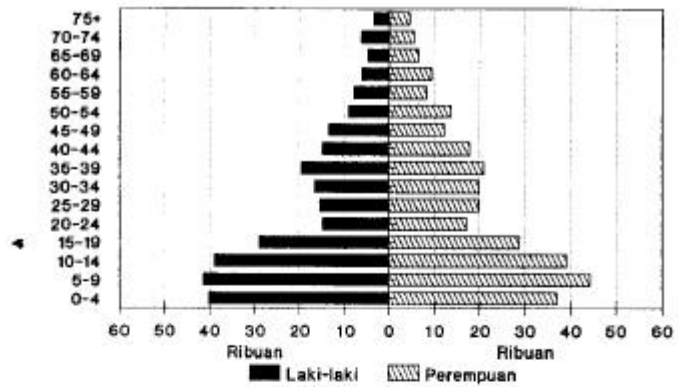
Source: Calculations by Population Studies Center based on BPS (1976: 9-26; 1981: 1-11; 1992c: 1-16).

Annex 5.1cd Population pyramids of regencies Gunung Kidul and Sleman (1971, 1980, 1990)

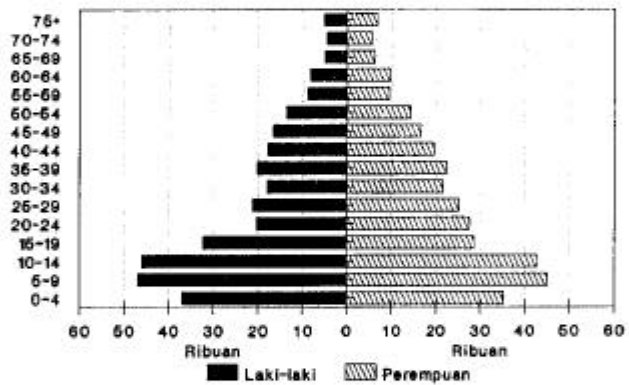
Piramida Penduduk Kabupaten Gunungkidul Tahun 1971



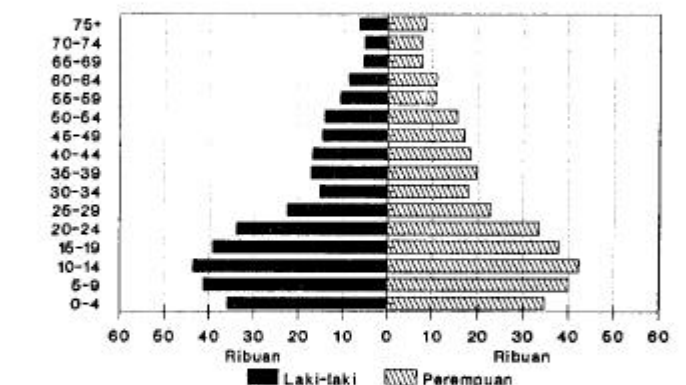
Piramida Penduduk Kabupaten Sleman Tahun 1971



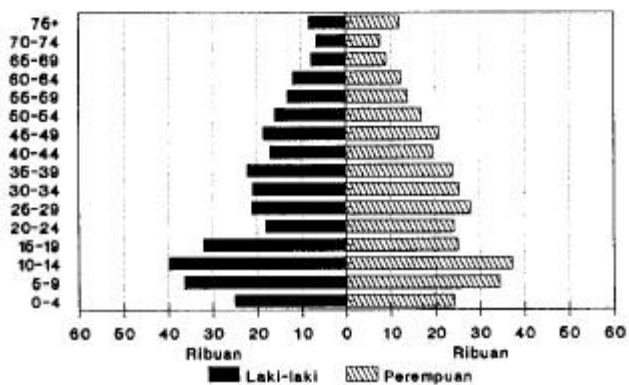
Piramida Penduduk Kabupaten Gunungkidul Tahun 1980



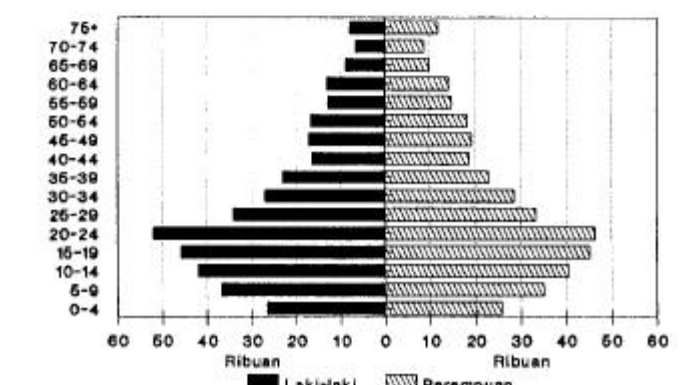
Piramida Penduduk Kabupaten Sleman Tahun 1980



Piramida Penduduk Kabupaten Gunungkidul Tahun 1990



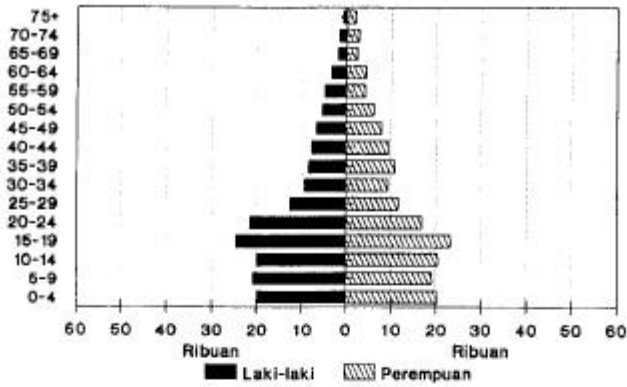
Piramida Penduduk Kabupaten Sleman Tahun 1990



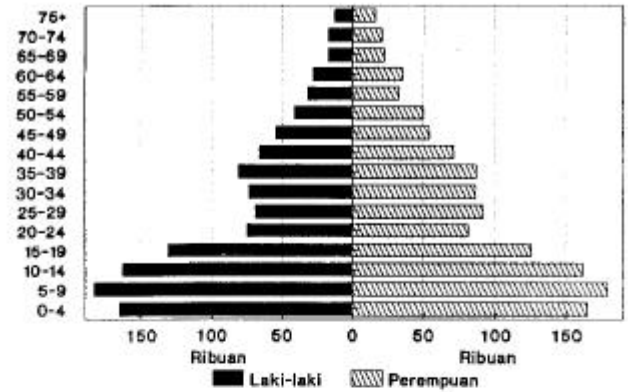
Source: Calculations by Population Studies Center based on BPS (1976: 9-26; 1981: 1-11; 1992c: 1-16).

Annex 5.1ef Population pyramids of municipality Yogyakarta and Special Region Yogyakarta (1971, 1980, 1990)

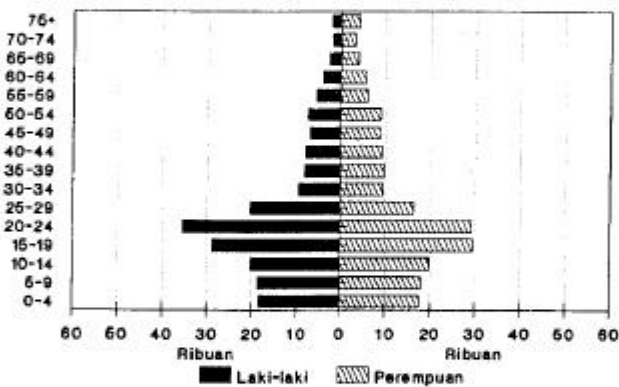
Piramida Penduduk Kotamadia Yogyakarta Tahun 1971



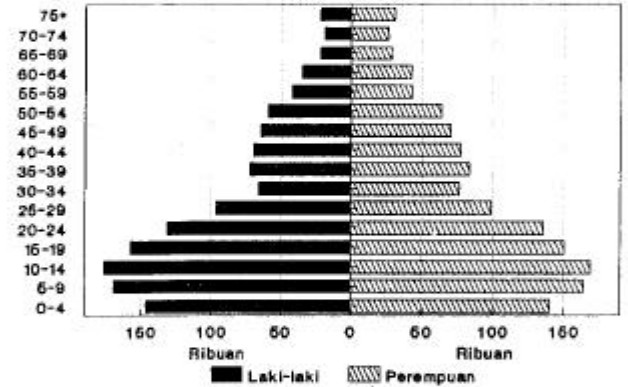
Piramida Penduduk D.I. Yogyakarta Tahun 1971



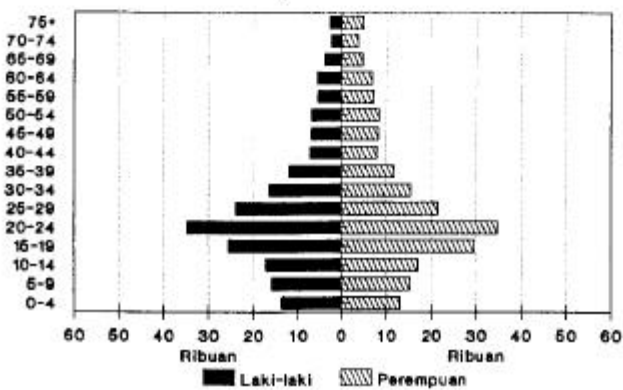
Piramida Penduduk Kotamadia Yogyakarta Tahun 1980



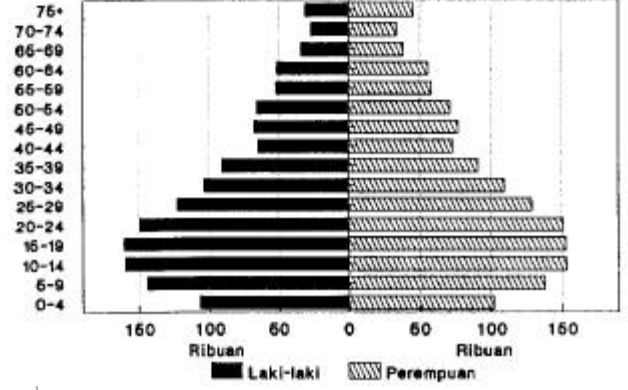
Piramida Penduduk D.I. Yogyakarta Tahun 1980



Piramida Penduduk Kotamadia Yogyakarta Tahun 1990



Piramida Penduduk D.I. Yogyakarta Tahun 1990



Source: Calculations by Population Studies Center based on BPS (1976: 9-26; 1981: 1-11; 1992c: 1-16).

Annex 5.2 Percentage of households by living conditions and regency/municipality in Special Region Yogyakarta

Regency/ Municipality	Gas for cooking	Electri- city for lightning	Pipe drinking water	Private toilet with septic tank	Private bathing facility	Owned motor cycle	Total nr of house- holds
Kulon Progo	0.15	31.88	1.79	15.07	56.26	12.19	89,894
Bantul	0.54	57.49	0.62	27.53	67.54	21.26	167,904
Gunung Kidul	0.10	16.75	2.67	6.35	38.93	6.39	159,450
Sleman	2.54	79.30	3.98	27.72	50.38	32.36	202,138
Yogyakarta	6.63	94.54	20.02	40.32	61.92	40.87	110,007
DIY	1.89	57.06	5.07	23.35	54.29	22.92	729,393

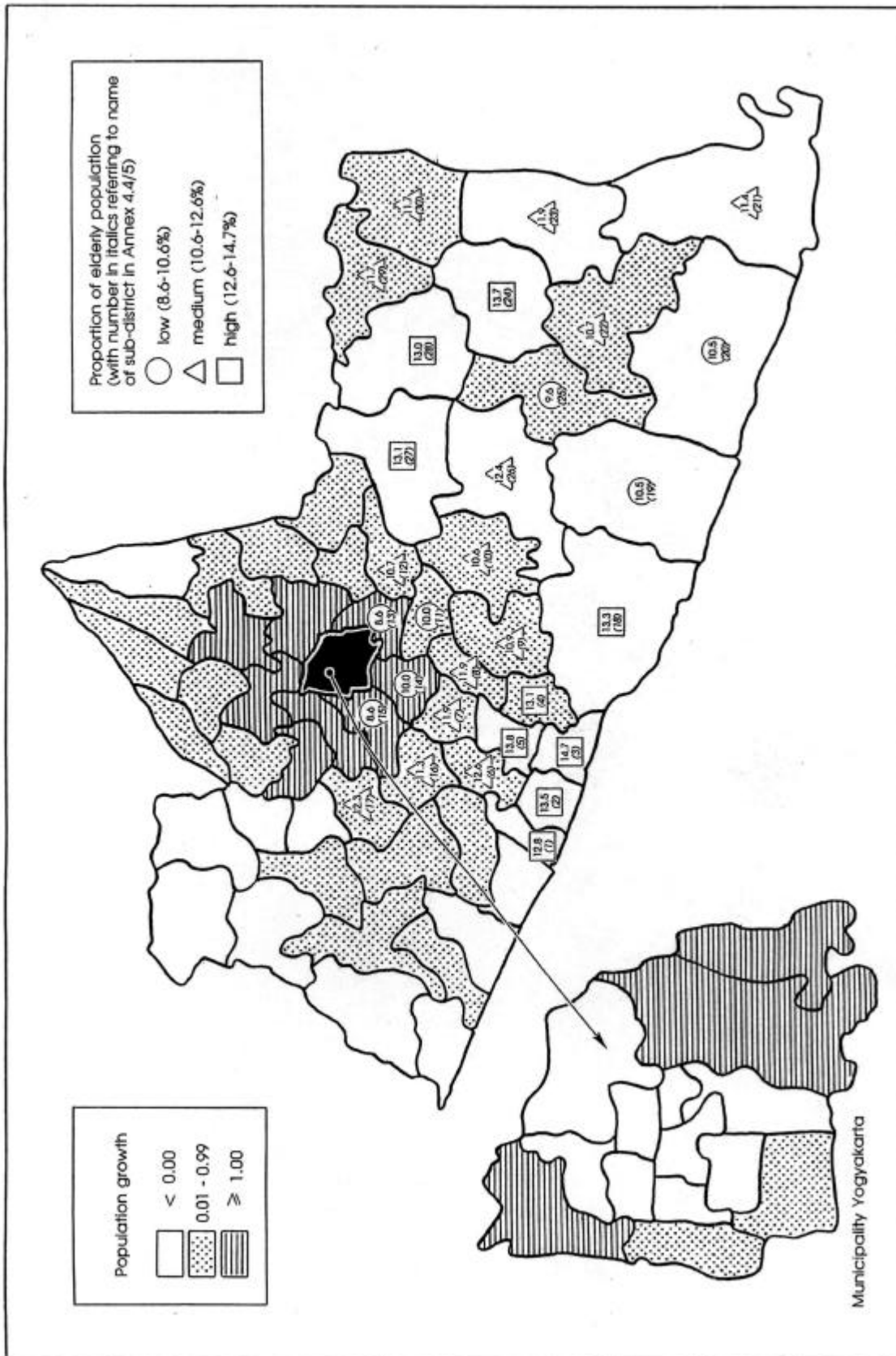
Source: BPS (1992b: 229-255)

Annex 5.3 Age and sex distribution by village

Agegroup	Kebonagung			Giriwungu		
	Male	Female	Total	Male	Female	Total
0-4	110	104	214	92	83	175
5-9	155	136	291	115	94	209
10-14	175	156	331	103	101	204
15-19	140	115	255	85	84	169
20-24	121	113	234	59	69	128
25-29	120	140	260	77	100	177
30-34	110	117	227	61	101	162
35-39	103	88	191	75	88	163
40-44	60	73	133	63	60	123
45-49	68	83	151	76	73	149
50-54	74	105	179	55	72	127
55-59	78	81	159	65	47	112
60-64	74	64	138	33	57	90
65-69	32	57	89	43	38	81
70-74	29	35	64	29	23	52
75+	37	43	80	54	81	135
Total	1,486	1,510	2,996	1,085	1,171	2,256
Test scores	$\chi^2(15) = 129.5^{***}, p=0.000$					

Sources: BPS (1992d: 8; 1992e: 42).

Annex 5.4 Map of population growth 1980-90 and elderly population (1990) in DIY



The correlation coefficient of population growth (1980-90) and proportion of elderly population (1990) in regencies Bantul and Gunung Kidul is -0.71.

Source: of crude population growth data Tukiran (1997) and of population data BPS (1992b).

Annex 5.5 Population growth by sub-districts of regency Bantul, 1961-71, 1971-80, 1980-90

Sub-district	Population		Population growth		
	1980	1990	1961-71	1971-80	1980-90
Srandakan	26,641	26,445	1.07	0.56	-0.07
Sanden	28,526	27,434	1.08	0.34	-0.38
Kretek	27,250	25,878	1.24	0.41	-0.50
Pundong	29,643	29,657	1.12	0.24	0.01
Bambanglipuro	35,065	34,699	1.44	0.24	-0.10
Pandak	40,530	42,632	1.50	1.07	0.52
Bantul	45,587	49,238	1.98	1.28	0.80
Jetis	40,932	43,229	1.54	0.95	0.56
Imogiri	46,084	49,706	0.96	1.01	0.79
Dlingo	30,022	30,245	1.46	0.58	0.07
Pleret	30,047	32,797	1.39	1.76	0.92
Piyungan	33,168	35,142	1.31	1.51	0.60
Banguntapan	56,335	71,727	1.69	2.76	2.73
Sewon	57,820	69,656	1.76	1.84	2.05
Kasih	51,913	68,683	1.93	2.23	3.23
Pajangan	23,128	25,261	1.38	1.36	0.92
Sedayu	31,751	34,476	0.92	1.23	0.86
Total	634,442	696,905	1.31	1.21	0.99

Sources of crude data: BPS (1976: 17; 1981: 8; 1985: 25; 1992: 1-88; 1996: 1).

Annex 5.6 Population growth by sub-districts of regency Gunung Kidul, 1961-71, 1971-80, 1980-90

Sub-district	Population				Population growth		
	1961	1971	1980	1990	1961-71	1971-80	1980-90
Panggang	45,009	48,091	47,984	43,299	0.69	-0.02	-0.98
Paliyan	53,065	55,952	60,139	59,934	0.54	0.75	-0.03
Tepus	50,183	54,763	59,587	57,574	0.91	0.88	-0.34
Rongkop	48,175	51,833	52,935	48,569	0.76	0.21	-0.83
Semanu	42,933	45,199	49,177	49,270	0.53	0.88	0.02
Ponjong	45,021	48,070	51,237	49,227	0.68	0.66	-0.39
Karangmojo	46,365	49,754	52,135	50,519	0.73	0.48	-0.31
Wonosari	48,443	56,642	65,474	70,753	1.69	1.56	0.81
Playen	45,204	49,123	52,269	51,302	0.87	0.64	-0.19
Patuk	37,904	39,651	42,615	42,517	0.46	0.75	-0.02
Nglipar	38,225	41,845	44,466	44,111	0.95	0.63	-0.08
Ngawen	28,399	31,683	33,422	35,085	1.16	0.55	0.50
Semin	42,907	47,479	48,046	48,844	1.07	0.12	0.17
Total	571,833	620,085	659,486	651,004	0.84	0.64	-0.13

Sources of crude data: BPS (1982: 53; 1981: 9; 1992d: 1-147).

Annex 5.7 List of secondary data

Indonesia:

- U.S. Census Bureau statistics: 'Demographic indicators '98 and 2010', 'Population Pyramid Summary of Indonesia'
- BPS: 'Population of Indonesia '90'
- BPS: 'Welfare indicators '92'
- PPK: 'Profile of Indonesian population'
- PPK: 'Analysis of the '80 census age distribution of Indonesia'
- PPK: '*Informasi statistik kependudukan*'
- State Ministry of Population and the Environment: 'Act of RI no. 10 of '92 concerning population development and development of prosperous family'
- Keyfitz: 'World population growth and aging: Indonesia-Netherlands'

Special Region Yogyakarta:

- BPS: 'Population. DIY '90'
- BPS: '*DIY dalam angka '93*'
- PemDa: '*Pekerjaan penyusunan rencana tata ruang wilayah Kab. daerah tingkat II Gunungkidul*'
- BPS: 'Regional domestic bruto product DIY 88-93'
- BPS: '*Statistik sosial dan budaya DIY '93*'
- BPS: '*DIY dalam angka '93*'
- BPS: '*DIY dalam angka '94*'
- BPS: '*Penduduk Indonesia-DIY-Kabupaten*'
- PPK: '*Tabel Susenas '93 DIY*'
- BPS: '*Sensus Pertanian '93 DIY*'
- BPS: '*Profil Kependudukan DIY*'
- PPK: 'Tables educational level DIY-Kab'
- PPK: 'Tables dependency. ratio DIY-Kab-Kec'
- PPK: 'Tables elderly population Gunung Kidul, Bantul'
- PPK: 'Population pyramids DIY Kab.'
- BPS: '*Supas '95 Migrasi*'
- BPS: '*Penduduk menurut umur DIY, Sensus '90*'
- BPS: '*Keadaan penduduk DIY, Sensus '80*'
- BPS: '*Sensus penduduk '71 DIY*'
- PPK: 'Tables dependency ratio DIY Kec.'
- BPS: '*Desa termasuk desa kota '83*'
- BPS: '*Desa miskin '93*'
- BPS: '*Daftar/ Metodologi/Kriteria desa tertinggal '94*'
- BPS: '*Peta Kecamatan DIY '90*'
- PPK: '*Analisa perkembangan kependudukan menurut sensus penduduk '90: Dinamika mobilitas, Jawa*'
- PPK: '*Kemiskinan dan kependudukan di pedesaan Jawa: Analisis data Susenas '92*'
- BKKBN: '*Profil kependudukan DIY '95*'
- BPS: '*Susenas DIY '94*'

Regency Bantul:

- BPS: '*Bantul dalam angka '84, '90, '94*'
- BPS: '*Sensus penduduk Kab. Bantul '80 lengkap*'
- BPS: '*Penduduk menurut umur Kab. Bantul Sensus '90*'
- BPS: '*Penduduk Kab. Batul (Kec, desa, dusun) '96*'
- BPS: '*Kecamatan Banglipooro dalam angka '90, '93*'
- Kades: '*Monografi desa Sumbermulyo, Kec. Banglipooro, '91, '96*'
- Kades: '*Laporan bulanan Sumbermulyo, Desember '85, '90, '95, Mei '96*'
- Kades: '*Pedoman pembagian kelompok umur bagi dusun*'
- Kades: '*Daftar pemilih Sumbermulyo*'
- Table 'Population of Sumbermulyo hamlets by age groups'
- Tables of Jetis '*produksi beras; industri dan kerajinan; menurut umur dan jenis kelamin*'

Regency Gunung Kidul (GK):

- BPS: '*GK dalam angka '81, '90, '94*'
- BPS: '*Sensus penduduk Kab. GK '80 lengkap*'
- BPS: '*Penduduk menurut umur Kab. GK Sensus '90*'
- BPS: '*Penduduk Kab. GK '91, '95*'
- PemDa: '*Rencana tata ruang' wilayah Kab. daerah tingkat II GK, '95-2005*'
- Bappeda: '*Daerah membangun GK*'

Sub-district Imogiri:

- BPS: *'Kec. Imogiri dalam angka '90. '94'*
- Kades: *'Laporan kependudukan Imogiri, Desember '94-96'*
- Tables of Imogiri *'Produksi beras; Industri kecil dan kerajinan'; Menurut umur dan jenis kelamin, '94'*
- Kades: *'Data rekapitulasi jumlah penduduk akhir bulan dusun Kebonagung '93-'96'*
- Kades: *'Daftar isian potensi desa dan kelurahan Kebonagung'*
- Kades: *'Daftar Pemilih Kebonagung'*
- Tables of Kebonagung *'Kelompok umur dan jenis kelamin; Pekerjaan'*
- Table *'Population of Kebonagung hamlets by age groups'*

Village Kebonagung:

- Map of Kebonagung
- Kades: *'Monografi Kebonagung '96'*
- Kades: *'Monografi wilayah kerja penyuluhan pertanian '96'*
- Kades: *'Laporan realisasi panen, tanam '96'*
- Kades: *'Laporan bulanan desa Kebonagung '93-'96'*

Hamlets of Kebonagung:

- Population pyramids
- Tables household size
- Tables household composition

Sub-district Panggang:

- BPS: *'Kec. Panggang dalam angka '91. '94'*
- PemDa: *'Monografi Panggang '96'*
- PemDa: *'Pelaksana Pendataan Panggang, '96'*
- PemDa: *'Rencana detail tata ruang kota Panggang, 93/94-2013/14'*
- DepSos: *'Petunjuk pelaksanaan pembinaan kesejahteraan sosial lanjut usia/jompo terlantar, '84'*
- BKKBN: *'Buku pengangan kader bina keluarga lansia (BKL), '96'*
- BKKBN: *'Kantong bhakti bina keluarga lansia'*

Village Giriwungu:

- Map of Giriwungu
- Kades: *'Monografi Giriwungu '97'*
- Kades: *'Daftar Pemilih Giriwungu'*
- Tables of Giriwungu *'Kelompok umur dan jenis kelamin; Pekerjaan'*
- Table *'Population of Giriwungu hamlets by age groups'*

Hamlets of Giriwungu:

- Population pyramids
- Tables household size
- Tables household composition

General:

- DepKes: *'Pola operasional upaya kesehatan usia lanjut, '94'*
- DepKes: *'Pedoman pembinaan kesehatan usia lanjut bagi petugas kesehatan I, '95'*
- DepKes: *'Pedoman pembinaan kesehatan usia lanjut bagi petugas kesehatan II, '95'*
- DepKes: *'Pedoman Manajemen upaya kesehatan usia lanjut di Puskesmas, '95'*
- DepKes: *'Buku petunjuk Kartu Menuju Sehat (KMS) usia lanjut, '95'*
- DepKes: *'Kartu Menuju Sehat (KMS) usia lanjut, '95'*

News paper articles:

- Kedaulatan Rakyat, 15-01-97: *"Seputar implikasi sosial ledakan lansia di Indonesia"*
- Kedaulatan Rakyat, 03-03-97: *"Wanita lansia rawan keropos tulang"*
- Kedaulatan Rakyat, 14-03-97: *"Usia lanjut dalam proses perubahan sosial"*
- Wawasan, 25-06-97: *"Perintis Posyandu khusus lansia"*
- Jakarta Post, 26-05-00: *"Getting old is unavoidable, but not a crime", "World population growing older due to better care"*

-
- : collected crude data
 - : processed data

Population Studies Center
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Dept. of Household & Consumer Studies
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The Netherlands

HOUSEHOLD INVENTORY SURVEY 'ELDERLY CARE IN RURAL D.I.YOGYAKARTA'
RECORD SHEET

Name **interviewer**:

Date 1st visit:-.....-1997

Date 2nd visit:-.....-1997

Date 3rd visit:-.....-1997

Duration enquête:-..... hrs. elderly respondent
.....-..... hrs. household member of elderly respondent

Reason for non-response:

Complete name of the **elderly respondent [A1]**:

Respondentnr. elderly: **NORN**

Address: - Kabupaten
[A8] - Kecamatan
- Desa
- Dusun
- RT/RW

Elderly respondent is a potential informant for the qualitative in-depth interviews,
because.....
.....
.....
.....
.....

Complete name of the **elderly's household member [E1]**:

Respondentnr. household: **NORT**

[Apply only if you suspect or notice that the elderly respondent is not capable of answering the questions.]

MINI MENTAL TEST [Every good answer is 1 point]	Maximal score	Score
1. Do you know what name of the day it is (Javanese/Indonesian day)? Can you also tell me what (...) it is? (date) (month) (year) (season)?	5	
2. In what (country) do you live? Do you also know in what (...) this is? (island) (provence) (<i>kabupaten</i>) (<i>kecamatan</i>) (<i>desa</i>) (<i>dusun</i>) (<i>RT/RW</i>)?	8	
3. May I test your memory? I will say 3 objects and ask you to remember them and repeat them. Chair - rice - book. [Say the names of 3 unrelated objects, clearly and slowly, about 1 second for each. After you have said all 3, ask him to repeat them. This first repetition determines his score (0-3) but keep saying them untill he can recall all 3, up to 6 trials. If s/he does not eventually learn all 3, questionnr. 5 cannot be tested.]	3	
4. I am going to tell you a short sentence which holds an assignment. Please listen carefully and do the assignment. Ready? Close - your - eyes! [Speak clearly and slowly. Try it only once. Score is 1 if the respondent closes her/his eyes.]	1	
5. Can you recall the 3 words, that I earlier asked you to remember? [Each good word is 1 point. Order is not important.]	3	
6. What is this? [Show the respondent a wrist watch.] And what is this? [Show the respondent a pencil.]	2	
7. Can you please repeat the following: "Kathah putra, kathah rejeki" [Allow only one trial. Score 0 or 1.]	1	
8. Take this paper in your right hand, fold it in half, and put it on the floor. [Give the respondent a piece of plain blank paper and repeat the command. Each part correctly executed is 1 point.]	3	
Total score:		

**[If the respondent has a total score of less than 13, the questionnaire should be ENDED.
GO TO QUESTIONNAIR HOUSEHOLD MEMBER OF ELDERLY.]**

HOUSEHOLD INVENTORY SURVEY

QUESTIONNAIRE ELDERLY RESPONDENT**[CARD 2: INTRODUCTION]****A. SOCIO-DEMOGRAPHIC STATUS ELDERLY**

A1. Complete name

[Fill in name at RECORD SHEET. If the respondent wants to stay anonymous make sure you have the right person, but do not write down the name.]

A2. Sex: 1. Male
2. Female

A3. Age: years

[CARD 3: If the respondent does not know her/his age or you suspect the given age is not good, try to estimate the age. END if the respondent is younger than 55 years.]

A4. Religion:

1. Islam
2. Christian
3. Roman Catholic
4. Hindu
5. Buddhist
6. Other

A5. Level of education:

1. No schooling or some primary school
2. Graduated from primary school
3. Graduated from general junior high school
4. Graduated from vocational junior high school
5. Graduated from general senior high school
6. Graduated from vocational senior high school
7. Graduated from Diploma I/II
8. Graduated from Academy/Diploma III
9. Graduated from University

A6. Marital status:

1. Never/not (yet) married **[GO TO A8]**
2. Married
3. Divorced
4. Widowed or unknown/lost spouse in war
5. Divorced and remarried
6. Widowed and remarried

A7. Since what year (duration of marital status)?

2. 19....
3. 19....
4. 19....
5. 19.... and 19....
6. 19.... and 19....

A8. Where do you live now (place of residence)?

1. Hamlet :
2. Village :
3. Sub-district :
4. Regency :

A9. Where were you born (place of birth)?

1. Hamlet :
2. Village :
3. Sub-district :
4. Regency :

[If place of birth is similar to place of residence, GO TO A12]

A10. Why did you move to the present place of residence?

1. It is the place where the spouse lived at (re)marriage
2. Educational possibilities
3. Work possibilities
4. Closer to family members **[write down type of relationship with respondent]**
.....
5. Other

A11. How many years have you lived here?

..... years

A12. With whom do you live together (in the same house)?

Or with whom do you eat together (from the same kitchen)?

[GO TO E2; only fill in the names and relationship. If the elderly lives alone or only with spouse or underaged children, COMPLETELY FILL IN E2.]

A13. Do you have children that are not part of the present household?

[Non-residential children who have their own family or do not have a monetary/material exchange relationship with the elderly respondent's household.]

1. Yes **[GO TO E3; only fill in the names. If the elderly lives alone or only with spouse or underaged children, COMPLETELY FILL IN E3.]**
2. No

B. NUTRITIONAL-HEALTH STATUS ELDERLY

B1.	Yes	No	Score
1. Do you have an illness or condition that made you change the kind or amount of food you eat?	[2]	[0]	
2. How many meals do you eat per day? a. ≥ 3 meals [0] b. 2 meals [1] c. ≤ 1 meal [2]			
3. Do you often eat fruit or vegetables?	[0]	[2]	
4. Do you often drink milk?	[0]	[2]	
5. How many cups of fluids do you drink per day? (e.g. water, tea, coffee, juice, milk) a. ≤ 3 cups [0] b. 4-7 cups [1] c. ≥ 8 cups [2]			
6. Do you have teeth, mouth or swallowing problems that makes it hard to eat?	[2]	[0]	
7. Do you always have enough money to buy food?	[0]	[2]	
8. Do you often eat alone (without other people)?	[2]	[0]	
9. Do you take 3 or more different medicines every day?	[2]	[0]	
10. Did you lose or gain a lot of weight without wanting it in the last 6 months?	[2]	[0]	
11. Are you always able to shop, cook or feed yourself?	[0]	[2]	
12. Do you regularly smoke tobacco, chew beetle nuts or drink alcohol?	[2]	[0]	

[Fill in later] Total score:

B2. Do you worry about your food supply?

1. Yes often
2. Yes sometimes
3. No never

B3. Why?

.....

B4. How is your health condition in general?

.....

B5. How is your health compared to that of other people of your age?

.....

B6. How is your health now in comparison to what it was like 10 years ago?

.....

.....

.....

.....

B7. Can you still sense everything like ... [1-5]?	Yes	No
1. Sight		
2. Hearing		
3. Smelling		
4. Taste		
5. Touch		

B8. Did you suffer from minor diseases like ... [1-6] in the last year, that caused you could not do your daily activities?	Yes/No	If yes; How many times per week/month/year	[Fill in later] Total frequency per year
1. Fever/flu			
2. Cough			
3. Vomit			
4. Toothache			
5. Headache			
6. Other			

B9. Do you suffer from chronic diseases like ... [1-8]?	Yes, already for ... weeks/months/years	No
1. High blood pressure		
2. Diabetes		
3. Liver problems		
4. Heart problems		
5. Rheumatism		
6. Paralysis		
7. Other		

B10. Did you use one of the following types of care for the diseases [B8,B9] that you suffered from last year?	Yes/No	If yes, exp. per week/month (Rp)	[Fill in later] Annual exp. (Rp)
1. Traditional/own medicines			
2. Modern medicines			
3. <i>Dukun</i>			
4. Rural Health Clinic/ <i>Puskesmas</i>			
5. Hospital			
6. <i>Slametan</i> ceremony			
7. Other			
Total annual expenditures:			

B11. Do you worry about your health?

1. Yes often
2. Yes sometimes
3. No never

B12. Why?

.....

.....

.....

.....

C. ECONOMIC STATUS ELDERLY

C1. Do you work nowadays?

1. Yes **[GO TO C5]**
2. No

C2. What kind(s) of work did you do in the year before you stopped?

.....

.....

.....

.....

C3. Why did you stop working?

1. Not necessary anymore, because
2. Incapable because of physical condition, sickness or health problems
3. Household members do not allow the respondent to work
4. There is no work available
5. Work is more and more difficult to acquire when you become older
6. Other, namely

C4. For how many years do you already not work?

..... years **[GO TO C8]**

- C5. (1) What kind(s) of work did you do last year? Do you also have additional work?
 (2) Is that during the whole year or in a specific season?
 (3) How many months per year?
 (4) How many days per month?
 (5) Where did you work?
 (6) What is for you the most important work based on the spent time (hrs/year)?
 (7) What is for you the most important work based on income (Rp per year)? **[CARD 5: Estimation]**

Type of work (1)	Season (2)	Months per year (3)	Days/ month (4)	Place (5)	Most important based on	
					Time (hrs) (6)	Income (Rp d/m) (7)
1.						
2.						
3.						
4.						
5.						

- | | | | |
|-----------------|---|----------------------|---|
| Season: | | Place: | |
| Dry season | 1 | Own/same desa | 1 |
| Raining season | 2 | Own/same kabupaten | 2 |
| Planting season | 3 | Other kab. DIY | 3 |
| Harvest season | 4 | Kotamadya Yogyakarta | 4 |
| Plant+harvest | 5 | Central Java | 5 |
| Whole year | 6 | Other area Java | 6 |
| | | Other area Indonesia | 7 |
| | | Outside Indonesia | 8 |

[Fill in later]
 Total income:

- C6. Is your income enough for: **[Choose one answer]**
1. your own needs only
 2. yourself and spouse
 3. (a part of) the needs of yourself, spouse and children (whole household)
 4. other

- C7. Why do you work?
1. To earn an income
 2. To cultivate plants for food
 3. To stay busy or to pass the time
 4. To help the household members
 5. To help others than the household members, namely **[Type of relationship with resp.]**

 6. Other

- C8. Do you personally feel that your economic situation is sufficient for your daily needs?
[economic situation = monetary income + land yield]
1. Yes
 2. No

C9. Why?

C10. Who owns the house you live in?

- 1. Respondent her/himself
 - 2. Spouse [GO TO C13]
 - 3. Daughter [GO TO C13]
 - 4. Son [GO TO C13]
 - 5. Daughter-in-law [GO TO C13]
 - 6. Son-in-law [GO TO C13]
 - 7. Other
- [type of relationship with resp.] [GO TO C13]

C11. Who will inherit the house?
 [Relationship/Child nr. and sex]

C12. Why will s/he inherit the house?

- C13. Do you personally own land at the moment?
- 1. Yes [GO TO E8; Only fill in for the elderly respondent!]
 - 2. No [GO TO C16]

C14. Who will inherit that land? [If respondent does not know the size of land, ask for the Letter C (tax)]

Nr.of child/relationship [E2/3]	Sex	Size of land (m ²)

C15. Why will specifically that person/child inherit that land?

- C16. Did you already distribute land that you owned before to your children?
- 1. Yes, formally
 - 2. Yes, not yet formally
 - 3. No(t yet) [GO TO D]

C17. To who did you already distribute land? **[If respondent does not know the size of land, ask for the Letter C (tax)]**

Type of relationship with resp.	Sex	Size of land (m ²)

C18. Why did you distribute this land to this person/child specifically?

.....

D. CARE ARRANGEMENTS ELDERLY

D1. What are your daily activities in general? **[More answers are possible]**

1. Farming work **[agriculture/hunting/forestry/fishery]**
2. Non-farming work **[any work that is not farming work]**
3. Householding
4. Babysitting or childminding
5. Being at home **[sitting/sleeping/staying]**
6. Socializing **[talking/visiting with non-household members]**
7. Other

D2. On what activity do you spend most of your time? **[nr D1]**

D3. Can you ... [1-5] alone by yourself, with some or much difficulty, only with help or not at all? [Score]	[Choose from the following answer categories]					[Fill in later]
	Can without difficulty [5]	Can with some difficulty [4]	Can with a great deal of difficulty [3]	Can only do it with help [2]	Can not do it at all [1]	Score
1. Wash yourself or take a bath						
2. Use the toilet						
3. Dress and undress (including doing up zippers, fastening buttons, putting on shoes)						
4. Stand up from and sitting down in a chair						
5. Walk outdoors for 5 minutes without resting						
- - - [GO TO D5]						Total score:

D4. If you need help with these personal daily activities [D3: 1-2], who usually helps you with ...?
[Answer only for the activities that the respondent needs help: name, type of relationship with respondent]

1. Bathing
2. Using toilet
3. Dressing
4. Standing up
5. Walking

D5. Do you worry about your ability to do these personal daily activities [D3]?

1. Yes
2. No

D6. Can you ... [1-10] alone by yourself, with some or much difficulty, only with help or not at all?	[Choose from the following answer categories]						[Fill in later]
	Not common to do it/Not applicable [0]	Can without difficulty [5]	Can with some difficulty [4]	Can with a great deal of difficulty [3]	Can only do it with help [2]	Cannot do it at all [1]	Score
1. Shop for daily groceries							
2. Cut fire wood							
3. Fetch water							
4. Boil water							
5. Cook meals							
6. Change bed sheets							
7. Do the laundry							
8. Sweep the yard							
9. Clean the house							
10. Feed livestock							
	↓	↓	↓				Total score:
	[GO TO D8]						

D7. If you need help with these daily household activities [D6: 1-10], who usually helps you with ... ?
[Answer only for the activities the respondent needs help: name, type of relationship with respondent]

1. Shopping
2. Cutting wood
3. Fetching water
4. Boiling water
5. Cooking meals
6. Changing sheets
7. Laundry
8. Sweeping
9. Cleaning
10. Feeding livestock

D8. Do you worry about your ability to do these daily household activities [**D6**]?

- 1. Yes
- 2. No

D9. Do you have activities you would like to do but can not do anymore?

- 1. Yes
- 2. No [**GO TO D12**]

D10. What activities?

.....

.....

.....

.....

D11. Why can you not do these activities anymore?

.....

.....

.....

.....

D12. If you need help to who will you first go or from who will you initially receive support like money [**monetary support**], or necessary things like food and clothes [**material support**], or advice and confidence [**emotional support**]?

Name support giver	Type of relationship with respondent	Sex (M/F)	Kind of help [literally]	How often did you ask her/him to help last year?
1.				
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				

- Type of relationship**
- | | | | |
|-------------------------|---|------------------------|---|
| Household member | 1 | Friend, acquaintance | 5 |
| Non-household child | 2 | (Ex) colleague | 6 |
| Other non-household kin | 3 | Co-member organisation | 7 |
| Neighbour | 4 | Other | 8 |

D13. Who did you give support last year like money [**monetary support**], or necessary things like food and clothes [**material support**], or advice and confidence [**emotional support**]?

Name support receiver	Type of relationship with respondent	Sex (M/F)	Kind of help [<i>literally</i>]	How often did you help her/him last year?
1.				
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				

Type of relationship

- | | | | |
|-------------------------|---|------------------------|---|
| Household member | 1 | Friend, acquaintance | 5 |
| Non-household child | 2 | (Ex) colleague | 6 |
| Other non-household kin | 3 | Co-member organisation | 7 |
| Neighbour | 4 | Other | 8 |

D14. Are you participating in social activities like ... [1-4]?	1. Yes, actively	2. Yes, passively	3. No
1. RT/RW e.g. - Arisan - Gotong royong - Ronda - Dasa Wisma - Other RT/RW			
2. Religious organization: - Old people - Praying group - Other			
3. Arisan (outside RT/RW or religious organization)			
4. Other			

D15. Do you often talk to someone outside the household?

1. Yes
2. No, because **[GO TO D17]**

D16. With whom (outside the household) and how often do you talk?

Name	Type of relationship	Frequency (... x week/month/year)

Type of relationship

- | | | | |
|-------------------------|---|------------------------|---|
| Household member | 1 | Friend, acquaintance | 5 |
| Non-household child | 2 | (Ex) colleague | 6 |
| Other non-household kin | 3 | Co-member organisation | 7 |
| Neighbour | 4 | Other | 8 |

D17. Do you ever feel lonely?

1. Yes, often
2. Yes, sometimes
3. No, never

D18. Why?

.....

.....

.....

.....

D19. Do you feel happier or unhappier compared with 10 years ago?

1. Happier
2. The same
3. Unhappier

D20. Why?

.....

.....

.....

.....

D21. Do you feel you have a peaceful life in general?

1. Yes
2. No

D22. Why?

.....

.....

.....

.....

[If the respondent lives alone or only with spouse or underaged children then the respondent should answer de Questionnaire for the Household Member too. If not; END.]

[Check if you have asked all the questions and have written down all the answers!]

I think I have finished the interview now.

Would you like to comment on something of the interview? **[Write this on the last page]**

Now I would like to ask some questions to an adult member of your household. **[not elderly spouse or grandchild, but a child]** Is that possible?

Thank you very much for your cooperation! It is a great help for the researcher.

QUESTIONNAIRE HOUSEHOLD MEMBER OF ELDERLY

E1. Complete name of the household member of the elderly respondent.

[Fill in name at RECORD SHEET.]

E2. Who lives together with the elderly respondent (in the same house)?

Or who eats together with the elderly respondent (from the same kitchen)?

[Fill in table E2 page 2.]

[Definition of the elderly household:

- Everyone who lives in the same house as the elderly (for largest part of the year),
or
- who eats from the same kitchen even if they live in another house (e.g. elderly and children), or
- someone who contributes monetary or materially to the household for the largest part of their income (e.g. circulating migration), or
- someone for who is monetary or materially taken care for (e.g. boarding student).]

[Check where they eat, sleep and spend the largest part of their monetary/material income:]

- Are there members who do not live in the same house as the elderly respondent, but still eat from the same kitchen?
- Are there other members who do not live here and contribute to this household by the largest part of their monetary income/material support/food production?
- Are there other members who are monetary or materially supported by this household?
- Do you think that there are other people who are part of this household?
- Does someone live in the same house that does not have a family relationship (non-kin) with the household members (e.g. servant, friend)?

E3. Does the elderly respondent have children who are not part of the elderly's household?

[Fill in tabel E3 page 3]

[Children of the elderly respondent are not a members of the elderly's household if:

- they do not live in the same house and
- do not eat from the same kitchen and
- have their own household/family and
- do not have a relationship of giving and receiving money/goods (child does not send/give the largest part of its income to the elderly's household).]

Table E2. Who are the members of the elderly's household? **[Start with the eldest household member. CARD 4: CODES]**

(1) No.	(2) Name household members <i>[Not necessary to fill in, only to help respondent]</i>	(3) Relationship with elderly respondent	(4) Sex	(5) Age	(6) Marital status	(7) Highest level of education	Main employment/activity		Additional employment/activity	
							(8) Status	(9) Class.	(10) Status	(11) Class.
1										
2										
3										
4										
5										
6										
7										
8										
9										
10										
11										
12										
13										
14										
15										

Table E3. Does the elderly respondent has children that are not part of the same household?

[Start with the eldest household member. CARD 4: CODES]

(1) Nr.	(2) Name child <i>[Not necessary to fill in, only to help respondent]</i>	(3) Child's ranknr.	(4) Sex	(5) Age	(6) Marital status	(7) Household size	(8) Place of residence	(9) Highest level of education	Main occ./activity	
									(10) Status	(11) Class.
1										
2										
3										
4										
5										
6										
7										
8										
9										
10										
11										
12										
13										
14										
15										

Age:
Add X if child
already died

Household size:
Number of household
members

**Place of
residence:**
Same desa 1
Same kab. 2

Other kab. DIY 3
Kota Yogya 4
Central Java 5

Other area Java 6
Other area Indonesia 7
Outside Indonesia 8

[Make sure that the house you visit is the house of the elderly respondent! Observe too. If the respondent has more types of the same facility, score for the best.]

E4. Housing quality [score]	Score
1. Type of largest outside wall: - bamboo [0] - wood, other [1.5] - cement [3]	
2. Type of largest floor: - earth, soil [0] - wood, bamboo [1] - cement, brick [2] - tile [3] - other [1.5]	
3. Type of window: - no windows, wooden shutters [0] - blinds of wood [1] - glass windows [2] - blinds of glass [3]	
4. Lighting facilities: - kerosene lantern [0] - petromac lamp, other [1.5] - electric [3]	
5. Source of drinking water: - spring, rain, river [0] - well, other [1.5] - pipe, pump [3]	
6. Source of washing water: - spring, rain, river [0] - well, other [1.5] - pipe, pump [3]	
7. Bathing facilities: - public, other [0] - shared [1] - own bathroom outside house [2] - own bathroom in house [3]	
8. Toilet facilities: - public, other [0] - shared [1] - own without septic tank [2] - own with septic tank [3]	
[Calculate later] Total score:	

E7. What material gifts/goods did the household receive from non-household members in the last year?

Type of giver/ Source of goods *	Goods	Value (Rp)	... X week/month/year	[Calculate later] Average material gifts per year (Rp)
Type of goods source/giver:				Annual total:
Child	1	Acquaintance	4	
Other kin	2	Social organisation	5	
Neighbour/friend	3	Other	6	

E8. What kind of land do the household members own, use or let? **[If respondent does not know the size of land, ask for the Letter C (tax)]**

No. household member [E2]	Type of land* [No.]	Size (m ²)*	Property status*	Application* [More appl. possible]
	1.			
	2.			
	3.			
	4.			
	5.			
	6.			
	7.			
	8.			
	9.			
	10.			

Type of land:		Local sizes:		Property status:		Application:	
Household garden/farmyard	1	1 lobang = 10 m ²		Owned	1	Bare	1
Vegetable garden (dry, possibly with trees)	2	1 ru = 14 m ²		Let out for money	2	Vegetables	2
Irrigated/rain-dependend garden	3	1 patok = 750 m ²		Let out for shared harvest	3	Subsidiary crop to rice	3
Ricefield dry non-irrigated/rain-dependend	4	1 wulong = 1000 m ²		Rented for money	4	Rice	4
Ricefield simple irrigated	5	1 bahu = 8000 m ²		Rented for shared harvest	5	Fruit trees	5
Ricefield technically irrigated	6			Used by village official	6	Perennial crops/trees	6
Other	7			Other	7	Other	7

E11. Can the daily needs of the household be fulfilled by the available economic resources **[monetary income, yield and material income]**?

1. Yes
2. Often/most of the times
3. Sometimes
4. No

E12. Do the household members own valuable possessions? **[Ask every item]**

1. Household items: a. cupboard and furniture b. stove (oil, gas, electric) c. refridgerator d. sewing machine e. other
2. Mean of transport/agricultural farm tool: a. horse cart (<i>dokar/gerobak kuda</i>) b. cow cart (<i>gerobak sapi</i>) c. bicycle d. scooter/motorcycle e. car f. truck g. boat (<i>prauw</i>) h. motorboat i. other
3. Audio: a. radio b. stereo set c. television d. video recorder e. parabola f. other
4. Savings/investment: a. money b. gold/jewelry c. other
5. Other:

E13. Is the household economically secure?

1. Yes
2. No

E14. Why?

.....
.....
.....
.....

[Check if you have asked all the questions and have written down all the answers!]

The interview is finished now. Would you like to comment on something?

[Write this on the last page]

Thank you very much for your cooperation!

F. SELF CARE & CARE ARRANGEMENTS FOR ELDERLY WITH MMT £ 13

F1. Respondent nr. household: **NORT**

F2. (Estimated) age elderly:

F3. Sex elderly:

F4. Health status:

F5. What are the daily activities of the elderly in general? **[More answers are possible]**

1. Farming work **[agriculture/hunting/forestry/fishery]**
2. Non-farming work **[any work that is not farming work]**
3. Householding
4. Babysitting or childminding
5. Being at home **[sitting/sleeping/staying]**
6. Socializing **[talking/visiting with non-household members]**
7. Other

F6. On what activity does the elderly spend most of its time? **[nr F5]**

.....

F7. Can the elderly do the following activities [1-5] alone by her/himself, with some or much difficulty, only with help or not at all? [Score]	[Choose from the following answer categories]					[Fill in later] Score
	Can without difficulty [5]	Can with some difficulty [4]	Can with a great deal of difficulty [3]	Can only do it with help [2]	Can not do it at all [1]	
1. Wash her/himself or take a bath						
2. Use the toilet						
3. Dress and undress (including doing up zippers, fastening buttons, putting on shoes)						
4. Stand up from and sitting down in a chair						
5. Walk outdoors for 5 minutes without resting						
						Total score:

F8. If s/he need help with these personal daily activities **[F7: 1-2]**, who usually helps her/him?

[Answer only for the activities that the respondent needs help: name, type of relationship with respondent, sex]

1. Bathing
2. Using toilet
3. Dressing
4. Standing up
5. Walking

F9. Can the elderly do the following activities [1-10] alone by yourself, with some or much difficulty, only with help or not at all?	[Choose from the following answer categories]						[Fill in later]
	Not common to do it/Not applicable [0]	Can without difficulty [5]	Can with some difficulty [4]	Can with a great deal of difficulty [3]	Can only do it with help [2]	Can not do it at all [1]	Score
1. Shop for daily groceries							
2. Cut fire wood							
3. Fetch water							
4. Boil water							
5. Cook meals							
7. Do the laundry							
8. Sweep the yard							
9. Clean the house							
10. Feed livestock							
							Total score:

F10. Which of these activities or other daily household activities does the elderly still carry out?

.....
.....
.....

F11. If the elderly needs help with these daily household activities [F9: 1-2], who usually helps her/him? [Answer only for the activities the respondent needs help for: name, type of relationship with respondent, sex]

1. Shopping
2. Cutting wood
3. Fetching water
4. Boiling water
5. Cooking meals
7. Laundry
8. Sweeping
9. Cleaning
10. Feeding livestock

F12. Do you have problems with taking care for the elderly or do you worry about the care for [name elderly]? If yes, what? If no, why not?

.....
.....

CARD 1: INTERVIEW MANUAL

Skills

1. Create a good relationship with the respondent ('rapport').
2. Express the question good and exact, in Javanese ('*Kromo/Kromo Hinggil*') only
3. Ask neutral questions!!!
4. Write the respondent's answers systematically and clear.
5. Try to get more specific information. Go on until they say there's nothing more.
6. Don't give any examples or give all possible answers. Don't answer yourself!!!
7. Let the respondent answer alone and prevent that other people help. If it is very crowded ask friendly if there is a more quiet place in the house to do the interview.
8. Don't dwell on to other subjects, keep track of the questionair.

Personality

1. Have a sympathetic attitude:
 - a. Take off your shoes - even if they say you should not - when they have a tile or cemented floor.
 - b. Low profile
 - c. Polite and respectfull towards respondent
 - d. Friendly behaviour and talking
 - e. Be patient facing the respondent, wait for the answer!!!
2. Perform tidy but normal:
 - a. Simple and clean clothes
 - b. No big jewelry
 - c. No exaggerated make-up (too bright lipstick) but fresh look
3. Be full understanding and neutral
4. Be willing to listen carefully
5. Relax: do not be nervous, avoid stress and pressure

Proceedings

1. RECORD SHEET:
 - Data interviewer, visits, non-response
 - Data elderly respondent
 - Data elderly's household member

Fill this in before and after each visit to the respondent. Don't do this in the presence of the respondent!

 - Mini Mental Test

Apply only when you suspect or notice that the elderly respondent is not capable of answering the questions.
2. CARD2 INTRODUCTION & NON-RESPONSE

Introduce yourself and the purpose of your visit properly otherwise the respondent will be confused!

If the respondent doesn't want to or cannot cooperate with the questionnaire, find out why (non-response). If you suspect or notice that the elderly respondent is not capable of answering the questions, do the MINI MENTAL TEST.

3. QUESTIONNAIRE ELDERLY RESPONDENT:

- A. Socio-demographic status elderly
- B. Nutritional-health status elderly
- C. Economic status elderly
- D. Care arrangements elderly

This questionnaire is meant to find out the personal living circumstances of the elderly respondent (age 60+). This is not the same as the circumstances of the whole household! Don't forget to note the NO. Responden on every page!

4. QUESTIONNAIRE HOUSEHOLD MEMBER OF ELDERLY:

- E. Elderly household

This part of the survey is asked to a member of the elderly's household. Because these questions concern the composition and socio-economic status of the total household, it is assumed that these are too difficult for the elderly respondent. Select one of the adult household members between 25-59 years (usually a child of the elderly). If the elderly respondent lives alone or only with a spouse or grandchild, the elderly respondent should answer this part by her/himself. Don't forget to note the No. Rumah Tangga [NORT] on every page!

5. CARDS:

1. Interview manual: Skills, personality, proceedings
2. Introduction & Non-response
3. Estimation of age [A3]
4. Codes household composition table [E2/E3]
5. Estimation of cash income [C5/E5]
6. List of crops [E9]

These cards are helpful to the interview(er).

CARD 2: INTRODUCTION & NON-RESPONSE

Good morning/afternoon/evening, I am [*name interviewer*] and carry out a survey for a Dutch researcher who works at the Gadjah Mada University in Yogyakarta. This research is for her study about elderly people in Indonesia. The answers and the results of this interview will be treated confidentially and anonymously. **[If they want to know the researcher's name: Iris Keasberry.]**

[Acquaintancing:

- **Introduce yourself and what you want.**
- **Try to speak with the elderly respondent. Ask if they have time to do the questionnaire now or make an appointment.**
- **If the elderly respondent is not at home, find out where s/he is or when s/he comes home. Say when you will be back or look for the respondent.]**

**Reasons why the elderly respondent does not want to/can not be interviewed (non-response).
Fill in at RECORD SHEET:**

- | | |
|--------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1. Does not have time or is too busy. | [Say you like to make an appointment when it is a more convenient time.] |
| 2. Does not like to be interviewed. | [Say the respondent it is very important that we get her/his answers, because that is valuable information on how elderly people live in Indonesia. Without the respondent's answers that is much more difficult to obtain.] |
| 3. Respondent thinks s/he is not interesting or important for this research. | [Say that the respondent's answers are very important to be part of the research, because we want to have an average population of this village. Therefore the respondent is especially selected for her/his characteristics of age, sex and living place.] |
| 4. Is afraid the interview results or answers will be used for political purposes or by the police/tax/government/other official purposes. | [Say the respondent that this is not the case! Her/his answers and the results of this interview will be treated confidentially and anonymously and will only be used for the study of the Dutch researcher - Ir. Iris Keasberry.] |
| 5. Unable to answer because of sickness/senile/died recently. | [If the elderly respondent died; END.]
[If the elderly respondent is sick/senile, ask type of disease. Ask if the household member wants to answer some questions. GO TO E] |
| 6. Failed the MINI MENTAL TEST | [GO TO E] |
| 7. The elderly respondent has not been reached after 3 times trying, because | [END] |
| 8. Other reason | [END] |

[If the elderly respondent changes her/his mind, make an appointment or GO TO A]

I am sorry to have bothered you. Thank you very much! **[END]**

CARD 3: ESTIMATION OF AGE [A3]

[DO NOT WRITE ON THIS CARD. MAKE NOTES ON THE QUESTIONNAIRE!!!]

Local/national history

How old were you when:

- 1a. The first Election of *Kepala Desa* was held? **[1912: Kebonagung / 19...: Giriwungu]**
- 1b. The big earthquake was? **[1942]**
- 1c. The Japanese invasion of Indonesia began and the Dutch surrendered in Java? **[1942]**
- 1d. World War II and the Japanese Occupation Era was? **[1942-1945]**
- 1e. The Indonesian Independence has been proclaimed? **[1945]**
- 1f. The Revolution of **[1945-1950]** was? *Clash II* **[1949]**
- 1g. Ash rained from the eruption of the volcano Kelud (East Java)? **[1951]**
- 1h. The first General Election was organised? **[1955]**
- 1i. The PKI rebels were? **[1965]**

For a woman with children

- 2a. Do you still know how old you were, when you gave birth to your first child?
- 2b. To how many children did you give birth?
- 2c. Do you happen to know the age of your first born child now?

[The birthdate on formal documents are normally not very accurate, but if you can not discover the age by the above questions please ask for:]

Formal documents

- 3a. What is the date of birth on your ID card?
- 3b. Do you have other formal documents in which your date of birth is written e.g. birth certificate, diploma, marriage document?

CARD 4: CODES HOUSEHOLD COMPOSITION [E2/E3]

E2/E3 (3):

Relationship with resp.:

Parent	0
Elderly respondent	1
Spouse	2
Child	3
Child-in-law	4
Grandchild	5
Sibling	6
Other kin	7
Servant	8
Other people	9

E2/E3 (4):

Sex:

Male	1
Female	2

E2/E3 (6):

Marital status:

Never/not (yet) married	1
Married	2
Divorced	3
Widowed	4

E2 (7)/E3 (9):

Education:

No school/some primary school	1
Graduated from:	
- Primary school	2
- General junior high school	3
- Vocational junior high school	4
- General senior high school	5
- Vocational senior high school	6
- Diploma I/II	7
- Academy/Diploma III	8
- University	9
Don't know	10

E2 (8/10)/E3 (10)

Employment/activity status:

Self employed	1
Employer assisted by unpaid/temporary workers	2
Employer assisted by permanent workers	3
Employee	4
Unemployed/jobseeker	5
Unpaid family worker	6
Housekeeper	7
Scholar	8
Masih kecil	9
Sudah tua	10
Don't know	99

E2 (9/11)E3 (11)

Industrial classification:

Agriculture, hunting, forestry, fishery	1
Mining and quarrying	2
Manufacturing	3
Electricity, gas, water	4
Construction	5
Whole sale and retail trade, restaurant and hotel	6
Transportation, storage, communication	7
Finance, insurance, property, business services	8
Community, social, personal and other services	9
Other	10

CARD 5: ESTIMATION OF CASH INCOME [C5/E5]

Average cash income per month (Rp)

1. Less than 10,000
2. 10,000 - 19,999
3. 20,000 - 29,999
4. 30,000 - 39,999
5. 40,000 - 49,999
6. 50,000 - 74,999
7. 75,000 - 99,999
8. 100,000 - 149,999
9. 150,000 Rp or more

CARD 6: LIST OF CROPS [E9]

Subsidiary crop to rice:

mung beans, string beans, peanuts
vegetables
soybean
cassava
corn

Seasonal vegetables:

mung beans, string beans, peanuts
vegetables
soybean
tobacco

Staple food products:

(dry) rice
corn
cassava
sorghum

Perennial crops and trees:

rotan
fruit tree**
coconut
petai bean tree
cardamon
coffee
bambu
clove
acacia

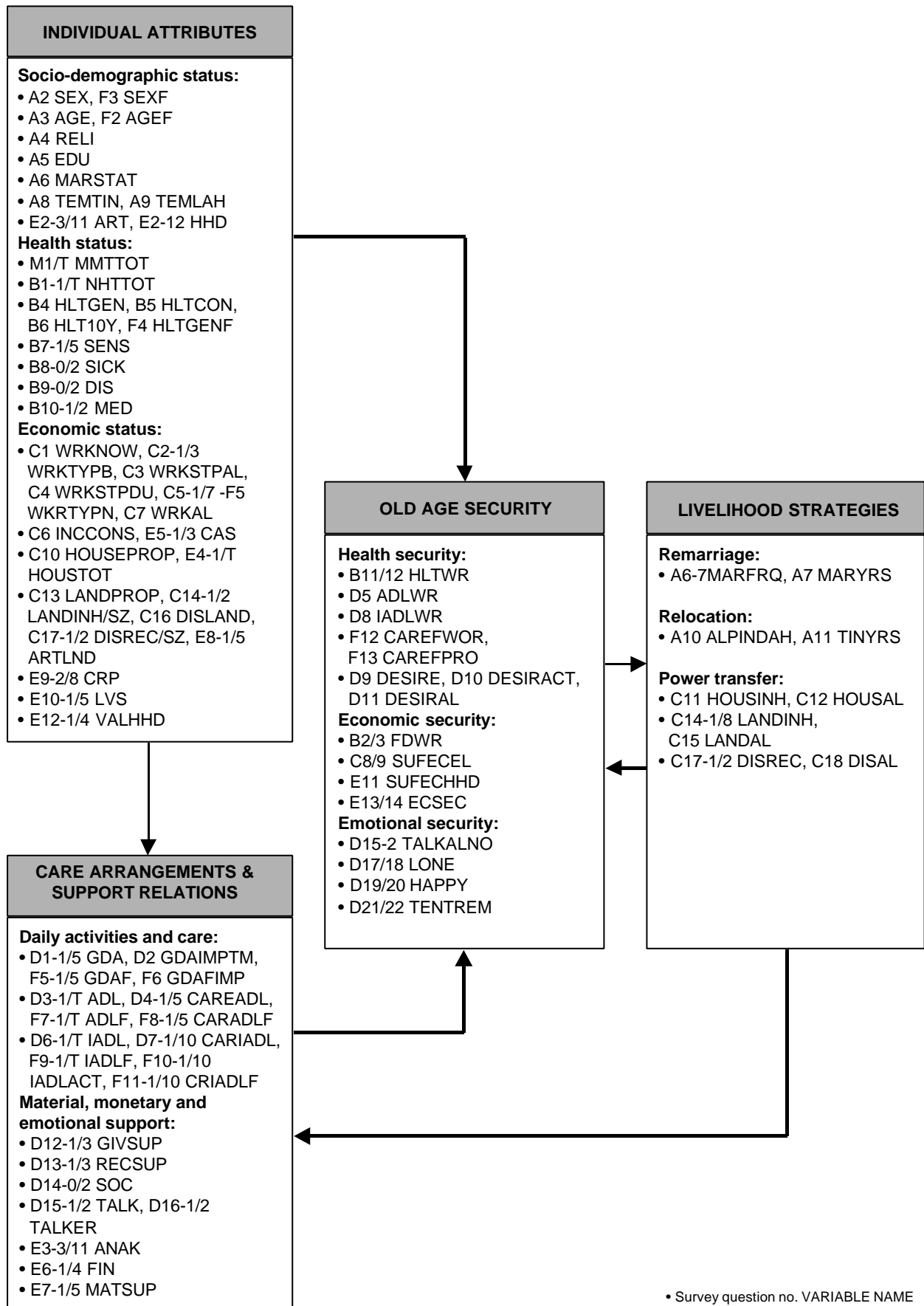
*vegetables

garlic
red onion
cucumber
cabbage
tomato
carrot
cauliflower
mustard greens/Chinese cabbage
bitter squash or momordica

**fruit trees

apple
sugar palm
tamarind
star fruit/carambola
jackfruit
durian fruit
rose-apple/guava
citrus fruit
mango
Gnetum gnemon tree (*emping*, *sayur* leaves)
mangosteen
passion fruit
pineapple
papaya
banana
rambutan/*Nephelium* tree
soursop

Annex 5.9 Operational analytical framework



Ask for each activity X:

- I. Who does X?
- II. Who helps you with X? (gift/loan?)
- III. If you are in need of X, who do you ask for help?
- IV. With whom do you (share) X?
- V. With whom do you X?
- VI. To whom do you give help with X?

Fill in format for each activity and name:

- Sex: Male or female?
- Old: Do you consider that person as old?
- Relationship: What kind of relationship do you have with that person?
- Location: Where does that person live?
- Frequency: How often do you do activity X with that person?
- Fluctuation: Does that contact fluctuate in time? If yes, how (monthly/seasonal)?
- Physical contact: Do you have physical contact? If not, how?
- Direction/balance: Do you also help that person with activity X? More/equal/less?

X. Activities:

1. Personal care activities of daily life (ADL):
 - a. Wash yourself or take a bath
 - b. Use the toilet
 - c. Dress and undress (incl. doing up zippers, fastening buttons)
 - d. Stand up from and sit down in a chair
 - e. Walk outdoors for 5 minutes without resting
2. Instrumental/household care activities of daily life (IADL):
 - a. Shop for daily groceries (*belanja untuk kebutuhan sehari²*)
 - b. Cut fire wood (*motong kayu bakar*)
 - c. Fetch water (*mengambil air dari pah ke dapur, pesan*) → 3b
 - d. Boil water (*masak air*)
 - e. Cook meals (*masak makanan*) → 3a
 - f. Do the laundry (*cuci pakaian*)
 - g. Sweep the yard (*nyapu kebon/halaman*)
 - h. Clean the house (*membersihkan rumah*)
 - i. Feed livestock (*memberi makan ternak*)
3. Material support:
 - a. Food/products
 - b. Water
 - c. Clothes/shoes
 - d. Medicines
 - e. Tobacco/*kinang*

4. Monetary support:
 - a. Handles the money (*pegang uang*)
 - b. Small amount of money (Description: get/give or borrow/lend. How much?)
 - c. Large amount of money (Description: get/give or borrow/lend. How much?)
 - d. *Arisan* (Description: *keluarga/trah/RT/dusun/beras/lingkunan/kerja*)
 - e. Save and borrow group (*simpan pinjam*)

 5. Aid for energy (*tenaga*):
 - a. Work (agricultural/non-agricultural but for yield/income)
 - b. Child minding
 - c. Mutual cooperation (*gotong royong*)
 - d. Patrol rounds (*ronda*)
 - e. Cooking assistance with ritual feasts and ceremonial funeral meals (*rewang*)
 - f. Help with making flower offers/decorations and carrying the deceased to the cemetery (*kelompok layatan*)

 6. Emotional support:
 - a. Talk/informal conversation (*omong²*)
 - b. Advice (*nasehat*)
 - c. Take in confidence (*percayai*)
 - d. Practise religion, pray (*berdoa*), recite from Koran/Bible/Tripitaka (*pengajian/persekutuan/renungan*), *slametan* (*kenduren/sedekahan/telasan*)
 - e. Visit ceremonies like birth, circumcision, wedding (*jagong/kondangan*), visit the deceased (*melayat*)
 - f. Ritual procedure/activity/tradition (*tradisi, budaya*)
 - g. Visit/stay over with people outside area (*perantau*)

 7. Informal care:
 - a. Women's information group (*Dasa Wisma*)
 - b. Neighbourhood group (*kumpulan RT/lingkunan*)
-

Annex 6.1 Justification for the estimation of age

The age of the elderly respondent was difficult to establish, which raises questions of reliability. Fortunately, we had the opportunity to test the accuracy of the answers, because we asked the age of some respondents twice. After the first parts of the Elderly Household Survey, the household members of the 42 non-communicative elderly were approached a second time. This third part of the survey was carried out in Giriwungu and in Kebonagung, seven and nine months, respectively, after the first parts of the survey. In both parts of the survey the age of the elderly was asked of the same household member (if possible), through which we could compare the responded ages.

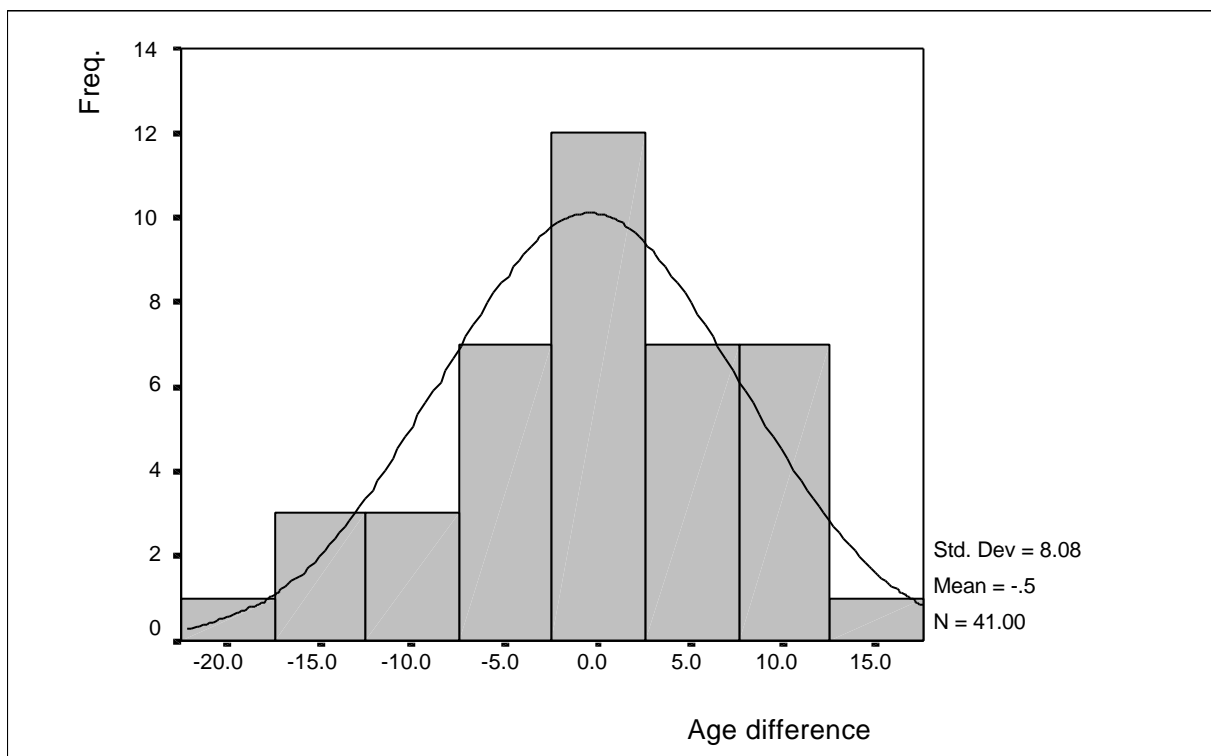
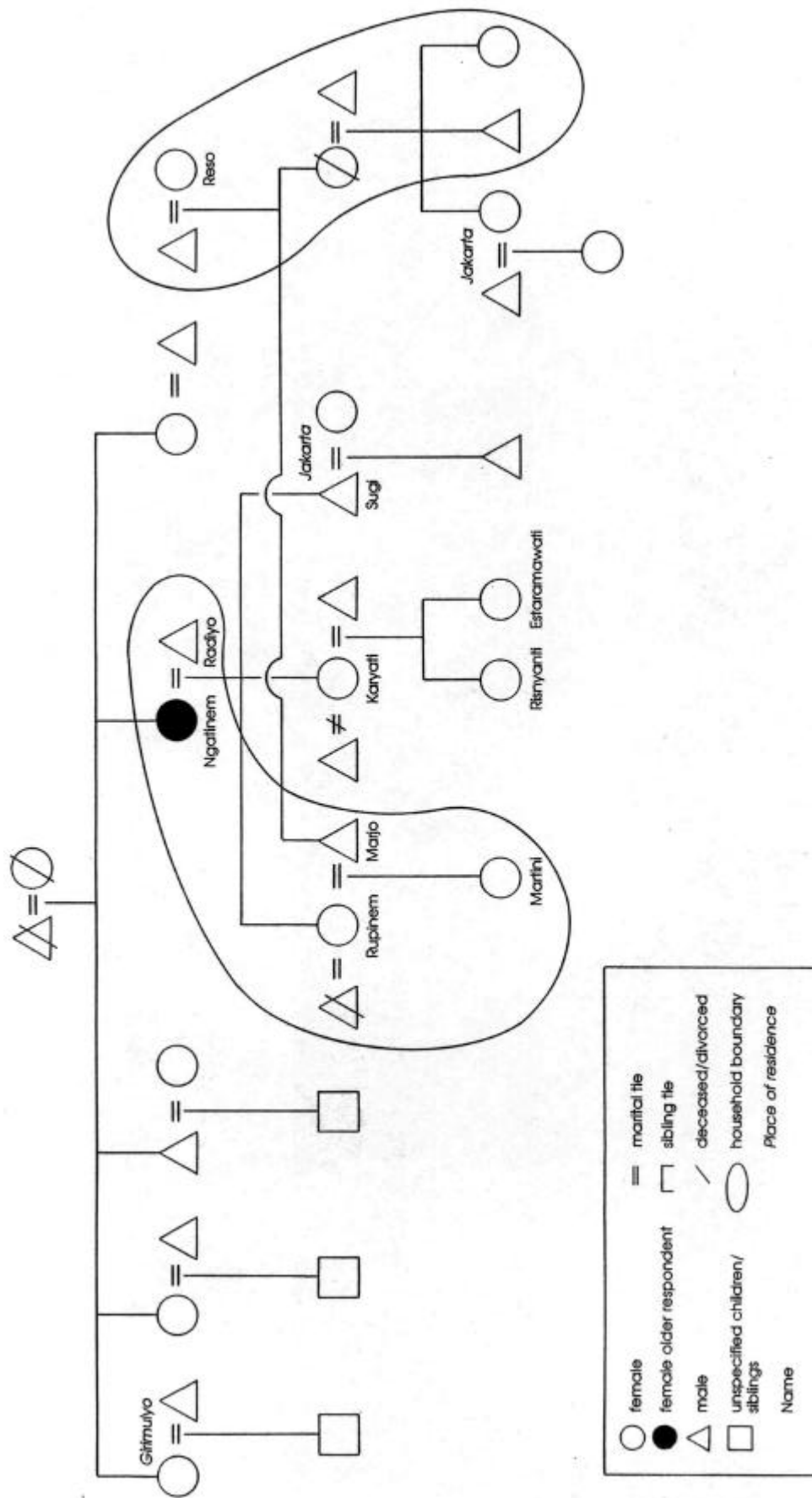


Figure 6.1 Normal curve of the difference in responded ages at time 1 and 2

In 36 of the cases a different age was given the second time, which could be higher or lower than the first time. In only nine cases the household member gave the same age and one case was missing because the age was unknown. Most of the given age differences (68%) fell approximately between -9 and 8 years. The highest absolute score differed 20 years between the first and the second answer. The question about the age of the elderly was very difficult to answer and the results were not reliable. However, the errors can be assumed to be random, because the mean age difference (-0.5) was not significantly different from zero ($\alpha=0.05$). This means that the analysis of other variables with the use of the variable age will not be significantly affected.



Annex 6.2 Genealogy of *simbah* Ngatinem's family

Annex 6.3 Daily observation of the activities of *simbah* Ngatinem's household (with emphasis on the older persons)

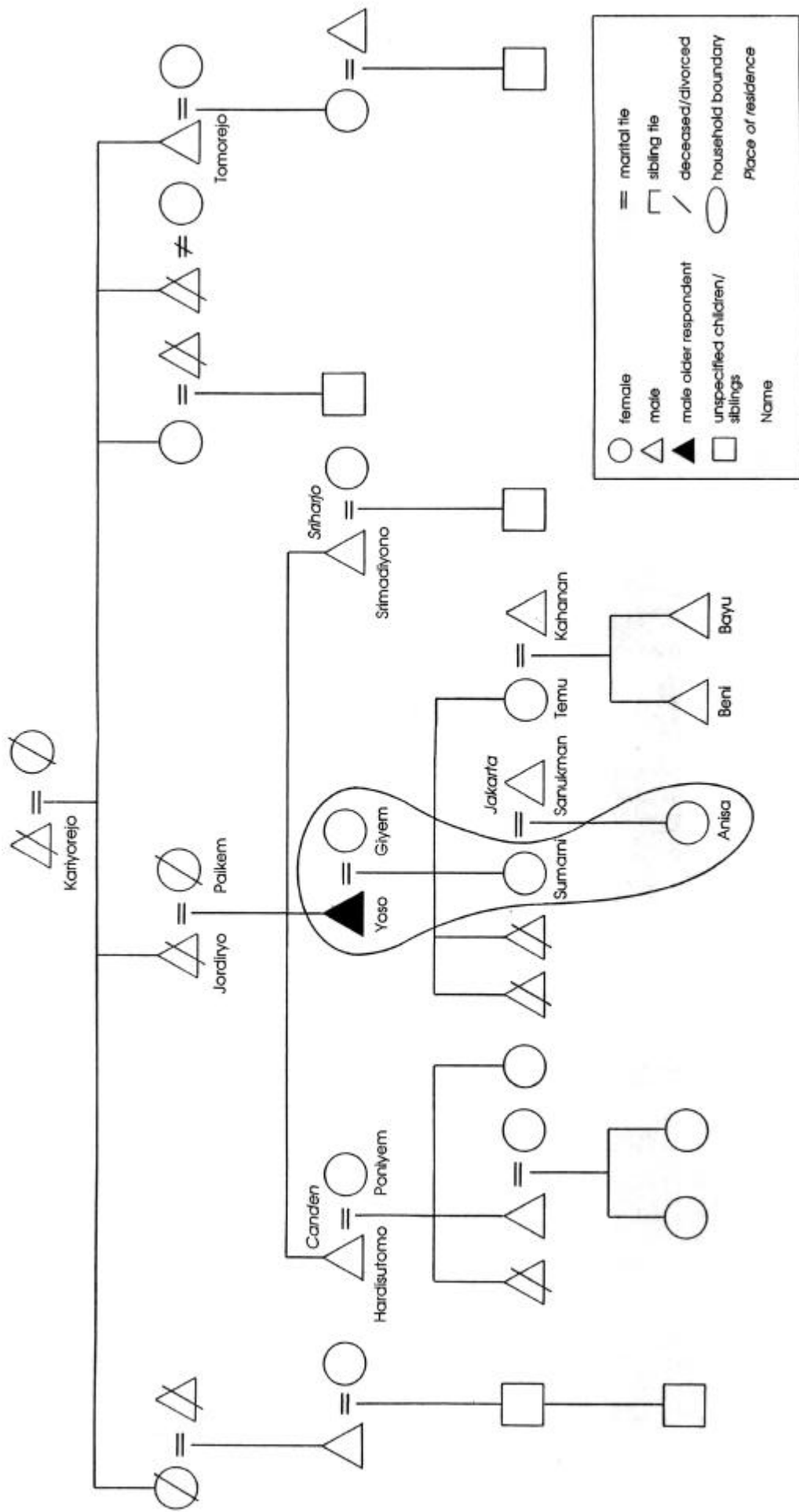
*: Situation is affected by the presence of the researcher and assistant. ...: Activities are not observed because we followed Ngatinem.

Time	<i>Simbah</i> Ngatinem (61 years, female, farmer, Giriwungu)	Time	<i>Simbah</i> Radiyo (husband, 71 years)	Time	<i>Ibu</i> Rupinem (daughter, 40 years); <i>Pak</i> Marjo (son-in-law, 45 years); <i>Mbak</i> Martini (granddaughter, 16 years)
	▪			5.00	Rupi, Marjo and Martini wake up and get dressed. Rupi starts a fire with very thin kindling to boil water in the kitchen.
				5.30	Martini waits for the bus in front of the house. She wears a school uniform of white headscarf (<i>jilbab</i>), blouse, long grey skirt, red socks! and white sport shoes. She leaves the house without eating breakfast and will eat in the school canteen. When other children arrive at the road, she walks up and talks to them.
5.45	Ngatinem wakes up and sits on a chair next to the open kitchen door. Later she walks around with her plastic bundle (<i>asahan</i>) of betel ingredients and chews (<i>nginang</i>).			5.45	Marjo leaves the house carrying a basket with jerry can and machete on his head. He will gather fodder and feed the cows. He also had not yet eaten.
5.55	She picks up a basket with small, red chilli peppers and spreads them out on the concrete water tank (<i>pah</i>) to dry.			5.50	A minibus picks up Martini and other children to bring to the school in Wonosari. The school starts at 7 a.m.
6.00	She opens a cotton bundle with black pulses (<i>benguk</i>). Outside she spreads them out on the stack next to the kitchen door and collects the loose beans that are scattered around.			6.00	Rupi sweeps the kitchen and washes the dishes. She steams already cooked rice, which she brought home from a wedding celebration yesterday. She chases off the chickens, which enter the kitchen and feeds them dried rice outside.
6.10	She combs her hair while she sits on a small wooden bed (<i>incak</i>) and belches vigorously. She combs a small hairpiece (<i>cemoro</i>) and makes a knot with it in her own hair.				

6.30	She makes a new portion of betel and starts chewing and spitting again.	6.40	Radiyo wakes up, takes a gulp of water and walks outside. He talks outside and shouts to his wife: "The grandchildren are here!" He brings them to their grandmother.	6.35	Rupi puts thicker pieces of wood on the fire in the kitchen stove.
6.45*	The granddaughters Risnyanti and Esta, who live in a house at the back, arrive and cling themselves to her. Ris is free from school, because another class has a picnic at the Borobudur temples. Usually they run around, but are a bit intimidated by the researcher's presence.	6.45	Radiyo makes tea at the small table near the kitchen door.	6.45	Rupi cooks a vegetable side dish (<i>sayur</i>) of so leaves, red onion and fermented soybean cake (<i>tempe</i>). Besides, she fries soybean curd (<i>tahu</i>).
7.05	Ngatinem walks with her grandchildren outside and puts the bamboo clothes rack back in its place. The grandchildren go home.				...
7.10	She takes a bucket to the former bath place and washes a little laundry.	7.15	He lights a handmade cigarette (<i>linting</i>) and smokes it.		
7.25	She eats chips (<i>krupuk</i>) and drinks tea.	7.25	He drinks tea with a very small cup (<i>sloki</i>). Both older people sit together at the small table near the outside kitchen door.		
8.15	She feeds the chickens with the last dried rice from a flat basket (<i>tampah</i>). She spreads new rice leftovers on the basket and puts it together with the chilli peppers in the sun on top of the neighbour's water tank. She talks with the neighbours.	8.15	He fills a water bottle and whets his knife outside.	8.15	Rupi sweeps the kitchen floor.
8.25	She goes home. Once there she puts a large pile of rice on a plate with vegetable soup (<i>sayuran</i>) and a piece of soybean curd (<i>tahu</i>). She eats with her hands. She dishes up again and drinks the broth (<i>kuah</i>) from her plate.	8.25	He talks to an older, female neighbour. He fills a plastic Aqua bottle (disposed of by the researcher) with cooled, boiled tea water for his wife to bring to the field.		...
8.40	She washes her plate and drinks a little cup of tea.				
8.45	She takes a bath and dresses herself.	8.30	He ties up the pepper plant (<i>icabe rawit</i>) to prevent the chickens from eating it. He eats.		

9.05	She drinks tea.	9.05	He washes his plate and puts the remaining rice in a plastic to feed to the dogs at the field.	
9.10	She prepares to go to the field (<i>tegal</i>) by putting on another shirt. She puts the lunch packets for her husband and herself and plastic bottle with tea in her bag.	9.10*	He drinks tea. He leaves the house with a dog to go to the field.	
9.20*	She leaves the house. The neighbour <i>mbak</i> Sadilah follows until she arrives at her field (10.05). Other women also follow because they are curious about the researcher.	10.15	He arrives at the field and feeds the four dogs close to the cow stable.	10.00
10.25*	Ngatinem arrives at the dry field (<i>tegal</i>) Tompakbonan where her husband already is. She takes a rest under the shelter (<i>gubuk</i>) and chews betel. Usually they do not rest for such a long time, but they talk to the researcher.	10.30*	He follows Ngatinem to the shelter and also takes a rest.	Marjo comes home to eat. When he finished eating, he helps (<i>gotong royong</i>) to build a house for a friend (<i>ikut teman</i>). Rupinem leaves to go to the non-irrigated field (<i>ladang</i>). ...
11.00	She puts on a black blouse with long sleeves to prevent her arms from being torn .			
11.30	She collects cassava roots (<i>ketela pohon</i>), peels off the skin and lays them in the sun on the terrace walls of basalt stone to dry to make <i>gaplek</i> .	11.30	He pulls out cassava plants and cuts the tubers of the stem. He cleans parts of the field by heaping up dried brushwood.	
12.25	She moves to another place to peel cassava, which Radiyo has dug up.			
14.00	She gathers pods of sword bean and spreads them in the sun.			
14.30	She binds dried sword beans in two plastic cloths to take home.	14.15	He gathers fodder for the goats and cows.	
14.45	She rests under the shelter and chews betel.			
14.55	She bakes small cassava roots in a heap of dried brushwood and burns several other heaps of brushwood that Radiyo has cut. They are preparing the field to plant beans, corn, cassava and millet in the rainy season (August).			
15.15	She calls Radiyo to feed the baked cassava to the cows. She cuts cassava tubers in two, tears off leaves from a young papaya tree and	15.15	He gives the fodder to the cows and feeds some rice to the dogs.	

	gives this in a basket with the cassava skins to Radiyo for the cows.			
15.20	She weeds grass (<i>ngarit rumput</i>).	15.20	He walks back to the shelter and shouts to Ngatinem that he wants to eat.	
15.25	She cuts of a square piece of banana leave to use as a plate, washes her hands in a coconut shell and starts eating. She chews betel.	15.25	He eats. He feeds the leftovers to the dogs. He smokes.	
16.00	She weeds grass.	16.00	He gives the fodder to the goats and looks for new fodder.	
16.30	She packs the bundle of (±15 kg) beans in a cloth sling (<i>gendong</i>) on her back, slippers and machete in her hand.	16.25	He gives the fodder to the goats.	
16.40	She departs from the field.	17.00	... He departs with one dog from the field.	
17.40	She comes home, rests at the back of the house, chews betel, drinks. Older neighbour comes over to chat and chews some betel from Ngatinem.			Martini is already home from school and reading. Rupinem cooks.
18.00	She takes a bath.	18.00	He comes home.	18.00 Daughter Karyati and granddaughters Ris and Esta pay a visit.
18.10	She tidies away her hat (<i>caping</i>), blouse and bag.	18.10	He takes a bath.	...
18.20	She boils water for tea and Rupinem's bath. She chews betel and eats chips (<i>krupuk</i>).			
18.35	She spreads a remnant of rice out on a basket.	18.30	He drinks tea and smokes.	
18.40	She gives granddaughter Esta <i>krupuk</i> .			18.40 Karyati and Esta go home.
18.45	She combs her hair and makes a knot with the hairpiece.			...
18.50	She changes her blouse and visits an older, female neighbour who is sick (itching throat) and who went to the hospital Sardjito in Yogyakarta today.	18.55	He also visits the sick neighbour.	
		19.25	He comes home, eats and smokes.	
20.55*	She comes home and talks with researcher and assistant. If they were not there, she probably go straight to bed.	20.15	He goes to bed.	
21.30*	She goes to bed.			

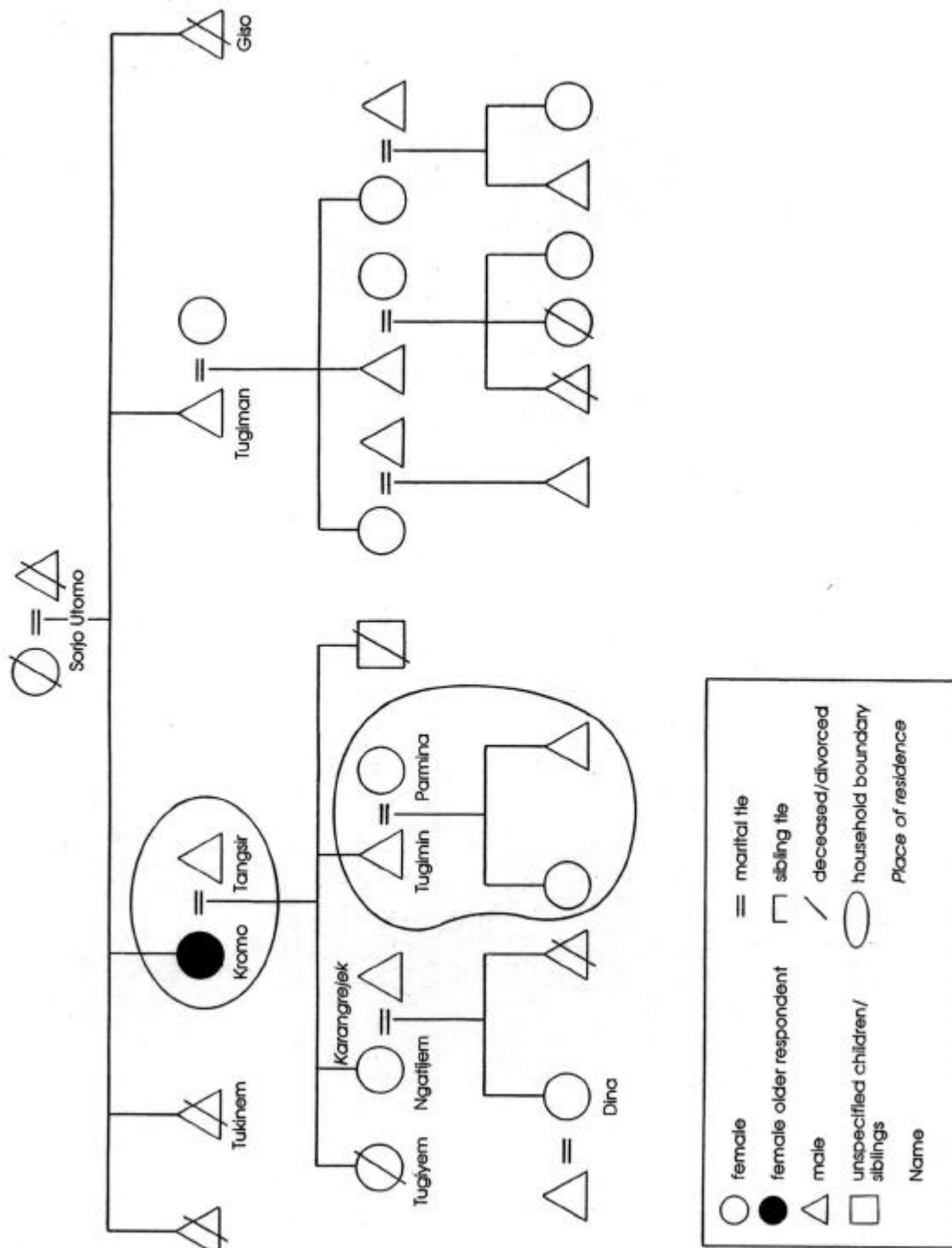


Annex 6.4 Genealogy of *simbah* Yoso's family

Annex 6.5 Daily observation of the activities of *simbah* Yoso
(65 years, male, retiring farmer, Kebonagung)

Time	Activity
4.30/ 5.00	Wakes up at the cow stable. Goes home to perform ablution (<i>wudhu</i>) and pray (<i>solat</i>). Let the chickens out of their cage and feeds them. Walks to the stable (<i>kandang kelompok tani ternak</i>), takes out the cow and feeds them some of the remains of the weeds gathered yesterday . Cleans the stable (removes the excrement and sweeps). Goes home to eat.
7.00	Goes back to the stable and walks with the cow to the river. [Every day if there is no other activity like <i>gotong royong</i> . Then once per two days.]
7.20	Walks into the water, washes (<i>guyang</i>) the cow, uses a knot of hay to scrub and kicks up the water with his foot.
7.35	Binds the cow to a tree and walks to the dam to watch the progress of the dam construction.
7.45	Walks back with the cow to the stable. Shouts to every herder to wash their cow or water buffalo (<i>carbao</i>), because they have to get an injection.
8.00	Arrives at the stable, gives the cow the rest of the weeds. Walks over to Pak Dwi Sutrisno on a bamboo bench, talks with him and later with other men. Borrows a knife (<i>arit</i>) from <i>nyai</i> Tomorejo (his aunt) to smooth the bamboo poles with which they use to make a holding place (<i>gapitan</i>) to vaccinate/immunisation (<i>nyontek</i>) the cows.
8.40	Goes home to get the money for the immunisation. Drinks tea.
8.55	Goes back to the immunisation place. In the meantime passing the houses of his aunt Tomorejo and his daughter Temu. Talks with the farmers who wait for the immunisation
9.20	The civil servants arrive and every cow or water buffalo gets an immunisation. Yoso's cow and some others are checked if they are already bearing young.
11.45	End of the immunisation. Yoso scoops up the excrements and throws them away. Others set off the bamboo holding place.
12.00*	Walks home. Washes his feet, face and hands (<i>wudhu</i>). Dresses in a <i>sarong</i> and a safari type of shirt. Says his prayer (<i>solat</i>) in the bedroom [usually on the bed in the living room but the researcher and assistant are sitting there].
12.30*	Makes tea in the kitchen. Drinks tea. Feeds corn and gives water to his rooster and chickens. [He usually rests now. Sleeps or just sits or walks over to the neighbours.]
13.00*	Eats some snacks such as cassava chips (<i>singkong</i>), crispy tempe chips (<i>tempe keripik</i>) and sponge cake (<i>bolu</i>). [They have probably so much choice, because the researcher and assistant visit them.] Yoso eats rice and soup of string bean and tempe <i>sayur kacang panjang dan tempe</i> in the living room [usually in the kitchen]. Drinks tea.
13.20	Whets the sickle (<i>arit</i>) outside.
13.30	Sits in the living room again. He does not yet depart, because it is still too hot outside.
13.50	Gets his sickle, puts on a bamboo hat (<i>caping</i>) and leaves the house.
14.00	Arrives at the ricefield (<i>sawah</i>). Cuts the grass and weeds (<i>ngarit</i>) in between the rows of corn plants. In the end he gathers the fodder in a sack.
16.00	Walks to the cow stable (<i>kandang kelompok</i>).
16.05	Feeds a little of the weeds from the sack to the cow and goes home.
16.15	Arrives at home, washes his feet.
16.25	Ablution (<i>wudhu</i>), puts on clothes, prays (<i>solat</i>).
16.40	Sits down (still wearing his <i>sarong</i> and good shirt for praying).
17.00*	Walks outside to catch the rooster and chickens with corn and lock them in their cages. Talks with neighbours. [Usually he would go to the stable again and put the cow in the stable, but forgot it because many people gathered in their yard to talk with the researcher.]
17.45	<i>Wudhu, solat.</i>
18.30	Eats rice with tahu soup (<i>sayur tahu</i>) and spicy tomato paste (<i>sambal tomat</i>).
18.40	Washes himself. Looks for the little cup to put in rice for the village collection (<i>jimpitan beras</i>).
19.00	<i>Wudhu, puts on clothes, solat.</i>
19.15*	Sits on the bench inside the house. [Usually goes directly to the <i>kandang</i> .]
19.30	Walks to the stable, climbs up to the platform above the stable to guard the cow while he sleeps.

* Situation is affected by the presence of the researcher and assistant.



Annex 7.1 Genealogy of *simbah* Kromo's family

Annex 8.1 Means of livelihood earned by adult household members of elderly case studies

Elderly case studies (age)	Self-employment			Wage employment		
	Agriculture	Agriculturally linked	Non-agri.	Agriculture	Agriculturally linked	Non-agricultural
Kebonagung:						
- Muh (58)	palm juice collector, poultry breeder			palm juice collector, farm labourer		
- wife (55)		palm sugar producer				
- Kromo (±62)		food producer, small market vendor			small market vendor of sister-in-law's products	middleman for pawning, money loans, documents
- husband (±68)	-					
- Yoso (65)	raiser of cow and chickens					
- wife (±50)	small farmer			farm labourer		
- daughter (35)						crochets bags, construction labourer
- Rejo (±72)		collector of dry leaves				
- son (43, Yogya)						pedicab driver
Giriwungu:						
- Ngatinem (61)	farmer					
- husband (71)	farmer					
- daughter (40)	farmer, small chicken breeder					
- son-in-law (45)	farmer, breeder of cows and goats					
- Dwijo (64)	tenant-farming land, share-breeding goats	crop trader		farm labourer		
- wife (.)			small shop			
- Marto (±65)	-					widow's pension
- Niti (±90+)	-					
- daughter (60)	farmer					
- son-in-law (63)	farmer					
- gr.daughter (39)	farmer					
- gr.son-in-law (44)	farmer, goats and chicken breeder					

Annex 8.2 Index of housing quality by village

Housing quality items	Score	Kebonagung (N=194)		Giriwungu (N=203)		Total (N=397)	
		Freq.	%	Freq.	%	Freq.	%
1. Type of largest outside wall:							
- (plaited) bamboo	0.0	11	5.7	29	14.3	40	10.1
- wood, other	1.5	23	11.9	97	47.8	120	30.2
- cement	3.0	160	82.5	77	37.9	237	59.7
2. Type of largest floor ^a :							
- earth, soil, wood, bamboo	0.0	26	13.4	71	35.0	97	24.4
- cement, brick	1.5	157	80.9	118	58.1	275	69.3
- tile	3.0	11	5.7	14	6.9	25	6.3
3. Type of window:							
- no windows, wooden shutters	0.0	112	57.7	150	73.9	262	66.0
- blinds of wood	1.0	19	9.8	11	5.4	30	7.6
- glass windows	2.0	49	25.3	40	19.7	89	22.4
- blinds of glass	3.0	14	7.2	2	1.0	16	4.0
4. Lighting facilities:							
- kerosene lantern	0.0	11	5.7	33	16.3	44	11.1
- petromac lamp, other	1.5	6	3.1	6	3.0	12	3.0
- electric	3.0	177	91.2	164	80.8	341	85.9
5. Source of drinking water:							
- spring, rain, river	0.0	3	1.5	187	92.1	190	47.9
- well, other	1.5	179	92.3	7	3.4	186	46.9
- pipe, pump	3.0	12	6.2	9	4.4	21	5.3
6. Source of washing water:							
- spring, rain, river	0.0	2	1.0	189	93.1	191	48.1
- well, other	1.5	178	91.8	6	3.0	184	46.3
- pipe, pump	3.0	14	7.2	8	3.9	22	5.5
7. Bathing facilities:							
- public, other	0.0	10	5.2	32	15.8	42	10.6
- shared	1.0	28	14.4	18	8.9	46	11.6
- own bathroom outside house	2.0	92	47.4	146	71.9	238	59.9
- own bathroom in house	3.0	64	33.0	7	3.4	71	17.9
8. Toilet facilities:							
- public, other	0.0	65	33.5	34	16.7	99	24.9
- shared	1.0	28	14.4	15	7.4	43	10.8
- own without septic tank	2.0	23	11.9	145	71.4	168	42.3
- own with septic tank	3.0	78	40.2	9	4.4	87	21.9
Total index score (of the first seven items)^b in categories:							
1. 0.0 - 3.5		2	1.0	22	10.8	24	6.0
2. 4.0 - 7.5		7	3.6	68	33.5	75	18.9
3. 8.0 - 11.5		46	23.7	102	50.2	148	37.3
4. 12.0 - 15.5		123	63.4	7	3.4	130	32.7
5. 16.0 - 21.0		16	8.2	4	2.0	20	5.0

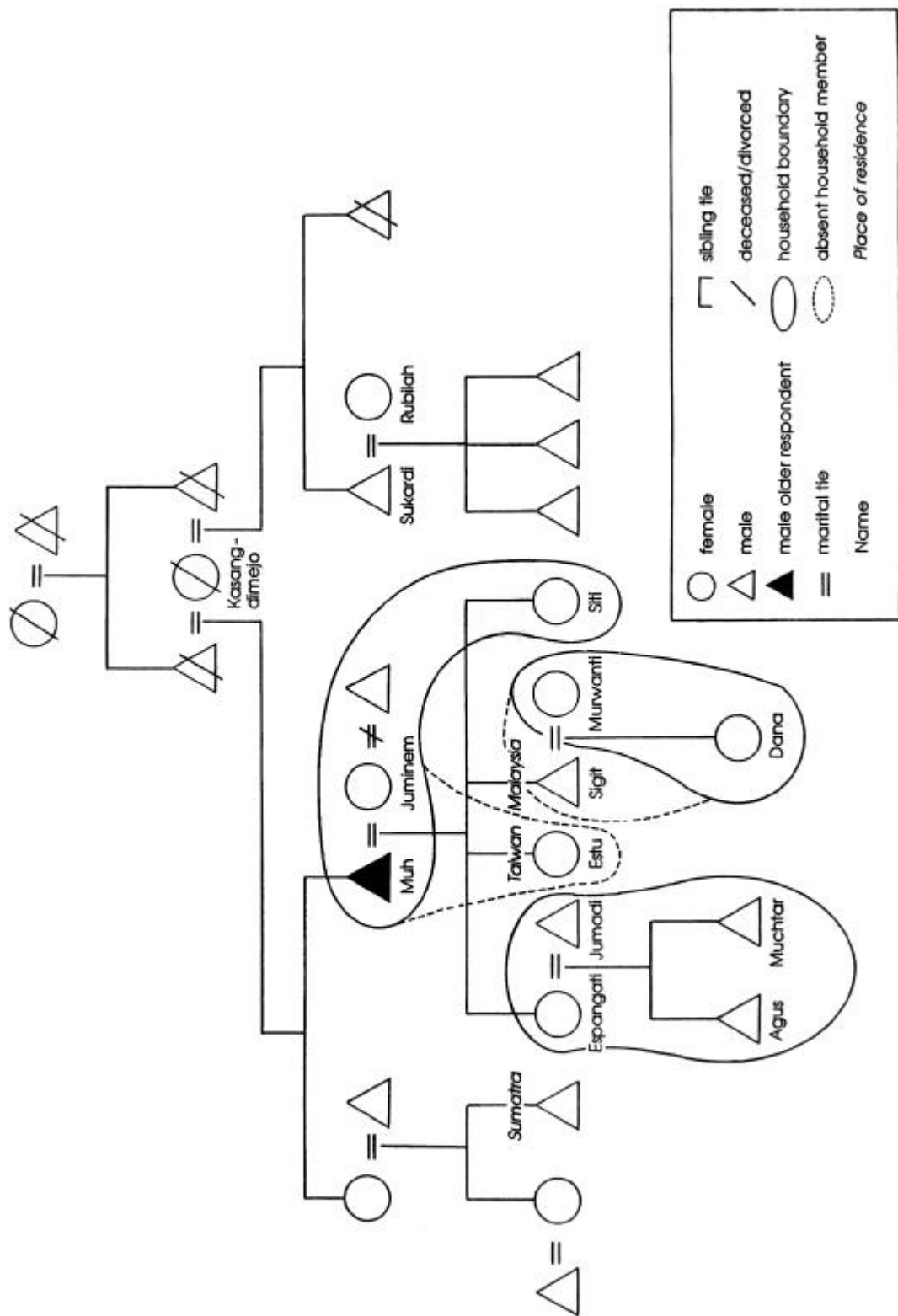
Test scores of total index score^c

$\chi^2(4)=198.1^{***}$, $p=0.000$

^a We recoded the answers for the item 'type of largest floor', because wood/bamboo was given as a response only once in Giriwungu.

^b The item 'toilet facilities' is excluded from the scale of housing quality, because it correlated negatively with the item 'type of largest outside wall'.

^c Each item of housing quality was also significantly different ($p=0.01$) for the two villages.



Annex 8.3 Genealogy of *simbah* Muh's family

Annex 9.1 Primary sources of support for instrumental activities of daily life (IADL) (%)

Source of IADL support	Shop daily (N=42)	Cut wood (N=37)	Fetch water (N=28)	Boil water (N=29)	Cook meals (N=32)	Do laundry (N=26)	Sweep yard (N=16)	Clean house (N=19)	Feed livestock (N=20)	Total of received support ^a	
										Freq.	%
Female hhd. member:											
- wife	2.4	.	3.6	6.9	3.1	3.8	.	.	5.0	7	2.8
- daughter	52.4	13.5	39.3	44.8	53.1	57.7	56.3	47.4	25.0	106	42.6
- daughter-in-law	23.8	2.7	7.1	10.3	15.6	15.4	12.5	5.3	.	28	11.2
- granddaughter	9.5	2.7	3.6	3.4	9.4	11.5	6.3	15.8	10.0	19	7.6
- other kin	4.8	.	.	.	6.3	.	6.3	.	.	5	2.0
Male hhd. member:											
- husband	.	10.8	3.6	6.9	.	3.8	6.3	10.5	10.0	13	5.2
- son	2.4	21.6	17.9	3.4	3.1	3.8	.	5.3	20.0	22	8.8
- son-in-law	.	35.1	10.7	10.3	3.1	.	.	.	25.0	25	10.0
- grandson	.	5.4	3.6	3.4	.	.	.	.	.	4	1.6
- other kin	.	5.4	10.7	3.4	.	.	.	10.5	5.0	9	3.6
Non-hhd. member:											
- daughter	.	.	.	.	.	3.8	.	5.3	.	2	0.8
- son	2.4	.	.	.	.	.	.	.	.	1	0.4
- other kin	.	.	.	6.9	6.3	.	6.3	.	.	5	2.0
- neighbour/friend	2.4	2.7	.	.	.	.	6.3	.	.	3	1.2
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	249	100.0

^a The support for the different instrumental activities of daily life might be given by the same source.

Annex 10.1 Sources of monetary and material support for elderly individual (N=355)

Sources for elderly individual	I Monetary support		II Material support	
	Frequency	%	Frequency	%
Female household member:				
- wife	3	1.3	2	1.3
- daughter	29	12.1	27	17.3
- daughter-in-law	2	0.8	4	2.6
- granddaughter	1	0.4	.	.
- other kin	3	1.2	3	1.9
Male household member:				
- husband	1	0.4	.	.
- son	50	20.8	22	14.1
- son-in-law	4	1.7	7	4.5
- grandson	1	0.4	.	.
- other kin	3	1.3	1	0.6
Non-household kin:				
- daughter	42	17.5	34	21.8
- other female kin	5	2.1	6	3.8
- son	62	25.8	40	25.6
- other male kin	19	7.9	4	2.6
Non-kin:				
- neighbour/friend	7	2.9	1	0.6
- acquaintance/(ex-)colleague	2	0.8	4	2.6
- co-member organisation	4	1.7	.	.
- social organisation	.	.	.	.
- NGO, project aid	.	.	.	.
- government	1	0.4	1	0.6
- other	1	0.4	.	.
Total	240	100.0	156	100.0

Annex 10.2 Sources of monetary and material support for elderly household (N=397)

Sources for elderly household	I Monetary support		II Material support	
	Frequency	%	Frequency	%
Kin:				
- child(ren)	238	76.0	238	76.3
- other	38	12.1	23	7.4
Non-kin:				
- neighbour/friend	3	1.0	7	2.2
- acquaintance/(ex-)colleague	11	3.6	7	2.2
- co-member organisation	1	0.3	3	1.0
- social organisation	7	2.2	7	2.2
- NGO, project aid	10	3.2	25	8.0
- government	4	1.3	1	0.3
- other	1	0.3	1	0.3
Total	313	100.0	312	100.0

Annex 11.1 Path model of OLSR analysis

In Chapter 11.3 we applied the method of Ordinary Least Squares Regression (OLSR) to analyse whether the effect of the independent variable on the dependent variable (old age security scale) can (partly) be explained by another variable. We describe this method here with the results of a care arrangement strategy presented in Table 11.17 as an example. Below, the results of the regression analysis are visualised in a path model to illustrate the causal order of the variables in the model.

We hypothesised that the effect of number of children on old age security can be explained by the frequency with which older parents talk with non-coresiding children. If older persons talk frequently with an adult child, then they are (emotionally) more secure than older persons that speak less frequently with their children. When older persons have more children, they have a greater chance of speaking with at least one of them. To test this hypothesis, first we analysed the old age security scale as the dependent variable and total number of children and frequency of talks with non-coresiding children as the independent variables. Secondly, we analysed frequency of talks with non-coresiding children as the dependent variable and total number of children as the independent variable. As can be seen in the path model below, there is an indirect effect of total number of children with frequency of talks with non-coresiding children on old age security. Hence, the hypothesis is confirmed by this study. Older persons who have more children feel more secure because they talk more frequently with children outside the household.

The indirect effect can be calculated by multiplying the direct effect of total number of children on frequency of talks (0.122) with the direct effect of frequency of talks on old age security (0.106). If we add this indirect effect ($0.122 \times 0.106 = 0.013$) and the remaining direct effect (0.112), the total effect of number of children on old age security amount to 0.125. This is the same strength as the total effect via receipt of ADL, which is $0.137 + (-0.090 \times 0.133) = 0.125$ (see Table 11.17). The care arrangement strategy of having many children explained by frequency of talks with non-coresiding children has the same strength as the care arrangement strategy of having many children explained by receipt of ADL.

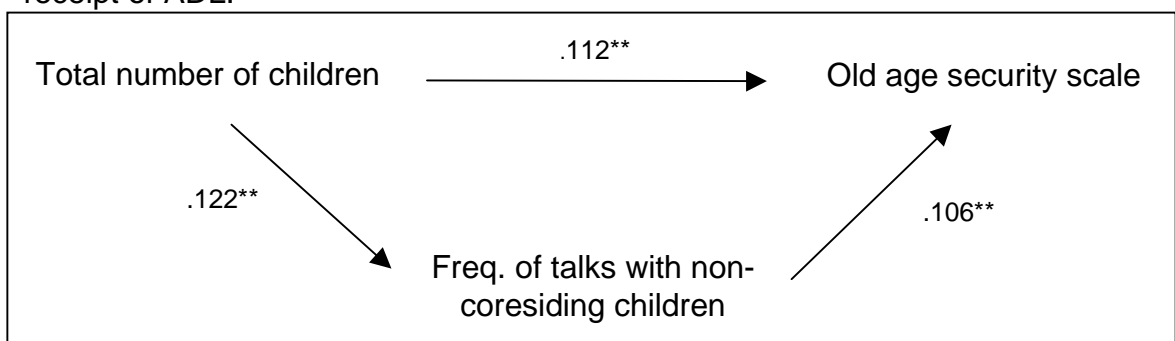


Figure 11.1 Path-coefficients in model of care arrangement strategy

Samenvatting (Summary in Dutch)

Dit proefschrift beschrijft de leefomstandigheden en zorgarrangementen van oudere mensen in de dorpen Kebonagung (Bantul) en Giriwungu (Gunung Kidul) op het platteland van Yogyakarta, Indonesië.

De wereldbevolking groeit sneller dan ooit tevoren. In ontwikkelde landen leven relatief veel mensen van 65 jaar en ouder, maar de snelste vergrijzing vindt plaats in Oost- en Zuidoost-Azië. In 1996 woonden er 206,3 miljoen mensen in de Indonesische archipel, waarvan tweederde op Java. Hoewel er in Indonesië nu nog relatief weinig oude mensen wonen, is de verwachting dat het oudere deel van de bevolking voor het jaar 2025 met 191 procent toeneemt. De Javaanse provincie Yogyakarta loopt in dat proces voorop.

Tegelijk met demografische ontwikkelingen wordt de Indonesische maatschappij beïnvloed door sociaal-economische veranderingen. Traditiegetrouw hebben Javaanse kinderen de verplichting voor hun ouders te zorgen, zeker nadat zij zijn gestopt met werken. Vroeger woonden ouders die niet langer werkten en geen jonge kinderen te verzorgen hadden meestal bij hun kinderen of kleinkinderen. Vaak was dat de jongste dochter, die na haar huwelijk in het ouderlijk huis bleef wonen. Maar hierin komt verandering. Huishoudens en families worden kleiner. Familieleden wonen verder uit elkaar. Vrouwen werken meer en meer buitenshuis. Daardoor komen traditionele zorgarrangementen voor ouderen in de knel. Indonesische ouderen zijn er in de nabije toekomst niet meer van verzekerd dat hun kinderen voor hen zullen zorgen.

Er is nog weinig studie gedaan naar oudere mensen in Indonesië. Het ontbreekt aan een theoretisch kader voor de beschrijving van zorg (voor ouderen) in ontwikkelingslanden. Juist om een goed beleid te kunnen bepalen is het echter van belang om te begrijpen hoe de zorg voor ouderen in deze landen is geregeld. De weinige studies die er zijn steunen op officiële gegevens van het Indonesische CBS. Zij gaan niet uit van eigen (kwalitatieve) gegevens. Veel onderzoeken hebben betrekking op Java, of geheel Indonesië. De onderwerpen betreffen de vergrijzing, sociaal-economische omstandigheden en het welzijn van ouderen, voeding en gezondheid en eventuele institutionele zorg die wordt geboden. Er zijn geen samenvattende studies bekend die gericht zijn op de leefomstandigheden, de zorgarrangementen en de bestaanszekerheid van oudere mensen.

Deze studie is deel van een breder onderzoek naar 'Zorgvoorzieningen van gezin en familie voor ouderen in een vergrijzende samenleving'. Dat onderzoek richt zich op de sociaal-economische positie van oudere mensen, de zorg die zij eventueel behoeven, en de rol van gezin, familie en andere betrokkenen daarbij. Er werd gekozen voor een vergelijkend onderzoeksperspectief. De positie van ouderen en

ouderenzorg in ruraal Indonesië (Yogyakarta) worden vergeleken met die zowel in een stedelijk gebied in Indonesië (ook in Yogyakarta) als een landelijk gebied in Nederland. In beide landen heeft de vergrijzing maatschappelijke gevolgen, maar gelet op de grote demografische en sociaal-economische verschillen tussen de landen valt te verwachten dat deze eveneens verschillend zullen zijn.

Ontwikkelingslanden in Azië kennen een grote culturele diversiteit met betrekking tot de zorg voor ouderen en de verhouding tussen verschillende generaties. In de Javaanse cultuur wordt veel belang gehecht aan het tonen van respect voor ouderen (*hormat*) en het onderhouden van harmonieuze sociale betrekkingen (*rukun*) met anderen, inclusief ouderen. Het grootste deel van de bevolking is moslim. De Islam is een godsdienst die veel nadruk legt op de zorg tussen generaties, op betrokkenheid en wederzijdse verplichtingen, zeker als het gaat om middelen van bestaan en algemene zorg.

De sterke bevolkingsgroei in Indonesië legt een zware druk op de overheid. De Indonesische regering biedt maar beperkt steun aan ouderen. De regering Suharto heeft onderkend een te lage prioriteit te hebben gegeven aan de problemen die met vergrijzing te maken hebben. Er werd te veel aan particuliere initiatieven en het werk van welzijnsorganisaties overgelaten. Overheidsvoorzieningen voor de oude dag zijn er alleen voor ambtenaren en militairen. Daarnaast zijn er welzijnsprojecten voor de allerarmsten en voor mensen met een handicap. Om te kunnen anticiperen op de toekomstige behoeften van ouderen in de samenleving en daarvoor een goed beleid te formuleren, is het belangrijk meer te weten te komen over de leefomstandigheden van ouderen en mogelijke zorgarrangementen met andere leden van het gezin, familie, vrienden, burens.

Dit onderzoek heeft een beschrijvende en een theoretische component. Het richt zich op:

1. Inzicht verkrijgen in het leven van ouderen, in het bijzonder in de zorg die zij voor zichzelf verwerven en die anderen hen verlenen op microniveau. Voorts wordt gekeken naar de veranderingen in de zorg voor ouderen, teneinde in staat te zijn te anticiperen op de behoeften van de oudere Indonesische bevolking.
2. Ontwikkeling van een theoretisch kader voor zorg, dat toepasbaar is op Indonesië en andere landen met een vergelijkbare sociaal-economische en culturele achtergrond. Dit kader steunt op de concepten die in de literatuur zijn beschreven en deze zijn toegepast op de lokale situatie.

Het onderzoek is van maatschappelijk en praktisch belang voor beleidsmakers die zich bezighouden met de ontwikkeling van programma's voor en dienstverlening aan oudere mensen in ruraal Indonesië. Ook is er een wetenschappelijke en theoretische relevantie voor onderzoekers die (de zorg voor) ouderen in ontwikkelingslanden bestuderen vanuit een vergelijkend perspectief. De centrale onderzoeksvraag luidde als volgt:

HOE BEÏNVLOEDT SOCIALE VERANDERING HET LEVEN VAN OUDERE MENSEN, EN WAT IS HET BELANG VAN ZORGARRANGEMENTEN EN ZORGRELATIES VOOR DE BESTAANSZEKERHEID OP LATERE LEEFTIJD?

Deze centrale vraag werd onderverdeeld in een aantal deelvragen die wij hieronder zullen benoemen en beantwoorden.

Leefomstandigheden van ouderen

Wij willen meer weten over de leefomstandigheden van oudere mensen en over de typische sociaaldemografische, medische en economische kenmerken van hun bestaan. De eerste onderzoeksvraag is daarom geformuleerd als volgt:

1. HOE KAN HET LEVEN VAN OUDERE MENSEN WORDEN GEKARAKTERISEERD?

Hoofdstuk 6 beschrijft de sociaaldemografische status van mensen van 55 jaar en ouder die wonen in de Javaanse dorpen Kebonagung en Giriwungu, in de provincie Yogyakarta, Indonesië. Gemiddeld is de onderzoeksgroep 69 jaar oud. De meeste mensen noemen zich moslim. In de praktijk combineren zij echter islamitische elementen met animistische en hindoeïstische tot een eigen traditie van Javaans syncretisme waarin de *slametan* een centrale rol speelt. De meerderheid van de ouderen heeft geen opleiding genoten, omdat er nauwelijks scholen waren toen zij jong waren. Tweederde van de ouderen is getrouwd; eenderde is weduwe of weduwnaar. Het huwelijk was meestal om praktische of economische redenen gearrangeerd door de ouders. De meerderheid van ouderen leeft samen met zijn of haar echtgeno(o)t(e) en/of anderen, meestal kind(eren), een schoonzoon of -dochter en mogelijk kleinkinderen. Over het algemeen bestaat een huishouden uit vijf personen van drie verschillende generaties. De meeste ouderen hebben nog drie levende kinderen, van wie er ten minste één in hetzelfde dorp woont.

Hoofdstuk 7 gaat over de gezondheid van oudere mensen. Wij onderzochten hun gezondheid aan de hand van een relatief objectieve schaal voor de kwaliteit van hun voeding en de mate waarin zij in staat zijn zichzelf te verzorgen en de instrumentele dagelijkse activiteiten te verrichten. De meerderheid eet redelijk gezond en is gewoonlijk in staat om alle noodzakelijke dagelijkse bezigheden uit te voeren. Wel is het zo dat oudere mensen iets kunnen veranderen aan hun gezondheid door beter en gevarieerder te eten. Verder is tevens gekeken naar subjectieve gezondheidskenmerken; mensen konden aangeven of zij zich fysiek en mentaal goed voelen, of hun zintuigen nog werken en of ze lijden aan lichte of chronische ziekten. Over het algemeen bleken oudere mensen een redelijk goede gezondheid te hebben. De helft van hen heeft chronische klachten. Zij beschikken bijna allemaal nog over hun zintuiglijke vermogens. Problemen zijn er vooral met zien en horen.

Er waren weinig gevallen van demente en bedlegerige ouderen. Hoewel het moeilijk is om het geestelijk welbevinden van mensen te beoordelen, zochten we naar mogelijke redenen voor het lage aantal demente ouderen. Indonesische mensen

bereiken zelden de leeftijd die hoort bij afhankelijkheid en dementie. Bovendien blijven ze tot het laatst toe taken vervullen in huis en op het erf, en bouwen zij hun arbeidzame bestaan geleidelijk af. Ook blijven zij in hun eigen huis wonen en voelen zij zich betrokken bij hun (klein)kinderen. Dat voorkomt dat zij van hun leefomgeving vervreemden, zoals het geval zou kunnen zijn als zij naar een verzorgingstehuis gaan. Ten slotte sterven zij meestal na een kort ziekbed, omdat de medische voorzieningen beperkt zijn.

Hoofdstuk 8 beschrijft de bronnen en voorzieningen die de economische leefomstandigheden van oudere mensen bepalen. Bronnen zijn de noodzakelijke directe middelen van bestaan. Werkgelegenheid, persoonlijk inkomen, het inkomen van het huishouden, landbouwgewassen, (fruit)bomen en de aanwezigheid van waterbronnen zijn belangrijk voor de dagelijkse behoeften van ouderen. Ongeveer de helft van de oudere mensen werkt het grootste deel van zijn tijd voor een inkomen, in geld of natura. Een kwart heeft vooral huishoudelijke taken en een kwart heeft andere taken in huis. Deze mensen kan men beschouwen als gepensioneerd, hoewel ze niet helemaal gestopt zijn met werken en ook geen pensioen genieten. Gepensioneerd wil hier zeggen: niet het grootste deel van de tijd werk doen dat een inkomen genereert. De meeste mensen stoppen in die zin met werken op 64-jarige leeftijd; hun levensverwachting bij de geboorte is 65 jaar. Wij kunnen stellen dat in Yogyakarta oudere mensen meestal werken totdat zij sterven.

Het individuele inkomen van ouderen is lager dan het officiële bestaansminimum. Het inkomen van oudere huishoudens is hoger dan het officiële minimumloon voor een standaardgezin van twee volwassenen en twee kinderen. De onderzoeksgegevens en formele cijfers zijn echter moeilijk te vergelijken, onder andere vanwege een verschillende bepaling van het huishoudinkomen en verschillen in de samenstelling van huishoudens. Voor driekwart van de ouderen in dit onderzoek blijkt het eigen inkomen hoog genoeg om in de dagelijkse behoeften te voorzien. Voor een kwart is het niet voldoende, omdat hun inkomen fluctueert of omdat zij door persoonlijke omstandigheden meer nodig hebben.

Bezit bestaat uit een breed spectrum van al dan niet tastbare 'spaarpotten' of 'zorgtegoeden' die als dat nodig is in daadwerkelijke steun kunnen worden omgezet. Het bezit van een degelijk gebouwd huis, waardevolle spullen in en om het huis, vruchtbaar bouwland en vee zijn belangrijk om in de basisbehoeften te voorzien en in moeilijke tijden op terug te vallen. In Kebonagung zijn de huizen waarin oudere mensen wonen in het algemeen beter gebouwd dan in Giriwungu, en hebben ze meer voorzieningen. Meer dan de helft van de oudere huishoudens heeft onvoldoende akkerland tot hun beschikking om in hun basisbehoeften te voorzien. Bijna tien procent van de huishoudens bezit helemaal geen land. Daardoor heeft men in Kebonagung vaak inkomen uit ander werk dan de landbouw.

Ouderen en zorg

Wij zijn in de eerste plaats geïnteresseerd in de zorgarrangementen en netwerkrelaties van ouderen, in het bijzonder de zorgactiviteiten die oudere mensen voor zichzelf regelen, die mensen in hun persoonlijke netwerk kunnen bieden en zij aan anderen verlenen. Een zorgarrangement wordt gedefinieerd als het geheel van regelingen omtrent zorg en steun tussen de oudere persoon en anderen. In ieder zorgarrangement onderscheiden wij de fasen van onderhandeling, overeenkomst, besluitvorming, planning en voorbereiding. Het netwerk van zorgrelaties beperken we in dit kader tot de banden van de oudere persoon met andere personen in zijn of haar huishouden, familie, buren en vrienden, en sociale organisaties. De specifieke zorgarrangementen en netwerkrelaties van een bepaalde oudere leiden tot een zeker patroon in de zorg voor ouderen. Vandaar dat de tweede onderzoeksvraag luidt:

2. WELKE PATRONEN KUNNEN WORDEN ONDERSCHIEDEN IN OUDERENZORG?

Hoofdstuk 9 beschrijft de leefomstandigheden en dagelijkse zorgpraktijk binnen het huishouden van ouderen. De beschikbaarheid van kinderen die in hetzelfde huis of in de buurt wonen bepaalt voor een belangrijk deel de leefomstandigheden van ouderen. Dat betekent niet dat ouderen automatisch zorg en steun genieten als er een kind in de buurt is, maar kinderen vormen een mogelijke bron van verzorging en steun en dit element bepaalt mede de verwachtingen van ouderen ten aanzien van steun en zorg. Zeer weinig mensen hebben geen kinderen, maar de meerderheid van die kinderloze ouderen leeft met familieleden. Kinderloze ouderen die alleen wonen zijn meestal vrouwen. Vanwege het ontbreken van een overheidsvoorziening voor sociale zekerheid zijn zij waarschijnlijk het meest kwetsbaar. De meeste ouderen wonen dichtbij een of meer kinderen en krijgen dus de steun die zij nodig hebben. Tegelijk heeft de overgrote meerderheid geen behoefte aan hulp bij dagelijkse bezigheden, omdat zij die zelf kunnen verrichten. De weinige mensen die wel hulp behoeven, hebben meestal een dochter die bij ze woont. Wij vonden nauwelijks bevestiging voor de hypothese dat ouders liever met een dochter dan met een zoon samenwonen. Oudere moeders wonen het liefst bij hun zoon. De afstand tussen de woonplaats van de ouders en die van de kinderen bleek niet van significant belang voor de dagelijkse zorg die men ontvangt. De meeste zorg wordt nog steeds geboden door kinderen die met hun ouders samenwonen of in hetzelfde dorp wonen. Het lijkt er echter wel op dat ouderen niet geneigd zijn te bekennen dat zij hulp nodig hebben als er geen kinderen in de buurt wonen om die te geven.

Hoofdstuk 10 beschrijft de financiële, emotionele en sociale steun van personen in het huishouden van de oudere en van relaties met mensen buiten het huishouden. Financiële zorg kan bestaan uit geld en materiële steun. Minder dan de helft van de ouderen ontvangt geld en slechts een kwart krijgt materiële steun in de vorm van voedsel of kleding. Gemiddeld ontvangen zij iedere drie weken geld en iedere tien dagen voedsel of kleding. Meestal komt de steun van zoons, die al dan niet in hetzelfde huis wonen. De gangbare situatie is dat de financiële verantwoordelijkheid en zeggenschap in het huishouden langzaam maar zeker overgaan van ouderen op jongeren. Onze hypothese was dat kinderen die zijn verhuisd, hun ouders meer

financieel steunen door geld naar huis te sturen. Het blijkt inderdaad zo te zijn dat ouders van wie de kinderen verder weg wonen meer geld ontvangen dan ouders wier kinderen in de buurt wonen.

Onder emotionele steun van personen buiten het huishouden verstaan we de mogelijkheid om advies in te winnen, een vertrouwensbasis op te bouwen, en verdere vormen van sociaal contact met mensen van buiten. Het was moeilijk antwoorden te krijgen op rechtstreekse vragen over gevoelens, omdat Javaanse mensen daar moeilijk over spreken. Het was eenvoudiger om informatie te verzamelen over hun sociale contacten. De meerderheid van de oudere mensen praat regelmatig met burens en vrienden. De verschillende woorden voor sociaal contact (*omong-omong*), gelegenheidsbezoek (*main, dolan*) en het bezoeken van een zieke (*besuk*) hebben verschillende connotaties en betekenissen. Kinderen die op grote afstand wonen van hun ouders komen minder vaak op bezoek, zelfs als de kinderen in Yogyakarta wonen, dat slechts vijftien tot vijfentwintig kilometer ligt van de onderzoeksgebieden. Zij komen zelfs niet thuis voor *Lebaran* aan het einde van de vastenmaand, als kinderen geacht worden respect te betuigen aan oudere mensen en van hen wordt verwacht dat zij hun ouders bezoeken en cadeautjes meenemen.

De sociale activiteiten van ouderen voorzien in een sociaal netwerk en een mogelijke bron van steun. Deze activiteiten worden meestal georganiseerd door de buurtgemeenschap. De sociaal instituties van *gotong royong* (wederzijdse hulp), *arisan* en *simpan-pinjam* (spaar-en-krediet groepen), *ronda* (nachtwacht), *Dasa Wisma* (informatiegroep voor vrouwen), *pengajian* (Koranleesgroep) en *lingkungan* (de sociale cirkel van directe burens) bieden financiële en praktische steun. Mensen kunnen echter alleen aanspraak maken op die steun als ten minste één lid van het huishouden participeert in de genoemde groepen. Daarom zullen oudere mensen die alleen wonen, geen kind hebben dat bij ze woont of alleen kinderen op afstand hebben, vaker emotionele en sociale ondersteuning ontberen.

Strategieën voor levensonderhoud

Om de problemen in de zorg voor ouderen te kunnen benoemen, te verhelpen en te voorkomen, is het nuttig indicatoren vast te stellen die de bestaanszekerheid van ouderen bepalen. Deze wordt gedefinieerd als de relatieve bestaanszekerheid van ouderen als het gaat om voeding, gezondheid, fysiek welzijn, economische zekerheid en emotionele voldoening. Wij willen weten hoe zeker ouderen zijn van hun bestaan en welke factoren daarop van invloed zijn. De derde onderzoeksvraag luidt daarom als volgt:

3. WELKE FACTOREN BEÏNVLOEDEN DE BESTAANSZEKERHEID VAN OUDEREN?

In hoofdstuk 11 wordt beschreven hoe wij een meetinstrument ontwikkelden als subjectieve graadmeter voor het welbevinden van oudere mensen. De hypothese was dat oudere vrouwen, weduwen en de alleroudsten zich het kwetsbaarst zouden

voelen. Die veronderstelling wordt echter niet bevestigd door deze studie. Geslacht, leeftijd en weduwschap blijken geen effect te hebben op de bestaanszekerheid die ouderen ervaren. Een tweede hypothese was dat ouderen in Giriwungu zich minder zeker zouden voelen dan in Kebonagung. Het omgekeerde bleek het geval. Deze studie bewijst dat economische factoren van minder groot belang zijn voor gevoelens van zekerheid dan sociale factoren. De gezondheid van de ouderen en hun vermogen om de instrumentele activiteiten van het dagelijks leven uit te voeren bleken de belangrijkste indicatoren. Daarnaast speelt landbezit een rol in de beoordeling van bestaanszekerheid op latere leeftijd.

Wij nemen aan dat ouderen bepaalde strategieën ontwikkelen om zich te verzekeren van een onbezorgde oude dag. Een strategie voor levensonderhoud wordt gedefinieerd als het vermogen om een veilig bestaan op te bouwen door de bezittingen en hulpbronnen te behouden en te verbeteren waarvan een huishouden afhankelijk is. De vierde onderzoeksvraag luidt:

4. WELKE STRATEGIEËN VOOR LEVENSONDERHOUD VERZEKEREN HET BESTAAN VAN OUDEREN?

Hoofdstuk 11 beschrijft de strategieën van zorgarrangementen, hertrouwen, verhuizen, het verwerven van steun en uitgestelde eigendomsoverdracht van het familiebezit. Het hebben van veel kinderen lijkt een effect te hebben op de bestaanszekerheid die ouderen ervaren. Dat effect wordt echter niet verklaard uit het feit dat kinderen bij hun ouders wonen. Een deel van de verklaring ligt in de hulp die dagelijks wordt ontvangen voor persoonlijke verzorging. Deze hulp wordt meestal geboden binnen het huishouden van ouderen of door kinderen die vlakbij wonen. Wij konden niet vaststellen dat ouderen hertrouwen of verhuizen om zich van een bestaan te verzekeren, of dat zij om die reden langer aan hun bezittingen vasthielden. De strategie van het mobiliseren van materiële of financiële steun heeft geen effect op gevoelens van bestaanszekerheid. Alleen financiële steun van andere familieleden en gesprekken met kinderen die niet in hetzelfde huis wonen, burens en vrienden, hebben een zeker effect. Subjectieve factoren blijken opnieuw meer van belang dan objectieve factoren. Oudere mensen voelen zich zekerder als zij samenwonen met een volwassen kind dat voor hen kan zorgen, en als zij regelmatig kunnen praten met hun kinderen die niet thuis wonen.

Effecten van sociale veranderingen

Wij verwachtten dat zorgarrangementen en zorgrelaties veranderen onder invloed van sociale verandering. Voorts namen we aan dat de bestaanszekerheid van ouderen verandert als zorgarrangementen en zorgrelaties van ouderen veranderen. In hoofdstuk 2 wordt sociale verandering gedefinieerd als een complex van onderling verbonden natuurlijke, culturele, maatschappelijke en individuele veranderingen. Domesticatie, rationalisatie, differentiatie en individualisering zijn sleutelprocessen van sociale verandering. Deze processen geven vorm aan de wereld waarin wij leven. Zij gaan altijd door en ontwikkelen zich niet in één bepaalde richting. De

aanname is dat in het bijzonder migratie en langere levensduur een grote impact hebben op de zorg voor ouderen op het platteland. Als jongeren het dorp verlaten om in een stad werk te zoeken en een bestaan op te bouwen, blijven de ouderen achter zonder de steun die zij traditioneel gesproken van hun kinderen zouden krijgen. Als oudere mensen langer leven, zullen zij over het algemeen meer zorg nodig hebben in het laatste stadium van hun leven. De laatste onderzoeksvraag luidt daarom als volgt:

5. HOE BEÏNVLOEDEN SOCIALE VERANDERINGSPROCESSEN DE ZORG VOOR EN DE BESTAANSZEKERHEID VAN OUDEREN?

Om het effect van sociale veranderingen op het leven van oudere mensen, de zorg voor ouderen en hun bestaanszekerheid te kunnen bestuderen, hebben wij een vergelijkend onderzoek gedaan in twee dorpen. Kebonagung is welvarender en kent weinig mensen die weggaan uit het dorp. Dit dorp bestaat vooral uit mensen die met landbouw hun geld verdienen, maar heeft daarnaast ook mogelijkheden voor ander betaald werk. Giriwungu, waaruit veel mensen wegtrekken, is arm. Hoewel in dit dorp alleen met landbouw een inkomen is te verwerven, zijn de landbouwmogelijkheden beperkt omdat de grond er minder vruchtbaar is. Wij namen aan dat het effect van sociale veranderingsprocessen groter zou zijn in Giriwungu. Daarom dachten we dat het welzijn van ouderen in Giriwungu ernstiger zou zijn aangetast, dat zij minder kunnen bogen op traditionele zorg en daarom minder van een onbezorgde oude dag verzekerd zijn.

De resultaten wijzen echter uit dat er uit Giriwungu niet meer jonge mensen emigreren dan uit Kebonagung. In Kebonagung wonen ouderen in kleinere huishoudens, ze leven vaker alleen, wonen vaker zonder een kind in hetzelfde huis en hebben ook minder vaak een kind in het dorp wonen. Oudere mensen in Giriwungu werken langer door. Meestal zijn het boeren. Dat heeft als voordeel dat zij hun werkende bestaan langzaam kunnen afbouwen. In Kebonagung werken evenveel mensen in de landbouw als in andere beroepen. In Giriwungu telen ouderen meer verschillende gewassen en zij hebben meer verschillende soorten vee. In Kebonagung heeft de bevolking zich gespecialiseerd in rijstbouw en er zijn meer mensen zonder land. Zij zijn afhankelijk van ander inkomen. Dat maakt ze kwetsbaar als ze ouder worden. Zij kunnen dan waarschijnlijk geen inkomen genereren en zijn ook niet zelfvoorzienend. In Giriwungu investeren ouderen meer in agrarische bezittingen, zoals vee en hardhout. In Kebonagung lijken ouderen vooral in het huis zelf en in duurzame artikelen te investeren. Het inkomen per huishouden in Giriwungu is de helft van dat in Kebonagung, maar in Giriwungu bezit een huishouden vijfmaal zoveel land. Dankzij de cassaveteelt, die op zich weinig opbrengt, zijn de mensen in Giriwungu verzekerd van voldoende voedsel.

Wij namen aan dat oudere mensen zich zekerder zouden voelen in Kebonagung, omdat zij verzorgd zouden worden door hun kinderen. Die hypothese was vooral gestoeld op economische argumenten. Wij dachten dat kinderen het dorp zouden verlaten om economische redenen en dat dat een direct effect zou hebben op de

bestaanszekerheid van ouderen. Maar in tegenspraak met de hypothese blijkt dat ouderen zich in Giriwungu zekerder voelen omdat zij samenwonen met ten minste een kind, omdat er andere kinderen in hetzelfde dorp wonen en omdat zij meer grond bezitten. Deze aspecten zijn belangrijker voor het welbevinden van ouderen dan negatieve factoren, zoals een grotere behoefte aan instrumentele zorg en hard moeten werken op het land. Wij konden deze effecten niet toeschrijven aan sociale veranderingsprocessen.

Een theoretisch kader voor ouderenzorg

Het theoretische kader van dit onderzoek is gebaseerd op bekende principes uit de literatuur, in het bijzonder Tronto's *Zorgtheorie* (1993). De zorgtheorie gaat uit van een brede definitie van zorg: "Zorg is een scala van activiteiten, gericht op het handhaven, het continueren en het herstellen van de 'wereld' om ons heen, op een zodanige manier dat we er zo goed mogelijk in kunnen leven. De wereld waarnaar verwezen wordt, omvat het complexe geheel van zowel ons lichaam, onszelf, als de wereld waarin wij leven en de mensen met wie wij leven." Tronto onderscheidt vier fasen in het zorgproces: zorgen om, zorgen voor, zorg verlenen en zorg ontvangen. Deze concepten zijn allemaal werkwoorden, om het idee tot uitdrukking te brengen dat zorg een activiteit is, een sociale bezigheid. In dit onderzoek wordt zorg uitdrukkelijk benaderd als een praktijk waarvoor denken en handelen nodig zijn. De vier fasen in het zorgproces zijn over het algemeen van toepassing, maar specifieke zorgactiviteiten variëren in verschillende culturen.

Om Tronto's zorgtheorie toepasbaar te maken op ouderen op Java in Indonesië en om de diverse aspecten van zorg in de praktijk te kunnen onderzoeken, ontwikkelden wij een analytisch model dat bestaat uit individuele kenmerken van de oudere mens, strategieën voor levensonderhoud en de bestaanszekerheid van ouderen. Zorgarrangementen en zorgrelaties vormen een strategie voor levensonderhoud, die gericht is op het veilig stellen van de oude dag. De specifieke zorgactiviteiten richten zich op persoonlijke dagelijkse activiteiten, instrumentele dagelijkse activiteiten en daarnaast op geldelijke, materiële, emotionele en sociale ondersteuning. Deze zorgconcepten zijn niet cultureel bepaald en daarom algemeen toepasbaar. Waaruit de zorg daadwerkelijk bestaat, moet voor elke groep mensen en elk land apart worden bekeken. Individuele omstandigheden beïnvloeden de levensstandaard direct en indirect door de strategieën die mensen ontwikkelen om in hun levensonderhoud te voorzien. Investeren in de relatie met anderen en het creëren van zorgarrangementen gaat het hele leven door, en kan resulteren in een menswaardig bestaan op latere leeftijd.

Curriculum vitae

Iris Nathaly Keasberry was born on April 16, 1965 in The Hague, The Netherlands. In 1984 she completed her secondary education at Rijks Scholen Gemeenschap Wijdschild in Gorinchem. From 1984 to 1988 she studied Home Economics at the Akademie Diedenoort in Wageningen, a school for higher vocational training and graduated cum laude. After graduation she continued to study Home Economics at Wageningen Agricultural University. As a part of her studies, she worked in the marketing division of Pon's Automobielenhandel BV, importer of Volkswagen and Audi in the Netherlands (1991), and she studied food security of farmers for the User's Perspective With Agricultural Research and Development (UPWARD) organisation in the Philippines (1992). She graduated in 1993 with Non-western Household Sociology and Marketing and Market Research as her major subjects.

In 1995 she became a Ph.D.-student at the former department of Household Sociology of the Wageningen Agricultural University and started the research project on elder care in Indonesia. From 1995 to 1996 she participated in demography courses offered through the Post-doc Onderzoekersopleiding Demografie (PDOD) and Netherlands Interdisciplinary Demographic Institute (NIDI), and Indonesian history at the University of Amsterdam (UVA). She presented some of her papers at:

- the 'Social Security and Social Policy in Indonesia' workshop in Yogyakarta (1996);
- the Pre-International Foundation of Home Economics (IFHE) congress workshop 'Approaching the 21st Century Family Issues and Responses' in Putra Jaya, Malaysia (1996);
- the 16th congress of the International Association of Gerontology (IAG) 'Aging beyond 2000: One World, One Future' in Adelaide, Australia (1997);
- the 6th Asia/Oceania Regional Congress of Gerontology 'Changing Family Systems in the 21st Century' in Seoul, Korea (1999).

In addition to her studies, Iris Keasberry has always been active in the Wageningen community. From 1988 to 1991 she was treasurer of the baseball and softball club Matchmakers. She worked as an assistant secretary at the Wageningen Agricultural University's Language Centre from 1991 to 1994. In 1993 she founded an educational group at Agromisa that provided lessons on developing world subjects to secondary schools, which she coordinated until 1995. In 1998 she supported the editing of a report for the Systemwide Genetic Resources Program (SGRP) by the Consultative Group on International Agricultural Research (CGIAR). From 1998 to 1999 she served as secretary of the organisational committee of the Course Centre Inzicht that provided courses for development-aid workers.

In 1996 Iris Keasberry married Martin Muilenburg and in 1998 they had a son, Delmar Muilenburg. At present they live in Gorinchem. Since May 2001, she has worked as a senior researcher at the Customs Intelligence Centre in Rotterdam.

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