

**Nutrition  
and  
National  
Development**

**An evaluation of nutrition planning in Malawi  
from 1936 to 1990**

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**Victoria J. Quinn**

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**For those Malawians dedicated to improving  
the lives of the poor**

## **ABSTRACT**

### **NUTRITION AND NATIONAL DEVELOPMENT**

**An evaluation of nutrition planning in Malawi from 1936 to 1990**

**Thesis by Victoria J. Quinn, Department of Human Nutrition, Wageningen Agricultural University, Wageningen, The Netherlands**

This thesis involves an evaluation of the nutrition planning attempts made in the small central African country of Malawi from 1936 to 1990. The fulfillment of four prerequisites necessary for development planning to be successful was evaluated at different points in time. These prerequisites include the existence of 1.) mutually agreed objectives, 2.) the political will to achieve those objectives, 3.) relevant planning theories and 4.) the means and capacity to take the required actions. Overall this study has shown that despite Malawi's long history of nutrition planning the attempts made over the past six decades have not been successful since child malnutrition levels are much the same today as during colonial times. From independence in 1964 up until the late 1980s a substantial part of the problem has been the lack of political will to address the poverty and household food insecurity aspects of the problem. Another major weakness has been the lack of adequate assessment and analysis of the nutrition situation in the country. As a result inappropriate actions were taken which often involved the importation of irrelevant nutrition activities by donors. An important lesson of this study is the important role that research and evaluation has in providing the empirical basis on which to plan actions as well as to assess past efforts.

One conclusion of this thesis is that the problem of malnutrition in Malawi can not be viewed as a small issue since the costs to the individual and to the nation are too great. Instead improvement in nutritional status needs to be viewed as an objective in a variety of sectors. Similarly its solution should not solely be limited to nutritionists since development planners in all sectors must be involved. In addition, considering the seriousness of the nutrition problem found in the country the time horizon for improvement to be evident should realistically be framed in terms of decades.

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## ABBREVIATIONS

ACC/SCN	Administrative Committee on Coordination - Subcommittee on Nutrition
ADD	Agriculture Development Division
ADMARC	Agricultural Development Marketing Corporation
ANOVA	Analysis of variance
ANTP	Applied Nutrition and Training Programme
ASAC	Agricultural Sector Adjustment Credit
ASAP	Agricultural Sector Adjustment Programme
ASSA	Annual Sample Survey of Agriculture
BLADD	Blantyre Agricultural Development Division
CCAM	Chitukuko Cha Amayi M'Malawi
CM	Centimeter
CMR	Child mortality rate
CSR	Centre for Social Research
DEVPOL I	Statement of Development Policies 1971-1980
DEVPOL II	Statement of Development Policies 1987-1996
DHS	Demographic Health Survey
EP&D	Department of Economic Planning and Development
EPI	Expanded Programme of Immunization
FSNU	Food Security and Nutrition Unit
FAO	Food and Agriculture Organization
GNP	Gross national product
GDP	Gross domestic product
HA	Height for age

HAZ	Height for age Z-score
WHZ	Weight for age Z-score
IBS	Integrated Basic Services Project
ICEF	International Child Emergency Fund
ICNND	Interdepartmental Committee on Nutrition for National Defence
IDD	Iodine deficiency disorders
IMF	International Monetary Fund
IMFNC	Inter-ministerial Food and Nutrition Committee
IMR	Infant mortality rate
IRDP	Integrated Rural Development Programme
KCAL	Calories
K	Kwacha
KG	Kilograms
LADD	Lilongwe Agricultural Development Division
LSHTM	London School of Hygiene and Tropical Medicine
LWADD	Liwonde Agricultural Development Division
M	Metre
MANR	Ministry of Agriculture and Natural Resources
MK	Malawi Kwacha
MCH	Maternal child health
MCP	Malawi Congress Party
MG	Malawi Government
MG/FFHC	Malawi Government/Freedom from Hunger Campaign
MOA	Ministry of Agriculture
MOCS	Ministry of Community Services

MOH	Ministry of Health
MOLG	Ministry of Local Government
MT	Metric tonne
N	Sample size
ND	No date
NGO	Non-governmental organization
NRDP	National Rural Development Programme
NSSA	National Sample Survey of Agriculture
NSO	National Statistics Office
OPC	Office of the President and Cabinet
PCM	Protein calorie malnutrition
PEM	Protein energy malnutrition
PHAM	Private Hospital Association of Malawi
PS	Principal Secretary
RDP	Rural Development Project
SD	Standard deviation
SE	Standard error
SGR	Strategic Grain Reserve
SPC	Secretary to the President and Cabinet
UK/FFHC	United Kingdom/Freedom for Hunger Campaign
UNDP	United Nations Development Programme
UNICEF	United Nations Children's Fund
USAID	United States Agency for International Development
WA	Weight for Age
WB	World Bank

WFP	World Food Programme
WHO	World Health Organization
Z-score	Standard deviation score

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## CHAPTER 1

### INTRODUCTION

Much has been written on the theory and practice of development planning, especially the difficulties encountered when attempts are made to put the theories into practice. The concept of planned development is defined as *the intentional manipulation of processes in society in order to achieve a desired goal or set of objectives*. The governments of developing countries set about the allocation of scarce resources through the implementation of planned programmes and strategies. This usually begins with the identification of issues or problems and the formulation of objectives to address them. Policies and programmes are then designed on the basis of available knowledge and in light of these objectives. This is followed by the mobilization of resources to implement the plans which have been agreed. Evaluation of actual outcomes to intended outcomes is also an integral part of the planned development cycle.

However more often than not what eventually takes place in the planning arena is substantially different from what was originally intended and often falls short of expectations. Experts in development planning have long debated the difficulties in planning and what has been termed the 'crisis in planning'. A lack of consensus on what comprise the major issues, constraints and possible actions has often rendered the advice of development experts ineffective in addressing the realities at hand.

The relationship between knowledge and action in development planning is similarly not straightforward and unambiguous. There is a tendency in academic circles to believe that development planning could be improved by bringing better information and analysis into the policy-making process. However, this is only partly true since it ignores the more important factors within the political economy which influence the decisions made and actions taken (Bulmer 1988; UNICEF 1991a; Pinstup-Andersen 1993a, 1993b). Instead

of a well structured world of unambiguous objectives, understandable social and economic processes and a bureaucracy which allows rationale and apolitical decision-making to take place, what development planning actually involves is a **"staggering variety of people and organizations, all pulling, pushing, and otherwise interacting with each other in pursuit of their various interests"** (Johnston and Clark 1982:11).

What has often been overlooked are those requirements which are fundamental to the process of planned development. Four major prerequisites have been identified (Van Dusseldorp and Zijderveld 1991). The **first** prerequisite is that there needs to be a mutually agreed objective or set of objectives. Essentially these objectives represent the rationale for undertaking the planning endeavor. The **second** prerequisite is that the political will must exist to undertake the actions necessary for the planning process. It could be argued that political will is perhaps the most important prerequisite since it largely determines the fulfillment of each of the other three prerequisites. The **third** prerequisite is that there must be a good conceptual understanding of the processes in society which need to be influenced to achieve the desired objective(s). This is closely related to a good analytical understanding of the nature of the problem at hand and its causal factors. The planning theories used (*e.g.* substantive, procedural and social) must be relevant to the achievement of the desired objective(s). The **fourth** prerequisite for planning is that the means and capacity needed to influence the processes in society must exist. This includes, for example, the availability of manpower, money and time.

The issue of malnutrition in developing countries epitomizes the types of issues raised above regarding the difficulties associated with development planning. Since the first nutrition planning work was carried out in developing countries in the mid-1930s there has been little consensus on what to do about the problem of malnutrition. Much of the action taken over the past six decades has been disappointingly ineffective, apart from a few success stories (Berg 1987a, 1987b; Field 1987; ACC/SCN 1993a). Despite the universal declaration made by the 1974 World Food Conference for the eradication of hunger by

1985 and the global commitment by governments both in the developed and developing world, the absolute numbers of malnourished people are greater today than ever before (ACC/SCN 1992).

The lack of consensus on what to do about malnutrition in developing countries is reflected by the vast array of nutrition planning theories which have emerged and disappeared at a rapid pace over the past 5 to 6 decades. These include the substantive theories used in planning to describe the nature of the problem as well as the actions which are needed. In addition, there have also been many different procedural theories of planning which have been used to address malnutrition including, for example, top-down and bottom-up planning strategies as well as multi-sectoral and single-sector interventions. At one extreme there are planners who view malnutrition as a technical problem which can be solved by technological solutions. At the other extreme there are planners who view malnutrition as a societal problem which can only be solved by an attack at the structural roots of poverty.

In addition the evolution of nutrition planning in developing countries since the early 1900s has not progressed as a steady accumulation of new knowledge which is based on existing theories and experience. Instead planning theories in nutrition have tended to swing from one extreme to the other depending on the current fashions of the international donor community. For example, one year the answer is protein, the next energy, and the next micronutrients. Past experiences are often not sought for use in future planning efforts. An historical view of development issues and the planning efforts undertaken to address them would doubtless yield valuable lessons and insights into the structural nature of a country's problems, as well as what works in planning and what does not. In the offices of development agencies this practice appears to be virtually non-existent. Reviewers of development assistance to third world countries point to the frequent tendency of aid workers to **"continue to function blissfully unaware of their history, neighbors, or the larger edifice which their efforts are creating"** (Johnston and Clark 1982:19).

## 1.1 Malawi as a case study

The small central African country of Malawi provides an opportunity to examine some of the issues and problems associated with development planning in general and nutrition planning in particular. There are several factors which make Malawi an attractive choice for such a case study. **First**, Malawi has had a long history of nutrition planning which began with the early work of British colonial nutritionists in the mid-1930s. Thus Malawi has the oldest history of nutrition planning in Africa spanning over fifty years. This provides an excellent opportunity to examine changes over time in the attempts made, especially whether lessons from the past were incorporated into subsequent work. **Second**, the malnutrition problem found in Malawi is very serious and according to United Nation's sources ranks as one of the highest in Africa (UNDP 1992). **Third**, Malawi is not a large country nor has been inundated by large numbers of donor agencies. In addition, the historical archives and records in the country are fairly well kept and accessible. These factors make it possible to reconstruct the past events in nutrition planning. **Fourth**, since Malawi has neither been afflicted by war or any other serious large scale natural disasters such as drought, the nutrition planning process which has taken place up until the late 1980s represents what could be described as a routine development planning. The **fifth** and last factor is that the author of this thesis has been involved in nutrition planning in Malawi since 1983 and lived in Malawi from 1987 to 1993, and hence has good first-hand experience in the nutrition work which took place in the country during the last decade.

## 1.2 Aim of the thesis

The aim of this thesis is to evaluate the attempts made at national planning in Malawi to address the problem of child malnutrition from 1936 to 1990. In particular an examination is made of the process through which nutrition issues have gained their recent prominence in the national development debate now taking place in the country. Looking at the evolution of nutrition as a development objective in Malawi provides an eyepiece of

sorts through which the larger issue of poverty can be examined in regards to its placement in national development planning. A fundamental belief held in this thesis is that malnutrition is an indicator of maldevelopment and as such the treatment of malnutrition provides a reflection of how the issue of poverty has been seen and dealt with by the Government and the donor agencies.

### 1.3 Hypothesis

This thesis concerns the issue of child malnutrition and national development planning in Malawi. The main focus is on the nature of the link between knowledge and action as this relates to the general perception of the child malnutrition problem in the country and the policies and programmes put into place to address the problem.

The hypothesis put forth is that:

**Nutrition planning, as defined by the model of planned development, has not been successful in Malawi and this has been due to the lack of fulfillment of four prerequisites which are necessary for planned development, namely:**

- 1. The formulation of *objectives* which are consistent, realistic and acceptable to those in charge of carrying out the planned development process, as well as to those who it eventually will affect;**
- 2. The *political will* to achieve the objectives must exist;**
- 3. The relevant *processes* which need to be influenced must be understood and the appropriate planning theories used; and**
- 4. The *means and capacity* to influence the processes must be available.**

At three different periods in Malawi's history, the state of art of nutrition planning will be evaluated in light of the fulfillment of each of the four prerequisites. The **first** time period to be studied is from 1936 to 1963 which represents the latter part of Malawi's colonial history. The year 1936 marks the first time nutrition issues entered the national planning arena. Independence was gained by Malawi in 1963. The **second** time period is from 1964 to 1979 which represents the first fifteen years after independence. This period has been described as Malawi's golden years when the macroeconomy grew at an impressive rate and earned the country an international reputation as being an African economic success story. The **third** time period is from 1980 to 1990. This decade represents a turbulent period for the country both in economic terms and later in regards to food security. By 1979 the country's fortunes reversed when the macroeconomy was severely jolted by external events. This resulted in a structural adjustment programme being initiated with the assistance of the donor community. This also marked a change in the role of donors in the country's development planning since it brought with it policy-based loans with conditionalities attached. From being passive observers during the 1960s and 1970s the donors, especially the World Bank and other large financial institutions, became active participants in the country's policy circle during the 1980s. Understanding the relationship between the Government and the donor agencies in policy formulation and programming, and how this changed over time, is critical in understanding the way in which malnutrition and poverty issues have been treated in the national planning process.

In this thesis specific attention will be given to a number of key factors which relate to the process of nutrition planning and to the four prerequisites. **First**, the major development issues facing Malawi during each time period are examined to place nutrition in the overall context of development planning priorities. **Second**, the global nutrition **planning** trends are also examined during each of the three time periods in order to trace the influences from outside agencies on what actually took place inside Malawi. Particular attention is given to the involvement of United Nations agencies especially UNICEF, FAO and WHO, as well as the World Bank, since these were the agencies which have had the most

influence, programmatically and financially, on the directions taken in national nutrition planning in Malawi over the past fifty years. **Third**, attention is also given to reconstructing the general perception of nutrition in the country which existed during the three time periods. This is done by reviewing Government policies related to nutrition, reviewing the existing empirical data base on nutrition as well as identifying the prevailing nutrition planning theories used by donor agencies in the country. **Fourth**, the major actions taken by the Government and the donors on nutrition are evaluated in case studies in regards to their appropriateness in addressing the country's malnutrition problem. **Fifth**, the manpower, financial and institutional capacity in the country, both within the Government and the local donor community, to undertake nutrition planning is also examined. The **sixth** factor taken into account in this evaluation of national nutrition planning in Malawi is of paramount importance and concerns the influence of political factors in the planning process especially the question of political will to address the problem of malnutrition. In particular the role of politics in affecting the empirical data base, the perception of the problem, the existence of national capacity as well as the types of actions actually taken will be reviewed.

#### 1.4 Methodology

This thesis will attempt to reconstruct the events which took place in nutrition planning in Malawi over a fifty year period in order to identify and evaluate the scientific, social and political factors which influenced the direction and content of nutrition programmes in the country. An analytical framework based on the concept of the planned development process and its necessary prerequisites is used to evaluate these nutrition planning attempts. As such this study involves a cross disciplinary analysis encompassing nutritional science, sociology, political science and history.

The information and materials collected for the study come from numerous secondary sources both inside and outside of Malawi representing libraries, donor agencies, university

offices and national archives. The sources of information and documents used in this thesis are shown in Appendix 1. In regards to the statistical information all are secondary data which derive from existing surveys and research studies. Comments are given when necessary in the text regarding possible problems which may exist with the secondary data used, for example in terms of its accuracy or representativeness, which might influence the conclusions drawn from the data. In these circumstances an appropriate discussion of the limitations of the data is given.

The only primary data collected related indirectly to this thesis was information obtained from a series of personal interviews conducted with Government officials and university researchers by the author and the director of the Centre for Social Research of the University of Malawi during the latter half of 1991 for another research project concerned with nutritional surveillance systems and the use of information for advocacy during the 1980s. Since some of the issues of that research and this present thesis overlap, it has been possible to extract certain information from those interviews as background to the nutrition planning events which took place during the 1980s which eventually led to the elevation of nutrition into the national development planning process. In the instances where this interview information was used a citation is shown in a footnote.

### **1.5 Limitations**

From the discussion presented above it becomes clear that this study focuses on Malawi only. It would be interesting if comparable studies are made in other African countries with a different scope of natural resources and with different political regimes. It has also to be emphasized that the attention of this thesis is mainly directed at the development of policies and programmes at the national level, most of which have been led and heavily funded by United Nations donor agencies. As will be seen in this thesis little nutrition planning work has taken place outside of the national policy arena. The most active donor in nutrition in Malawi since independence has been UNICEF and as a result much attention is given in

this thesis to the role of this particular agency. In regard to financial support and involvement in overall development policies the World Bank has been the most influential donor in the country, therefore, attention is given to this agency because of the potential impact of its work on nutritional levels. The work of other United Nations donors, for example FAO and WHO, is also examined but to a much limited degree since their involvement in nutrition planning in Malawi has been substantially less. Bi-lateral agencies and non-governmental organizations have not generally been involved in national nutrition planning activities in Malawi, hence little mention is made of these groups in this thesis. One exception, however, has been the United Kingdom's Freedom from Hunger Campaign team which worked in Malawi in the early 1970s and which forms the topic of one of the case studies presented in this thesis because of its significance to the longer-term development of national nutrition planning in Malawi.

### **1.6 Organization of the thesis**

The thesis is organized into six chapters. **Chapter 1** provides an introduction to the thesis, including the hypothesis to be examined and the methodology used. The analytical framework of the study is given in **Chapter 2** which includes a review of the key issues found in development planning in general and in nutrition planning in particular. A brief introduction to Malawi is presented in **Chapter 3** which includes a description of the major characteristics of the country, the approach taken for development planning and the key development issues facing the Government. In **Chapter 4** an assessment is made of the trends in nutritional status over the past fifty years using anthropometric data available from research studies carried out at different points in time.

**Chapter 5** is the major core of the thesis which addresses the central hypothesis regarding the performance of national nutrition planning in Malawi. Chapter 5 is split into three sections covering each of the three time periods under review. Each section begins with an introduction to the major development issues facing Malawi at that point in time. This

is then followed by a review of global nutrition planning theories which prevailed during these years. After this the overall policy environment for national nutrition planning in Malawi is described. This is followed by a reconstruction of the general perception of nutrition which was found in the Government, university groups and the donor agencies. To illustrate the types of actions taken to address malnutrition a number of case studies are presented. Each section concludes with a review of the status of fulfillment of each of the four prerequisites identified for planned development. A synthesis of the main findings derived from Chapter 5 is presented in Chapter 6. The focus of this concluding chapter is on the major lessons which have been learned from Malawi's experience in national nutrition planning which are relevant to future nutrition planning attempts in the country and which also may have a wider application in other countries facing similar situations.

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## CHAPTER 2

### THEORETICAL CONSIDERATIONS AND ANALYTICAL FRAMEWORK

#### 2.1 The planned development process

##### 2.1.1 The *raison d'être* of planned development

The concept of development is subjective and means different things to different people under various social, cultural and political settings. To an economist it may mean the achievement of economic growth as measured by gross national product. To a sociologist it may mean an increase in the capacity of certain groups in society to influence their own future. To a regional planner it may mean the provision of tarred roads or piped water facilities to all settlements within a certain area. In the context of this thesis development is viewed from the human dimension and is intended to mean **"the process of enlarging the range of people's choices - increasing their opportunities for education, health care, income and employment, and covering the full range of human choices from a sound physical environment to economic and political freedom"** (UNDP 1992:2). This includes the improvement of human welfare in general and the nutritional well-being of the population in particular.

Much has been written on development planning and the attempts made to influence the processes within society to achieve certain objectives, for example, improvements in living conditions. Planning and problem-solving are closely intertwined. When development activities are implemented through a structured framework of objectives and programmes which involve the allocation of resources in a pre-determined fashion along a given time frame the process is termed **planned development**. This is the most common approach taken by governments in developing countries to address the issues confronting their countries. The focus of this thesis is on the process of planned development and how it operates for national level decision-making regarding issues of malnutrition.

A theoretical framework of the planned development process is given in Figure 2.1 which highlights the stages considered to be most relevant to this study. In order for a problem to be addressed by the planned development process, the government authorities in charge must first consider it important enough to warrant such attention. This decision is closely tied to the general perception of the problem which is based on a combination of scientific knowledge, ordinary knowledge and political factors. Scientific knowledge based on empirical data forms a central part of the general perception of an issue. Ordinary knowledge is also very important and is based on a combination of common sense, scientific facts, speculation or unfounded beliefs (Lindblom and Cohen 1979). Although ordinary knowledge is highly fallible, its influence on the general perception of certain issues may at times be immense since it can sway personal or public opinion one way or the other. The political environment is also important and may be the decisive factor which determines whether a problem is deemed acceptable for the authorities to take action.

Once a decision has been taken that an issue should be addressed by the government's planning machinery the process of planned development can best be described as an on-going cycle which involves a number of essential steps as shown in Figure 2.1 (Van Dusseldorp 1993). The process begins **first** with the identification of goals and objectives which describe the final outcome desired by the authorities in charge. The **second** step is the compilation of all available data and information on the problem in order to develop an understanding of the underlying physical, social and economic processes and how these can best be manipulated through planned interventions. If the information is incomplete or out of date, new data might need to be collected. Given this conceptual understanding of the problem the **third** step involves drawing up realistic plans and programmes to influence these processes to achieve the stated objectives. The **fourth** step is to get the plans approved by the necessary authorities in the government which includes getting their commitment on the allocation of resources, such as manpower and money, which are necessary to implement the proposed plans. Programme implementation is the **fifth** step of the process and this entails mobilizing the resources allocated and carrying-out the

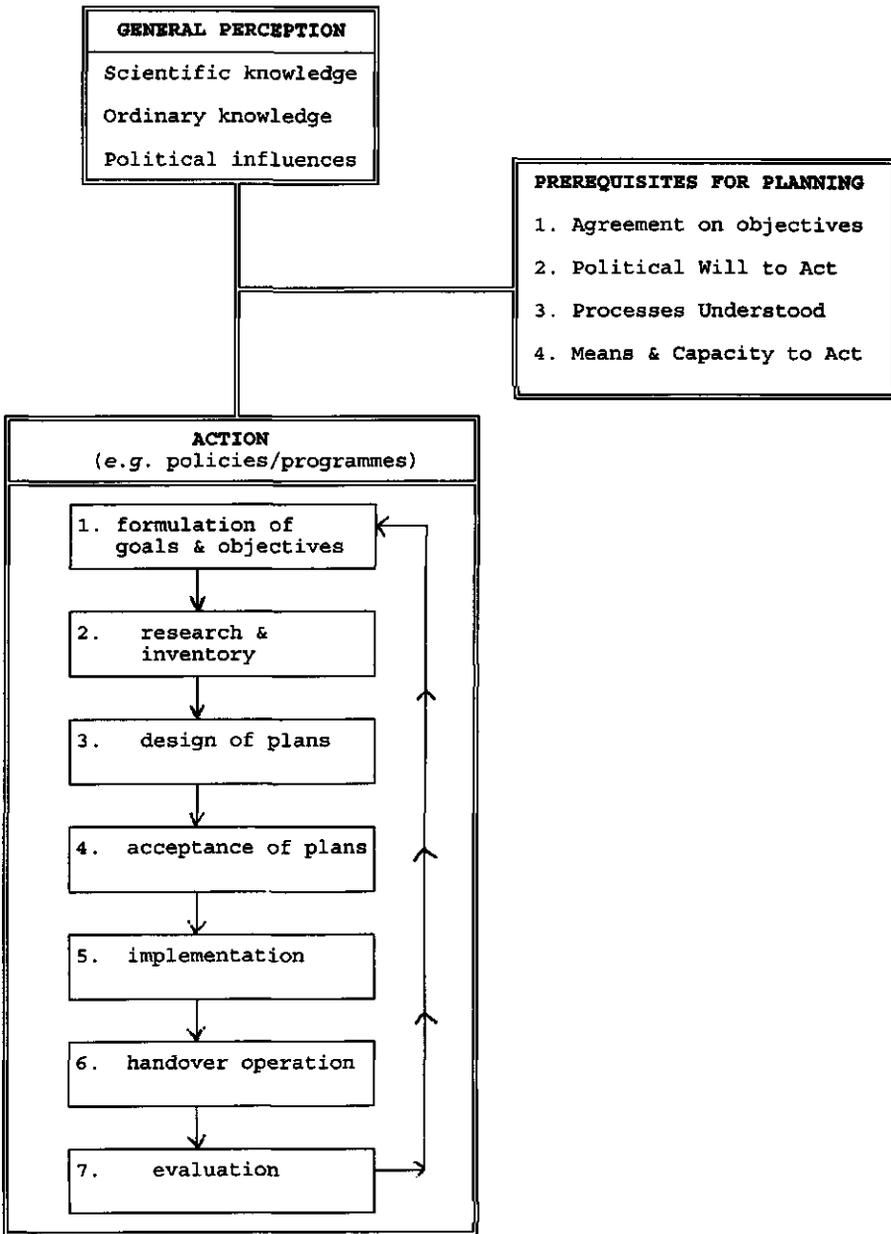


Figure 2.1: Theoretical framework: The planned development process

programme plan along the given time schedule. The **sixth** step involves handing over the project. The **seventh** step is undertaking an evaluation of the actual activities carried out and outcomes achieved compared to the intended activities and outcomes. In theory, the lessons learned from such evaluations should be used in subsequent planning cycles to further revise objectives and refine the programme strategy in order to maximize future impact.

It needs to be emphasized that the planning cycle shown in Figure 2.1 is not meant to be linear but should be viewed as an iterative process. In the overall process of planned development, the element of planning is required in formulating objectives, carrying out research, designing the policies and programmes as well as evaluating results (Van Dusseldorp and Southwold 1994). Management is also required throughout the planned development process especially in the acceptance of the plans, their implementation as well as the hand-over operations.

### **2.1.2 The actors involved in planning**

Planning involves a host of different individuals and it is useful to describe some of the key actors involved to understand some of the motives behind decision-making. The focus in this study is on national level nutrition planning in Malawi and those individuals most relevant for carrying out this work. In Malawi there are six main groups of actors involved in the national planning process: 1. politicians, 2. senior government bureaucrats, 3. government planners, 4. researchers, 5. donor agencies including their technical advisors, and 6. the clients of the planning process.

The **politicians** include the Life President of Malawi, Dr. Hastings Kamuzu Banda, as well as his circle of hand-picked ministers. Their role, particularly of the Life President, is of crucial importance since only issues which are deemed acceptable by Dr Banda can be contemplated for planning. The group of ministers around the Life President can be considered to be political loyalists. In most cases these individuals do not have any

technical or professional qualifications. Their actions tend to be based on maintaining their survival in the political hierarchy rather than on an objective and professional analysis. Up until recently most policy directions emanated from Dr Banda himself. In the ministries for which he held the portfolio, for example, agriculture and works, the Life President has also been extensively involved in day to day decision-making up to the late 1980s. From about the mid-1980s policy making appears to have gradually devolved to senior bureaucrats and technocrats in the civil service (Gulhati 1989; Pryor 1990).

**Senior Government bureaucrats** include those individuals serving in positions in the top echelon of the civil service. In Malawi this group includes the Secretary to the President and Cabinet (SPC) who is the head of the civil service. Principal Secretaries also comprise this group. Most of these individuals have had some level of professional training in a technical discipline. Senior Government bureaucrats, especially the SPC, are particularly important in the planning process since they help to crystallize issues that need to be addressed. Many times their actions also determine the placement of development issues in the larger context of ministry concerns. In other words, their attention to an issue helps to prevent it from disappearing altogether in the myriad of competing demands for resources. As mentioned above, in Malawi for many years all important decisions were made by the Life President. It was not until the mid-1980s under the guidance of the SPC that senior bureaucrats were brought into policy formulation and major decision-making. This meant that decision-making began to be based more on professional analysis than on political pressures from above. The reasons behind this transformation are not entirely clear. However, it has been suggested that the start of the macroeconomic reform programme and the subsequent entry of the donors into Malawi's policy circles in the 1980s meant that overall a more rational and professional basis was given to the Government's decision-making process (Gulhati 1989). The funding from donors to support the macroeconomic reform programme was provided through policy based loans with attached conditionalities. This meant that money would not be released by the donors unless Government took certain actions along the lines stipulated in the loan conditionalities. This

leverage strengthened not only the donor's hand in policy formulation, but also that of the professional civil servants who in the past had little opportunity to inject their professional analysis in Government decision-making since political signals from higher levels dictated the actions taken.

The next group of actors involved in the national planning process are **government planners** who are located in each sector. These individuals undertake the groundwork and provide the basic analysis on which plans are conceived and designed. In some instances they may provide the initial stimulus to their superiors in the ministries that action needs to be taken on certain issues. In Malawi the majority of planners are economists. Some planners are subject matter specialists in other disciplines such as engineering, agriculture, as well as a small number in nutritional sciences, amongst other areas. These are the people who attend the many workshops and meetings held on different development topics.

Another group of actors involved in Malawi's national nutrition planning process are **researchers**. Since the late 1970s researchers from the University of Malawi have been especially active in undertaking policy research on nutrition, food security and poverty issues. By 1989 the link between University researchers and government nutrition planners was officially forged with the permanent representation of University research groups on government planning committees. International researchers have also played an important role in conducting studies on food and nutrition issues starting as far back as the late 1970s. Some of the resident donor missions in Malawi have also carried out research studies on key issues, either by bringing in outside research consultants or by contracting local researchers. During the 1980s the role of research in helping to identify malnutrition, food insecurity and poverty as important development issues was instrumental in fuelling the advocacy process through which these same issues finally emerged as national planning priorities in the 1990s.

**Donor agencies** are another important group in the national planning arena. Historically the major share of the Malawi Government's development budget, over 80 percent in 1990/91, has been funded by donors (Malawi Government/United Nations 1993). Donor agencies of the United Nations, such as UNICEF, WHO and FAO, have played the leading role in Malawi in national nutrition planning, especially in regards to the initial impetus to take action, programme design, technical assistance and funding. The World Bank has been one of the most influential donors in regards to rural development particularly in the smallholder agricultural sub-sector. Since the late 1980s the World Bank has become more active in nutrition, food security and poverty issues. In addition, the historical shortage of trained Malawians in all sectors, including food and nutrition, has resulted in a heavy reliance on international advisors provided by these same donors.

Another group of actors important in the planning process in Malawi are the **clients** or end-users. In regards to national nutrition planning the clients comprise low income families both in rural and urban areas. However in Malawi's national nutrition planning efforts all too often the end-users have been seen as passive recipients of development efforts and not as active participants since historically the focus has been top-down with no participatory element from the people themselves.

In Malawi, there exist a number of groups of actors who play, or potentially could play, important roles in the national nutrition planning process. When evaluating the nutrition planning efforts which have taken place in the country over the past five to six decades in Chapter 5 the involvement of these different groups will be examined.

### **2.1.3 Problems in planning**

The underlying premise of planned development is that man has within his reach the ability to control and manipulate physical, social and economic processes to achieve a desired outcome (Van Dusseldorp and Zijdeveld 1991). Although the theoretical step-wise approach to planned development, as described above and shown in Figure 2.1, outwardly

appears logical and straightforward, in practice the best laid plans may go awry and fall short of original expectations. Experience has shown that the transformation of paper plans to real life has proven fraught with problems and weak links in the theoretical chain of events.

These problems stem from a wide range of factors, from conceptual issues to issues of management, manpower, money and politics. A major part of the difficulties found in planned development arises from the lack of recognition and attention given to fulfilling certain requirements (Van Dusseldorp 1993). In particular four prerequisites have been identified which include:

1. The formulation of **objectives** which are consistent, realistic and acceptable to those in charge of carrying out the planned development process, as well as to those who it eventually will affect;
2. The **political will** to achieve the objectives must exist;
3. The relevant processes which need to be influenced must be understood and the appropriate **planning theories** used; and
4. The **means and capacity** to influence the processes must be available.

Although presented as four separate prerequisites, it should be recognized that there exists a high degree of inter-relationship between the four. For example political will is important in its own right, but to a large extent also determines whether certain issues are deemed acceptable to be formulated as national development objectives. In some countries, for example in Malawi, poverty issues are very sensitive and may not officially be recognized by the government. Under such circumstances it would be highly unlikely that poverty reduction objectives could exist in the national development strategy. Politics can also influence the way in which development objectives are phrased. For example, under the situation just described the problem of child **malnutrition** would most likely be presented

as a problem of disease and ignorance and not as a problem of poverty. In this way the underlying issue of poverty could be avoided at the same time that claims could be made that malnutrition was being addressed. In addition, politics may also influence the scope of research initiatives, particularly those which pertain to sensitive issues such as poverty, hunger and malnutrition. This in turn would influence the availability of empirical data on which the understanding of the problem is based. Political will also determines just how far a government, or donor, will go in addressing a problem especially in regards to resource allocation.

The other prerequisites identified above are also interrelated. For example, understanding the nature of the planning issue and its underlying processes will largely depend on the capacity within the country to undertake research. Similarly the way in which objectives are formulated may also depend on the level of understanding of the problem. For example, if malnutrition is thought to arise from a deficiency in protein, then the statements of objectives to improve malnutrition may be phrased in regards to increasing the production and consumption of protein rich foods. In summary, although it is convenient to categorize the prerequisites for planned development into separate groups, in reality there are many connections between the four. The prerequisites are discussed below in more detail, especially the ways that the fulfillment of each can be evaluated for the purpose of this thesis.

In regards to the **first prerequisite**, if there is no objective or set of objectives agreed upon at the onset by those in charge of the planning process it is very difficult to focus efforts towards a common goal. There needs to be some degree of consensus and uniformity of opinion on the objectives which are desired in order to ensure that efforts from all sides can be combined and are not in competition with one other. The objectives should also be realistic so as not to raise expectations falsely. However, what may be considered desirable in fact may not be feasible. Therefore, in practice a balance might be needed. Also the stated objectives must be specific enough so that it is understood by all what they are truly

meant to represent. Assessing the existence of objectives in the planning arena can be done by reviewing policy and planning documents, both from the government as well as the donor agencies. Explicit objectives to improve nutritional status may exist or alternatively the improvement of nutritional status may exist as an implicit part of a larger objective, for example, to improve human welfare in general.

The planned development process, however, is rendered useless if the **second prerequisite**, the political will to act, does not exist. As mentioned above political will must exist for objectives to be formulated, for research to be carried out to investigate the nature of the planning issue and its underlying processes, as well as for the allocation of resources. The level of political will may also vary. Whereas it may be politically acceptable to design policies and programmes aimed at reducing poverty and malnutrition, the lack of sincere political will, as well as a lack of resources, may prevent the actual implementation of these policies and programmes. Assessing political will is not straightforward since statements on paper may serve to create a politically correct external image, for example, in the case of a government telling the donors what they want to hear although not really meaning it. Written and verbal statements are important to note, however, a better measure of political will is the allocation of resources to certain sectors or programmes. In addition, the creation of institutions and new posts also provides an indication of political will. But as suggested above, the bottom-line is whether policies and programmes are actually implemented. Other ways to evaluate the existence of political will includes evidence of negative or obstructive behavior. An example is official censorship in discussing or writing on certain issues or problems, for example, poverty and malnutrition. In addition, the lack of action when opportunities present themselves to address malnutrition also provides an indication of the political willingness of the authorities, both government and donors, to pursue these issues. For example, the omission of poverty objectives in a national rural development programme, where it could strongly be argued they should be placed, would suggest that low priority is accorded to poverty. A factor which confounds the assessment of a government's political will to address malnutrition is that historically donors have been

extensively involved in the design and funding of nutrition policies and programmes. As a result it is difficult to determine the sincerity and level of commitment on the side of a government to address the problem of malnutrition.

The **third prerequisite** necessary for planned development is that the planning issue must be thoroughly understood, including its underlying causal processes. This prerequisite is directly concerned with the different planning theories used in the planned development process (*e.g.* substantive, procedural and social) which will be discussed in the next section. Understanding the nature of the planning issue and its underlying processes is central since the premise of planned development is the belief that processes in society can be manipulated to achieve a desired outcome. However, as will also be discussed further below, the conceptualization of an issue is greatly determined by the planning theories to which the planners in charge subscribe and these may vary dramatically from one planner to the next even within the same discipline.

How to assess the fulfillment of the third prerequisite, or in other words the adequacy of the understanding of the processes, is not straightforward. One approach is to re-construct from available documentation (*e.g.* policies statements, planning documents, research reports, speeches, newspaper articles, etc) the general perception of child malnutrition and its underlying determinants which existed at different points in time. This could be done by examining the empirical data which were available, the prevailing substantive theories in nutrition which were used in the country as well as globally, as well as the ordinary knowledge which existed. This reconstruction of the general perception of child malnutrition can then be compared to an internationally accepted model of child malnutrition in developing countries and its underlying causes. The model which will be used in this thesis is the 'Conceptual Framework of Young Child Malnutrition in Developing Countries' which has been promoted by UNICEF since the late 1980s. The UNICEF Conceptual Framework highlights three major clusters of underlying causes to malnutrition: insufficient household food insecurity, inadequate maternal and child care and

insufficient health services and an unhealthy environment (UNICEF 1990). Particular emphasis in the analysis undertaken in this thesis will be on the recognition given by the Malawi Government and the donors to the issue of household food security or, in other words the access of families to food, and to the larger issue of poverty. The Conceptual Framework of young child nutrition will be discussed in more detail in the latter half of this chapter which deals with issues related specifically to nutrition planning.

The **fourth prerequisite** required for the planned development process is that the means and capacity to achieve the stated objectives must exist. Having the trained manpower, equipment, money and time is necessary to implement the policies and programmes which have been proposed. This is true both in the government as well as in the donor community. In addition, the level of resources must be consistent with the objectives to be achieved. However, what may be seem desirable in theory may not be feasible in practice. In regards to available resources, the problem of malnutrition poses an especially difficult situation since its roots stem from the basic poverty found in a country.

Also related to the fourth prerequisite is the issue of management and how this relates to the means and capacity to implement policies and programmes. Management is a critical issue in all development programmes. This is especially true in nutrition where management has recently been singled out as an issue frequently overlooked by planners that probably forms a large part of the problem behind the failures seen in the nutrition planning attempts made in developing countries (Field 1993). Whereas nutrition policies and programmes may be developed to address certain problems facing a country, if the capacity in the country does not exist to implement these policies and programmes then the original plans will fail. Management relates policy and programme design to the realities of implementation, including institutional capabilities and limitations in the local environment within which the programme is supposed to operate.

Turning to the question of how to assess the status of the fourth prerequisite on the means and capacity to take action, this can be done by looking at the nutrition planning and research capacity (e.g. manpower, offices, funds) which existed in the government, university as well as the donor community at different points in time. Evaluating management capacity in regards to policy and programme implementation, however, is less straightforward. For the purpose of this thesis a potential source of information on programme management comes from the experiences written up on nutrition programmes which have been implemented such as internal reports or *ex post* evaluations. For some of the case studies presented in Chapter 5 management issues are referred to when relevant information on them has been found in existing documentation.

These four prerequisites are fundamentally important to put the theory of planned development into practice. However, they also pose a great challenge since it is highly improbable that all four will be adequately met at any one time. Most of the time only some of the prerequisites are fulfilled, and at best this may only be partially. As a result there have been calls for modesty to be used by planners in forecasting their expectations for success (Johnston and Clark 1982; Bulmer 1988; Van Dusseldorp and Zijdeveld 1991). In addition, besides the fact that these prerequisites are not always fulfilled, too often the planned development process is seen as an administrative exercise. But in reality planning is an arena of struggle for scarce resources and the protection of vested interests.

#### **2.1.4 The role of knowledge in planned development**

The role of data, information and knowledge in the planned development process is critical from beginning to end. It is useful first to differentiate what is meant by each. According to a recent discussion of information and power, Davies (1994) defines **data** as referring to raw unanalysed material (*i.e.* facts and figures), **information** as referring to analyzed data often presented in a form that is meant to be usable and **knowledge** as referring to the subsequent absorption, understanding and appreciation of that information. In this thesis it is understood that the scope of knowledge is broad and encompasses that which pertains

to the scientific disciplines themselves as well as to the political and administrative environment in which planned development is to take place. This section addresses issues related to two areas of knowledge: *knowledge for understanding* and *knowledge for action*.

In planned development knowledge for understanding includes that which contributes to the formulation of the conceptual framework of the major determinants of the problem including the processes which need to be influenced. Knowledge for action is different since it is quite specifically action oriented and should provide exact recommendations to decision-makers on the actions which need to be taken to improve the situation.

Traditionally more emphasis has been placed on knowledge for understanding especially in academic circles since scientific research which breaks new ground in human understanding carries with it a high status (Van Dusseldorp and Southwold 1994). University researchers typically embark on research which collects data to expand the knowledge base on an issue. The more neglected side in planned development is knowledge for action. This usually falls into the domain of the development practitioners who have the daunting task of translating scientific knowledge into practical recommendations which are both relevant to solving the problems identified and feasible in light of existing resources.

The two sections which follow will explore in more detail different aspects of knowledge cutting across its dual role for understanding and for action. The first section begins with a review of planning theories including the *substantive theories in planning*, the *procedural theories of planning* and the *social theories for planning*. This discussion is closely related to the third prerequisite on understanding the nature of the planning issue, including its underlying processes. Examples are given from nutrition planning in developing countries to illustrate some of the more important points. In the second section issues which influence the uptake of knowledge in the planning process are discussed.

### *Planning theories*

Once the decision has been made by the authorities in charge that an issue needs to be addressed the wheels of the planning process are set into motion. The third prerequisite mentioned above concerns having adequate knowledge of the planning issue to be addressed especially its underlying processes. Knowledge of an issue or a process is usually expressed as a theory which is intended to provide an organized system of ideas to explain the relationships found in the empirical world (Van Dusseldorp 1993:310).

In the late 1960s according to McConnell (1981) a distinction was made between three types of planning theories which relate to different aspects of the planned development process: 1. substantive theories in planning, 2. procedural theories of planning as well as 3. social theories for planning. In all three types of planning theories there are elements of knowledge for understanding as well as knowledge for action. The first are referred to as *explanatory* theories, which are usually empirically based and the second as *normative* or *prescriptive* theories which provide guidance on programme planning, formulation and implementation.

The *substantive theories in planning* are many and are based on the professional theories used by different disciplines to explain why the situation is the way it is and what needs to be done to change it for the better. Planners from different disciplines as well as from the same discipline, will view an issue from differing perspectives which reflect their conceptualization of a problem and views of causality. In regards to nutrition planning there are many different substantive theories in planning which are used to explain malnutrition. Each theoretical explanation in turn usually has a distinct intervention strategy to address malnutrition. For example, an agricultural planner may see the problem of malnutrition as one of inadequate food production due to low yields and erratic rainfall (descriptive theory), and therefore might advocate irrigation, high yielding drought resistant crops and fertilizer to improve food production (prescriptive theory). An economist may see the nutrition problem as stemming from low income levels and the lack of access to

food and would advocate employment generation programmes, regulation of wage levels and controlled staple food prices.

Even within the same discipline, differing opinions and planning theories may exist. This is especially true in regards to nutrition. One nutrition planner may view the problem of child malnutrition in a given community as being due to an imbalanced diet low in animal protein resulting from village mothers' ignorance of good eating habits. Another nutrition planner may view the problem in that same community as being due to too little food being eaten by children because of the problem of household food insecurity. This tendency for diverging opinions in planning underlines the importance of undertaking an adequate assessment and analysis of the local situation as part of the research and inventory step of the planned development process (see Figure 2.1). This may necessitate undertaking a survey if required to ensure that the planning theory used has an empirical basis which is relevant to the local circumstances. Only when a problem is adequately understood can appropriate actions be designed.

The *procedural theories of planning* concern how the planning process itself should be organized and implemented. For example, many times national level planning endeavors are carried out in a purely top-down fashion from the starting point of identifying the planning issue, to preparing the strategy and programmes as well as to end point of implementing the plans. Although the initial objective of a planning exercise may be to improve the nutritional status of village children, under such a system of top-down planning these children and their families are not viewed as active participants but rather as passive beneficiaries. On the other hand if the view of the problem is that the problem of malnutrition stems from the lack of empowerment at the level of the village families to improve their own situation, a large part of the solution would be to bring the villagers into the planning process as the central participants. Here the procedural approach would be participatory, or in other words bottom-up, in which the villagers are viewed as the catalyst

for the planning process as well as the driving force behind the eventual implementation of interventions.

The *social theories for planning* provide the larger background and national context of the political and moral structure of society within which planned development is supposed to take place. Social theories for planning explain the position and purpose of planning in society. The role of the state in planning provides the social and political structure in a government and hence determines the process through which objectives are defined, decisions made, resources allocated and programmes implemented.

A description has been given above of the three different groups of planning theories which as can be seen are closely interconnected. It can be concluded that there exist many different types of planning theories depending on the professional biases of the planners involved. This leads to differing opinions on the nature of the planning issue as well as on the types of actions which are thought to be needed. At the same time it needs to be recognized that understanding the underlying processes in the social and economic disciplines, across which the problem of malnutrition is straddled, often can be difficult. This is because the underlying processes related to these types of issues tend to vary considerably from place to place as well as may change over time (Van Dusseldorp 1993). In light of this as well as the many ambiguities which still exist in our knowledge both for understanding and for action, it is not surprising that planning attempts often fall short of original expectations. As pointed out by Johnston and Clark "**this ineffectiveness surfaces as a lack of consensus among advisors regarding the basic issues, constraints, and possibilities associated with development problems**" (Johnston and Clark 1982:18). Harmonizing such differences of opinion remains one of the great challenges to planners in their quest for realistic and effective solutions to address the problems of development.

*The uptake of knowledge*

There are a number of issues regarding the uptake of knowledge in the planned development process particularly its dual role for understanding and for action. There is a tendency, particularly in academic circles, to believe that planning is a well organized and objective process which can be improved by bringing better information in the form of new knowledge into the planning process (Bulmer 1988). New knowledge is important particularly in regards to contributing to the understanding of problems and the processes which need to be influenced. However, the academic view that new knowledge and better information can greatly improve planning and decision making needs to be evaluated in light of the issues and realities encountered in practice which affect the uptake of knowledge in the planning arena.

These issues include: first, the communication gap which often exists between the information generated by researchers and the information needed by planners; second, the demand for information; third the presentation of that information and the existence of an entry point in the planning machinery through which the new information can be channelled; and fourth other important factors concerning the political economy of a country.

Regarding the first issue experts have identified that a gap often exists between the typical information produced by researchers and that which is needed by planners in government (Lindblom and Cohen 1979; Mason *et al.* 1984; Bulmer 1988; UNICEF 1991a; Van Dusseldorp and Southwold 1994). Whereas planners need information which is simple, precise and gives clear prescriptive recommendations on what type of actions to take, more often than not the reports produced for them by researchers are complicated, ambiguous and not action oriented. Part of the problem is that often those generating information may not understand what is required by decision-makers, hence they provide inappropriate information which is not useful for decision-making. It is important that a dialogue exists

between information generators and users from the very start to ensure that the data which are collected and the information finally produced match the needs of the decision-makers.

The second issue concerning the use of knowledge in planning is whether or not a demand exists for that type of information. Information is only called for and used by decision-makers if they consider it to be important to them from either a professional or a personal standpoint. This is particularly true for issues under their jurisdiction and for which they are held accountable. Information on issues which have been defined as important development objectives would be sought more than information on issues not considered to be important by the existing power structure. For example, it would be expected that the minister of finance would demand information on the rate of inflation and that the minister of agriculture would demand information on national production yields since both these individuals are held responsible for the growth of these two sectors. However data on human welfare, for example on the levels of child malnutrition, are rarely demanded by ministers from any sector since in most countries no one in government is held directly responsible for these issues. If political sensitivities exist on certain issues, for example malnutrition or poverty, this may in fact stifle demand for information on these topics.

Related to the issue of the demand for information is that decision-makers may not realize the importance of certain issues in development and the usefulness of information on such issues for their own work. As a result information on these issues is never sought. This is particularly true with nutrition information since malnutrition is many times misunderstood and often erroneously viewed as a medical or a dietary related problem under the sole jurisdiction of doctors or home economists. But as will be discussed in the second half of this chapter, the issue of nutrition concerns many different sectors and levels of child malnutrition provide a good indicator of human welfare, especially of social, agricultural, health and economic conditions (Mason *et al.* 1984; ACC/SCN 1990).

The third aspect regarding the uptake of knowledge in the planning process is the way in which information is presented to the decision-makers. This includes several issues. First scientific data needs to be transformed into information which is meaningful to planners. This requires the right type of data analysis and a final presentation of the information in the most effective manner possible using a language which is understandable to the end users. If information is presented in lengthy and highly technical reports, the odds are that these documents will never be read. Related to the issue of information presentation is the issue of dissemination and the importance of having an entry point within the government structure which can take up the information produced by researchers and incorporate it into the planning process. This is usually an office but can also be an individual under certain circumstances should no office exist.

Fourth, a few last comments are needed on the political factors which may influence the uptake of information in the planning process and the decisions which are finally taken. This relates to the issue of whether the political will exists in a government to take action on certain issues. As touched upon earlier, decisions are rarely made on a purely rational and objective basis since a variety of professional and personal influences can get in the way and sway the final actions taken. Although it can be argued that accurate and current information is important for planning, in practice other factors in the political economy of a country may have a greater impact on decision-making than the quality or quantity of information available:

**"New knowledge is but one further element to add to an already boiling pot. Policy-making as a process of muddling through is at least as plausible as one of it being a rational, knowledge driven process. This is not to say that enhanced knowledge has no influence upon the way in which policy problems are handled but, rather, that this influence seems more likely to be indirect, diffused and slowly percolating into the awareness of policy-makers" (Bulmer 1988:49).**

Each group of actors involved in development planning, from politicians, senior government bureaucrats, planners, donors, researchers and clients have their own professional and

personal interests at heart and will usually act accordingly to maximize their chances to achieve what they consider to be best for them (Heaver 1982; Pinstrup-Andersen 1993a). As mentioned earlier, the planning arena can become a struggle for scarce resources. The dynamics of the decision-making process in planning has been aptly described as "a **staggering variety of people and organizations, all pulling, pushing, and otherwise interacting with each other in pursuit of their various interests**" (Johnston and Clark 1982:11). Carefully thought out plans can easily be thwarted should a powerful interest group find the planning objective or proposed programmes runs against what they perceive to be their own vested interest in terms of money, power and prestige.

#### **2.1.5 Concluding remarks**

In summary, although the theory of the planned development process appears simple at face value, many challenges confront planners in putting theory into practice. The description of muddling through policy-making contains a large element of truth. In addition, new endeavors in development planning rarely take into account the lessons learned by previous generations of planners and all too often these past experiences are lost. Competing theories on the nature of the issues to be addressed by the planning process and what approach is needed may lead to conflicts between planners. Beyond these professional issues are those factors in the political economy which affect the decision-making process. The environment within which policies are formed, plans drafted, final decisions made and programmes implemented can never be described as neutral or objective in any sense.

In some of the discussion presented above on the theory and practice of the planned development process reference has been made to nutrition issues in order to illustrate certain points. The second half of this chapter will focus specifically on nutrition planning in developing countries and includes an overview of the major issues and challenges which exist in addressing the problem of malnutrition in the planned development process.

## 2.2 Nutrition planning in developing countries

### 2.2.1. Introduction to malnutrition

For the purposes of this thesis malnutrition is defined as "the pathological condition brought about by the inadequacy of one or more of the essential nutrients that the body cannot make but that are necessary for survival, growth and reproduction, and for the capacity to work, learn, and function in society" (Berg 1987a:4). There are different types of malnutrition according to the type of dietary deficiency which exists. Inadequate intake of food energy, which for many also carries over to inadequate protein intake, has been broadly termed protein energy malnutrition (PEM). PEM is the result of either infectious diseases or insufficient food intake or most commonly a combination of the two. By the end of the 1980s it was estimated that 20 percent of the world's population, or in other words 786 million people, were consuming inadequate dietary energy<sup>1</sup> (ACC/SCN 1992:2).

Deficiencies in micronutrients are also important as well as common especially for iron, iodine and vitamin A (ACC/SCN 1992). During the 1980s 370 million women (15-49 years old) were anaemic, 211 million people of all ages were iodine deficient and close to 14 million children under five years were vitamin A deficient. Deficiencies in these micronutrients are known to cause increased morbidity and mortality as well as other adverse functional consequences (UNICEF 1993a; ACC/SCN 1993b).

The focus of this thesis is on the problem of PEM in children<sup>2</sup>. Apart from estimating dietary intake, another method commonly used to assess PEM is through measurements of child growth, especially weight and height, which can be compared to internationally

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<sup>1</sup> Inadequate energy intake (calories/capita/day) was defined as less than 1.54 BMR (basal metabolic rate) on average over one year (ACC/SCN 1992)

<sup>2</sup> The usage of the term malnutrition in this thesis is meant to be taken as protein energy malnutrition unless otherwise stated.

accepted standards<sup>3</sup>. It has been estimated that in 1990 184 million preschool children were malnourished as defined by an inadequate weight for age (ACC/SCN 1992). This amounts to 34 percent of the world's underfive population. Sub-Saharan Africa is the only area where no improvement has been seen in the past fifteen years in the levels of malnutrition. In 1975 it was estimated that about 31 percent of underfive children in sub-Saharan Africa were underweight. This level remained at 30 percent in 1990. However, due to the high rates of population growth, in absolute terms the number of underweight children has risen dramatically from 18.5 million in 1975 to 28.2 million in 1990.

### 2.2.2 Nutrition in national development

In order for malnutrition to be eradicated the attitude of those in charge of the power structure of a country must be that *nutrition matters*. Therefore before preceding further it is necessary to justify why nutrition matters in development since this forms the central basis of this thesis.

There is adequate justification for why malnutrition needs to be eradicated. Eliminating the problem of malnutrition and the human suffering with which it is associated has a high ethical justification in and of itself. In recent years there has been a growing body of opinion that nutrition should be seen as a basic human right (Eide, Oshaug and Barth Eide 1991; Grant 1992; Jonsson 1992, 1993a; Barth Eide 1993). Child malnutrition also increases the risk of morbidity and mortality. Of the 15 million children who die each year malnutrition is the contributing cause of death in one-third of the cases (Pinstrup-Andersen *et al.* 1993) The risk of increased mortality exists even in cases of mild and moderate malnutrition (Pelletier, Frongillo and Habicht 1993). As compared to an adequately nourished child the risk of dying for a certain disease is doubled for a mildly malnourished

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<sup>3</sup> It should be noted that there are several different methodologies by which anthropometric indicators (eg. weight and height) can be analyzed to determine nutritional status. In some instances the same terminology (for example, wasting, underweight and stunting) may represent more than one of these methodologies. Although percent of median is a popular methodology used even today, the World Health Organization has recommended instead that standard deviation scores (Z-scores) be used to define nutritional status. Under this system malnutrition is defined as a height for age, weight for height or weight for age Z-score less than -2.00 (WHO 1983, 1986)

child, tripled for a moderately malnourished child and 11 times higher for a severely malnourished child (Grant 1992).

There is also a growing body of evidence to provide the economic justification for the eradication of malnutrition. Malnutrition has serious economic consequences not only for the individual affected but for the family, community and nation. This is because poor nutrition increases the risk of morbidity, impairs cognitive development and reduces school performance (Tompkins and Watson 1989; Levinger 1994). Work capacity and labour productivity in adults are also adversely affected by malnutrition during childhood and adulthood. In an expansive review by Pinstrup-Andersen *et al.* (1993) the economic consequences of malnutrition include not only the economic costs due to lower worker productivity but also the costs of health care and social programmes required for dealing with malnutrition, as well as lower school performance, higher educational costs and the lost productivity of care givers because of child malnutrition. On the basis of an economic model constructed to study these costs, these researchers conclude that the global economic loss due to stunting (low height for age) is US \$ 8.7 billion annually which is equivalent to one-fourth of the total health expenditure of all developing countries (Pinstrup-Andersen *et al.* 1993).

International nutrition experts provide a convincing argument that nutrition should be seen as an integral part of the development process and that improvement in nutrition should be viewed as an objective in a variety of sectors. (Mason *et al.* 1984). By the beginning of the 1990s it has been agreed that the causes of malnutrition are many and deeply rooted in socio-economic, agricultural and environmental conditions. The poverty found in many areas of the developing world is characterized by lack of food, low income levels, inadequate child caretaking practices, poor maternal health, high disease levels and poor environmental sanitation. Survival under these conditions ultimately leads to the high rates of growth faltering found in young children and the measurable deficits in height and weight. Hence, it has been eloquently said that malnutrition is a sign of maldevelopment

(Williams and Mason 1982). As such the nutritional status of young children in developing countries, as assessed by child anthropometry provides a good indicator of a country's overall socio-economic development (Mason *et al.* 1984; Quinn and Williams 1985).

### 2.2.3 Nutrition as a complex issue

The issue of child nutrition in developing countries is not a simple one, rather it is extremely complex. It epitomizes all the difficulties associated with the planned development process described in the first section of this chapter, plus brings with it other complexities associated with the nature of the malnutrition problem. Throughout this century there have been many difficulties in arriving on a consensus on malnutrition and its causes, especially what should be done. There is no doubt that the goal to eradicate malnutrition is not only desirable but extremely noble. However what may be desirable may be hard to accommodate in reality considering the huge size and complexity of the malnutrition-poverty web as compared to the limited resources which are available in developing countries.

Some of the complexities of malnutrition arise from the fact that nutrition is not a sector in and of itself. As a result nutrition becomes everybody's concern, but no one's responsibility. Without constant attention nutrition is many times overlooked in the planning process. In addition, the field of nutritional science has many facets and encompasses medicine, biology, sociology, agriculture, economics and education, to name but a few. As a result this diverse array of theories, professional biases and experiences has resulted in many different views of the problem of nutrition in developing countries and what to do about it.

Apart from the wide range of professional views regarding the scientific side of malnutrition, on the political side there are additional complications. Malnutrition tends to affect the dispossessed members of society who do not have a voice in the allocation of resources. As a result nutrition issues are not usually high up on the agenda of the powers

that be. In many cases nutrition is left off the agenda altogether. Because of its close association with poverty, the topic of malnourished people may be considered to be a taboo issue with sensitive political undertones. This was the case in Malawi. Factors in the political economy of a country can lead to a complete avoidance of tackling the structural aspects of malnutrition and poverty by reframing the nutrition problem as an apolitical issue soluble by technological fixes.

#### **2.2.4 Schools of thought in nutrition planning**

The subject of malnutrition provides a good example of the lack of consensus and the conflicts which arise between development planners. Since nutrition is the meeting point of the social, economic, and health sciences it embraces all the individual complexities of each of these disciplines. Nutritional science provides a good example of the diversity of the schools of thought which can exist within a single discipline. For example, one group of nutrition planners may conceptualize the malnutrition problem as being the result of ignorance and therefore they might advocate nutrition education programmes to teach people what to eat. Another group may see the problem as being too little high quality protein in the diet and might promote animal husbandry projects and dairy schemes to increase the production and consumption of animal protein. Yet another group may see the problem as being inadequate food intake which stems from inadequate access to food at the family level. This group might promote agricultural production and income raising programmes to improve the food security of low income families.

Nutrition planning in developing countries is also subject to planning fashions in a 'here today, gone tomorrow' mode. Whilst micronutrients were seen as the answer to malnutrition during the 1930s and 1940s, protein became the magic bullet cure during the 1950s and 1960s, and was later replaced by a more structural view of the problem as being too few calories in the 1970s and 1980s. As we enter the 1990s the popularity of micronutrients, and to a lesser degree protein, are making their comebacks on the agendas of nutrition planners (WHO *et al.* 1991; ACC/SCN 1993; Waterlow 1992; World Bank

1993). The failure of the debate on nutrition in developing countries to make cumulative progress in the content of its theories reflects what the historian James Ravetz calls a sign of immaturity:

**"Watching the activity of a(n) immature field over a period of years, one does not witness the steady cumulation of new facts, perhaps superseding but never completely destroying the old. Instead, there is a succession of leading schools, each with a manifesto which is more impressive than its accomplishments, and each fading into obscurity as its turn on the stage is over" (Ravetz 1971:368 as quoted by Johnston and Clark 1982:19).**

Johnston and Clark (1982) continue this line of argument and point out that:

**"the tendency of the development debate to proceed as a series of fads fits well with this general picture of the ineffective discipline... Successive fads (or schools) give little impression of building on the foundations left by their predecessors. Their attitude is more one of dancing on an enemy's grave" (Johnston and Clark 1982:19).**

The substantive theories used in nutrition planning can basically be divided into two extreme views: the technical school and the structural school. In the technical school nutrition is viewed as a science concerned with the biological processes whereby the body maintains the effectiveness of its internal structure and organization in the face of varying supply of nutrients (Harriss and Payne 1984). The key issue is the dietary balance of certain components of food and how this can be optimized to promote better health and nutritional wellbeing. The focus is mainly on dietary quality, particularly in terms of protective foods which are high in such nutrients as vitamins, minerals and protein. Often the underlying problem is viewed as ignorance of a well balanced diet. The solutions are seen as technological interventions, for example, improved plant breeding schemes to grow staple grains with a better essential amino acid content, food technology projects to produce high protein child weaning mixes, or the provision of capsules of vitamin A or iron or injections of iodine. Nutrition education programmes based on the concept of a balanced

diet and the three food groups to show people how to eat more intelligently often forms a major part the technological school's strategy to combat malnutrition.

At the other end of the spectrum is the structural school where nutrition is viewed as an art in which skills involving economics, agriculture, health and sociology, amongst others, are used to increase the access of people to food as well as to other basic necessities such as health care, education, clean water and sanitation. On the dietary side the underlying cause of malnutrition is seen as the inability of families to obtain sufficient food, especially in quantity but also quality, to satisfy basic nutritional requirements. However, problems with inadequate child and maternal care as well as high levels of disease, inadequate health care and poor water and sanitation conditions are also recognized as underlying factors contributing to malnutrition. A large part of the solution is seen as improving overall socio-economic conditions. Followers of the structural view tend to focus on the larger societal problem of poverty which requires a broad perspective to address the processes which cause people to be poor.

A problem with the view represented by the technical school is that it bypasses the issue of poverty and as such does not address the root causes of the malnutrition problem (Worboys 1988). As such in some countries the technological school may present the most politically acceptable option for addressing malnutrition if the country's leadership places low priority on poverty alleviation. A challenge in the approach taken by the structural school is that efforts to address the poverty problem can become immobilized or lost in the complexity and magnitude of such a daunting task especially if the political will does not exist.

The debate between the followers of the technological school and the structural school remains heated even today (Field 1977; Berg and Austin 1984; Harriss and Payne 1984; Berg 1991; Csete 1993). In this day and age, however, it is unusual to find an 'either or'

situation in terms of which approach is taken to combat malnutrition. Instead the approach now taken often is a blend of both the technical and structural schools.

A view of the malnutrition problem which has become popular in the late 1980s and which arose from the structural school in the late 1980s is shown in Figure 2.2. This is the UNICEF conceptual framework of the factors affecting young child nutrition. Three important underlying causes to child malnutrition are highlighted in the Conceptual Framework and these include: 1.) *inadequate household food security*, 2.) *inadequate child care and maternal health*, and 3.) *insufficient health services and environmental conditions*.

Going hand in hand with the Conceptual Framework is the Triple A Approach (shown in Figure 2.3) which represents the important role of information in a continuous process of *assessment-analysis-action*. The underlying philosophy is that an adequate assessment and analysis of the nutrition situation is necessary for the design of appropriate actions. The Triple A cycle is meant to be viewed as an iterative planning process since actions taken can be evaluated by further assessment and analysis which then serves as the basis of further actions. Essentially the Triple A cycle is a much simplified version of the Planned Development Cycle shown in Figure 2.1. The view of child malnutrition as represented in the Conceptual Framework shown in Figure 2.2 will be used in Chapter 5 as the basis against which the understanding of the causes of child malnutrition in Malawi will be studied at different points in time.

The above introduction illustrates some of the issues related to nutrition planning. Because of the diversity of professional views on the problem of malnutrition, the planning attempts made at introducing nutrition programmes have been extremely varied. Reflecting the pet concerns of nutrition experts from different disciplinary backgrounds, the history of nutrition programmes in developing countries has resembled a potpourri of ideas. The diversity which exists in global nutrition planning approaches and how they have changed over time will be discussed in more detail in Chapter 5.

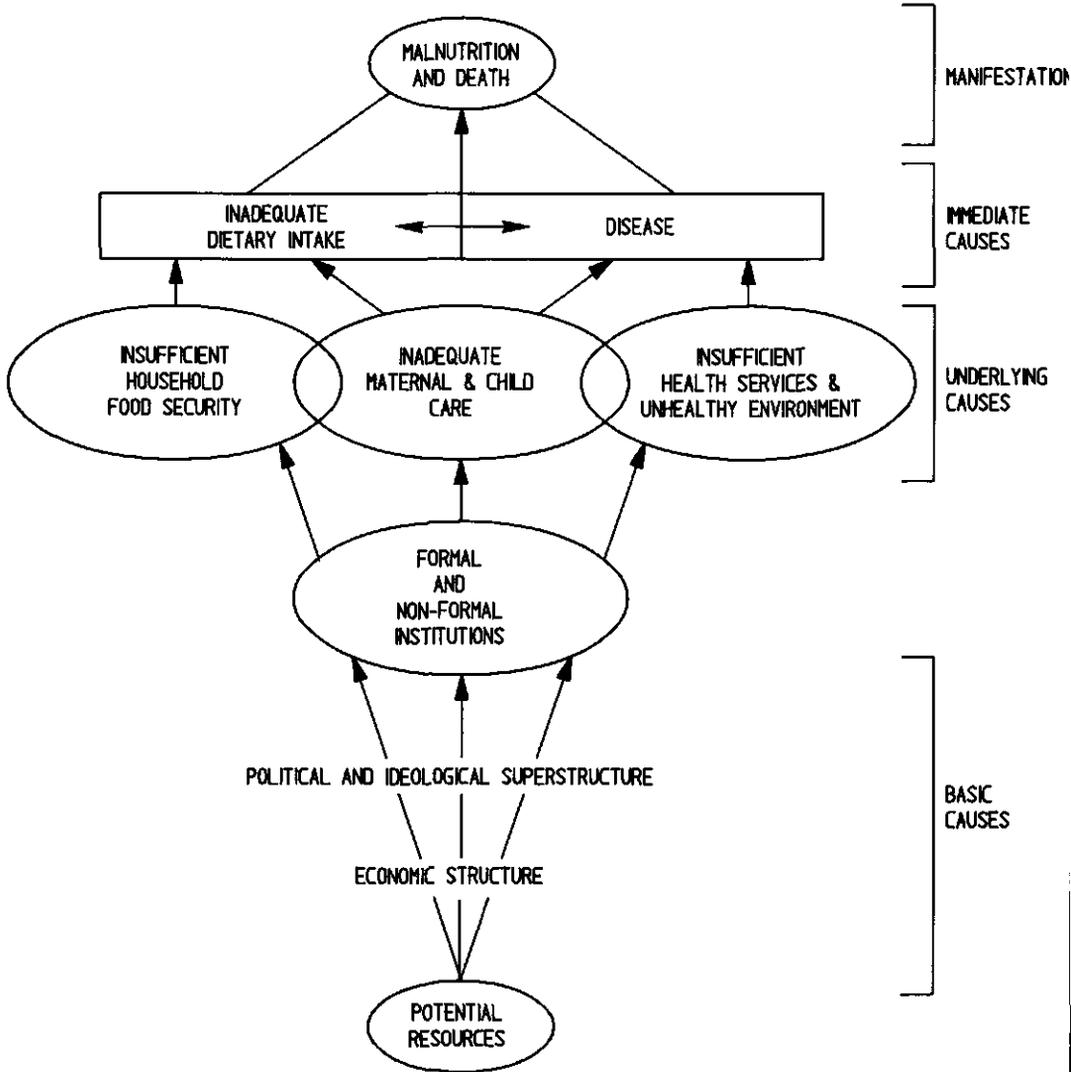
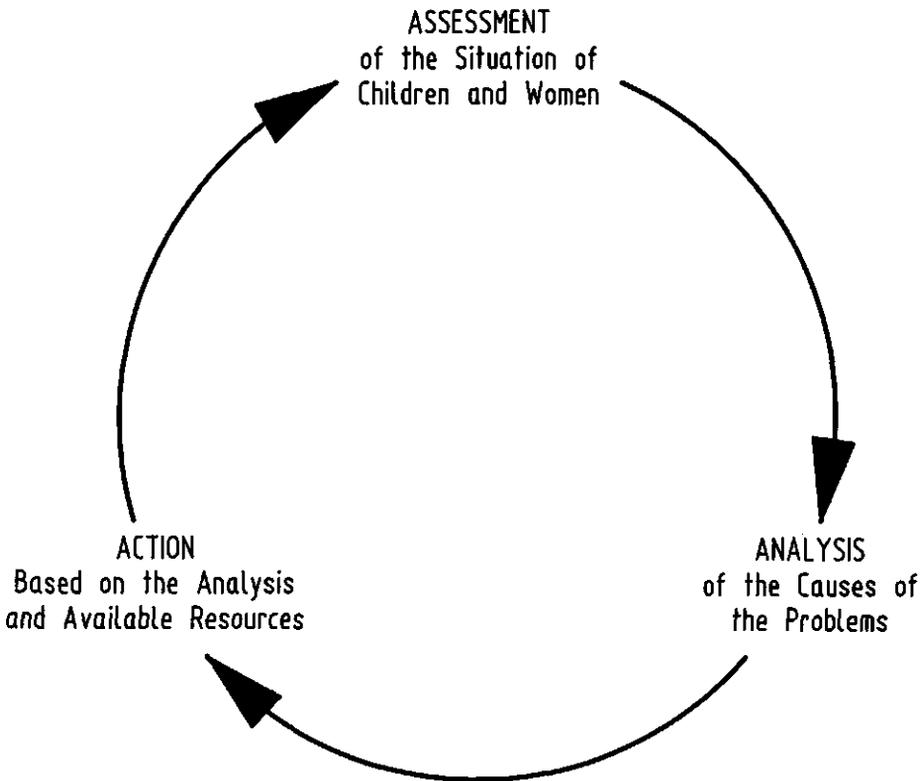


Figure 2.2: Conceptual framework of young child nutrition

(Source: UNICEF 1990)



**Figure 2.3: The Triple AAA Cycle**

(Source: UNICEF 1990)

### **2.2.5 Political economy issues**

It is also important to appreciate the factors related to the political economy of developing countries which have shaped the perception of nutrition. This may help to explain some of the problems encountered with integrating nutrition into the development agenda of economists, agriculturalists and other experts from sectors outside of nutrition's traditional home-base in health.

In a recent review of the political economy of nutrition policy and planning Field (1993) identified four important deficiencies often associated with nutrition that may account for the lack of successful nutrition planning examples. *First*, he argues that nutrition as an issue lacks salience. In other words, it is a difficult issue to activate in government because of its lack of prominence on the agenda's of the powers that be. Some may argue that this may arise from what was described above which is that nutrition has been marginalised as a small sector which only concerns 'nutritionists' which automatically absolves others of the taking responsibility for it (UNICEF 1991). *Second*, there is typically little or poor advocacy surrounding nutrition, since those who it tends to affect are typically poor and have little power in the political arena. *Third*, nutrition tends to lack clear policy definition and guidance and as a result it is often difficult to know what to do about nutrition problems and how to go about doing it. The difficulties in knowing how to approach the problem were clearly illustrated in the previous section. The *fourth* deficiency is that nutrition is often subject to political gestures which may contain little real commitment.

Field also argues that certain individuals in government are fundamentally important for moving ahead to address the malnutrition problem. These include the political leadership and senior government representatives who are needed to rally the cause of nutrition and **"heighten its salience in both policy space and the public mind, adorn it with compelling language and imagery connoting vision as well as urgency, compassion as well as realpolitik, and send signals to relevant government institutions that this is an issue whose time has come"** (Field 1993:176). Field also identifies senior officials in the ministries of health and agriculture, usually at the level of Principal Secretary, as being of central importance in helping to ensure that the concern for malnutrition, including the operational commitment to do something about it, survives amongst the many competing issues and demands for limited resources in their respective sectors.

Pinstrup-Andersen (1993a, 1993b) argues that food and nutrition-related policies and programmes are susceptible to political economy considerations and manipulations as any other government development policies and programmes. He emphasizes the need to understand the complete policy arena in regards to who is likely to win and lose under different strategy options for reducing malnutrition. This includes understanding the motives of all the actors involved:

**"While nutrition is a convenient justification, other interests are being served. Knowing what those interests are and whom they serve may be an important tool for the enhancement of the nutrition effect. Could the most powerful interests be served by some alternative policy that would increase the nutrition effect without compromising the political sustainability of the policy" (Pinstrup-Andersen 1993a:227).**

In regards to the frequent failure of past nutrition planning efforts, particularly the multisectoral efforts of the 1970s and 1980s, Pinstrup-Andersen concludes that a major oversight was the lack of recognition to the constraints in the political economy concerning the existing power structure and vested interests which made it virtually impossible to implement broad-based policies and programmes to improve nutrition in the poorer segments of the population. In other words, for nutrition planning to have a better chance of success it must be undertaken with a full understanding of the dynamics of a country's political economy.

### 2.2.6 Concluding Remarks

Reviewers of past nutrition planning attempts claim rightly that there is little cause for celebration as the numbers of malnourished children are higher today (184 million) than fifteen years ago (168 million). In recent years there has been a growing debate on the role of *nutritional sciences* as a discipline and the role of *nutritionists* as the professionals to combat the problem of malnutrition in developing countries (Rivers 1979; McLaren 1983; Berg 1987b; Field 1987; Berg 1991; Csete 1993; Field 1993; Seaman 1993; Jonsson 1993a, 1993b). Some of the complaints voiced have been that too little attention has been given

to the implementation side of nutrition programmes since all the focus has been placed on answering the question of *why* malnutrition exists and too little on *what* needs to be done and *how* to do it (Berg 1991). In addition implementation and management of nutrition programmes have been identified as areas of past neglect which may account for the unimpressive results (Berg 1991; Field 1993).

Another view is that nutrition is fundamentally an area of biological science and is not a subject organized to put knowledge into practice (Seaman 1993). Along similar lines it has been claimed that the *science of nutrition* has long been dominated by the *science of human nutrition*. Jonsson (1992, 1993b) argues that the problem of malnutrition is a societal problem and that in order to address it a *science of nutrition problems in society* is needed which will also require an underlying theory. He argues a first step in this direction is the conceptual framework (Figure 2.2) which presents not a quantitative model as such but rather a set of logical entities, their interconnections and likely causal relationships.

What is clear is that many controversies remain regarding the way to address the problem of child malnutrition in developing countries. In combination with the fundamental challenges posed by the process of planned development, the additional complexities imposed by nutrition planning call for much more thought to be given to future strategies which also incorporates lessons from the past.

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## CHAPTER 3

### POLITICAL AND DEVELOPMENT PROFILE OF MALAWI<sup>4</sup>

A summary of Malawi's history, political structure, policy framework and major development issues will be provided in this chapter in order to give adequate background against which the country's development planning process in general and nutrition planning in particular can be viewed. Chapter 5 presents a more detailed description of the key policy and development issues which prevailed during each of the three time periods under study.

#### 3.1 Brief political history

Malawi's continuous contact with the outside world began in the late 1850s with the arrival of the Scottish explorer, Dr David Livingstone, who had sought out on his lonely trek through Africa to bring christianity and commerce to areas being decimated by the slave trade (Ransford 1966). Finally settling in the north of the country, Livingstone established a long-standing tradition of missionary education which extended to hospital infrastructure as well as to some commercial ventures.

To counter Portuguese expansion in central Africa, in 1891 the British Government declared Nyasaland, as the country was then called, a protectorate and this marked the beginning of over seven decades of British rule. The Government of Nyasaland administered the country through a policy of 'indirect rule' in which legislation was implemented through the traditional structure of native chiefs. By the mid-1920s it had begun to be accepted by the British that Nyasaland held little potential for European style agricultural development (Pryor 1990). Fewer than 500 British farmers lived in the colony at any one time. Mineral

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<sup>4</sup> Part of this chapter is based on the paper "Malnutrition, household income and food security in rural Malawi" by V.J. Quinn, M. Chiligo and J. Price Gitinger, *Health Policy and Planning* 5(2):139-148.

resources had not been found and the prospect of industrial development was pessimistic. The greatest resource the country had was an abundant supply of cheap labour which did earn foreign exchange through the emigration of men to the mines of Northern Rhodesia (now Zambia), Southern Rhodesia (now Zimbabwe) as well as South Africa.

Although the country was certainly poor when the British first encountered it, little investment was made under their rule. As described by Pachai (1979) the story of Malawi's underdevelopment could be described as one of official neglect. Resources were extremely scarce in terms of trained manpower, equipment and money. To generate internal revenue a hut tax was imposed and this later became an unpopular issue with the African population. After World War II the outlook of the British authorities to Nyasaland changed somewhat for the better and some investments were made to improve commercial agriculture. By the time of independence in 1964 the major foreign exchange earners were migrant labour, tea, tobacco and groundnuts (Pryor 1990).

In 1954 the British government formed the Central African Federation which brought together Nyasaland with Northern Rhodesia and Southern Rhodesia into an economic alliance (Pryor 1990). The educated African population in Nyasaland was strongly opposed to the Federation because of concern that the racist policies of Southern Rhodesia might infiltrate the country as well as the lack of any clear economic benefits for Nyasaland's inhabitants. In time the break-up of the Federation became a political rallying cry for the nascent independence movement which had begun to form within the country (Short 1974).

After disappointing results in forming an effective political movement with which to confront the British Government and disband the Federation, senior Africans in Nyasaland finally identified Dr Hastings Kamuzu Banda as the man who could lead them to freedom from British colonial rule. Dr Banda had received his medical degrees in the United States and the United Kingdom and had lived in England for many years working as a medical doctor. In July 1958, after nearly a 40 year absence, Dr Banda finally returned to the land

of his birth at the age of 60 years to lead his country through a turbulent period of political unrest and mass mobilization against the British administration. At one point the British government imprisoned Dr Banda for 13 months, however, this served to increase his popularity among the people of Nyasaland. By 1963 the end goal was finally achieved when the Central African Federation was dissolved.

Shortly thereafter in 1964 Malawi gained independence from British colonial rule and Dr Banda was named as the country's prime minister. The first of several internal political struggles occurred in 1964. This involved Dr Banda's policy on Africanising senior Government posts which in the opinion of left-wing elements within the cabinet was too slow and conservative. In what was to be known as his style of control Dr Banda quickly overwhelmed his opponents who fled the country in exile. By 1966 Malawi was declared a republic. Soon afterwards the Malawi Congress Party (MCP) was proclaimed the only legal political party allowed to exist and Dr Banda made its leader. By 1971 Dr Banda had firmly consolidated his power and had constitutional amendments enacted which invested him as Life President of the Republic of Malawi.

The political system which existed in Malawi for the next 30 years perhaps could best be described as a right-wing authoritarian state. The role of the state in the lives of the Malawian people, in other words the social theory for planning, was based on the MCP's cornerstones of Unity, Loyalty, Obedience and Discipline. Dr Banda ruled Malawi with absolute authority and the MCP became omnipresent and infiltrated all levels of society from the village up to district, regional and national levels. Development initiatives also become intertwined with the political structure especially in rural areas with the involvement of the paramilitary youth brigade, the Malawi Young Pioneers, in agricultural development and later of the women's political group, Chitukuko Cha Amayi M'Malawi (CCAM), in women's development projects.

The control of information was an important feature of the rule of Dr Banda and the MCP. The only two newspapers, the weekend Malawi Times and the Daily Times, were both owned and controlled by the MCP as was the only radio station. Foreign journalists were banned for many years, television never allowed and imported reading materials and videos heavily censored of political commentary regarding Malawi, in addition to material considered to be immoral (Kelso 1993). The use of propaganda and the censorship of politically undesirable information was a central element on the agenda of the country's leadership. The strength of the propaganda machine and the control asserted by the political system over the lives the Malawian people was immense. The following quote taken from F.A. Hayek (1944) describes the control of information under a totalitarian state and was written during the Second World War in response to the rise of fascism in Europe. It is presented here since it so aptly captures the atmosphere found in Malawi from 1964 until the late 1980s regarding the control and use of information:

**"the effect of propaganda in totalitarian countries is different not only in magnitude but in kind from that of the propaganda made for different ends by independent and competing agencies. If all the sources of current information are effectively under single control, it is no longer a question of merely persuading the people of this or that. The skilful propagandist then has power to mould their minds in any direction he chooses and even the most intelligent and independent people cannot entirely escape that influence if they are long isolated from all other sources of information" (Hayek 1944:114).**

Such was the situation in Malawi for nearly 30 years after independence. As will be described in detail in Chapter 5, the flow of information regarding food security and poverty issues was especially tightly controlled to prevent any contradictions to the image the politicians had created of the country. This image was that Malawians were a well-fed, well-clothed and well-housed people who had prospered under the leadership of Dr Banda. Officially the problems of hunger, food insecurity and poverty did not exist in the eyes of the country's leadership, although statistics would later show otherwise.

In early 1992, after nearly 30 years of political dormancy, a wind of change blew across Malawi with the emergence of opposition to the one-party state of Dr Banda and the MCP. This was triggered by the public reading of an Easter pastoral letter written by a group of Catholic bishops which expressed concern for human rights issues in the country. As a result a number of public pressure groups formed and began to lobby that these issues be addressed, especially poverty, inequality, freedom of speech and press as well as the release of political prisoners. For many years the human rights problems within Malawi had been ignored by the Western donors, no doubt because of the country's capitalistic leanings and anti-communism stance. However, with the end of the cold war between east and west in the late 1980s and the subsequent easing of the old western imperative to guard against communist and socialist tendencies, some of the country's large donors began to take a more objective look at Malawi and the country's human rights record. As a result at the Consultative Group meeting held in Paris in 1992 Malawi's western donors suspended US \$74 million of non-humanitarian aid to the country until the time when evidence could be produced by the Government that positive and irreversible steps had been taken to address human rights issues. The donors' financial leverage finally resulted in an agreement by the Government to hold a national referendum to allow the population to vote on whether they wished to change to a multi-party democracy or remain as a one-party state under the MCP. The results were overwhelmingly in favor of discarding the one-party system and led to the scheduling of multi-party elections for June 1994. The results of the 1994 elections was that the MCP was voted out of office and replaced by Malawi's first democratically elected Government.

### **3.2 Government and central administration**

Malawi is divided into three regions - Northern, Central and Southern - and 24 districts. The administrative system consists of the Central Government, Local Government and Traditional Authorities (Malawi Government/United Nations 1993). The latter is supervised by the District Administration of Central Government.

The Central Government is organized through the Office of the President and Cabinet (OPC) which is responsible for many services including Economic Planning and Development. The Secretary to the President and Cabinet (SPC) also serves as the head of the civil service. In addition, there are 16 ministries which are headed by Ministers appointed by the Life President. The only exceptions are those sectors, for example agriculture, foreign affairs and works among others, for which Dr Banda personally held the ministerial portfolio and was involved in day-to-day decision-making. Each ministry also has a Principal Secretary who is overall in charge of substantive planning issues as well as administrative affairs.

The District Administration is the channel through which the Central Government reaches rural communities. Each of the 24 districts in the country has a District Commissioner who in turn is supervised by the Regional Administrator of that region. District Development Committees exist and below these Area Development Committees operate which consolidate several villages under a Traditional Authority. Each Traditional Authority has its own Chief. Below this there are Village Headmen who oversee the affairs of each village for the Chief.

The system of Local Government is organized on a single tier with urban councils and rural councils. A total of 35 local authorities exist which are responsible for providing certain services to the public, including primary education, non-primary road construction, markets, certain public health facilities and refuse disposal (Malawi Government/United Nations 1993).

Apart from its pro-Western stance on development issues which for many years put the country in good standing with the large donors from North America and Western Europe, Malawi also earned a reputation for its efficient, well-managed and accountable civil service (Kydd 1984; Gulhati 1989). In addition, it can be argued that these attributes, which are rarely found in the sociopolitical climate which typifies most African countries, helped to

reinforce a positive image of Malawi alongside of the country's impressive macroeconomic growth record, which will be discussed below.

However, despite these positive attributes of Malawi's civil service, in practice development planning has been held back by the highly centralized structure of the Government. The lack of decentralization and devolution in regard to decision-making and financial control to the local level has been identified as a major constraint limiting the effectiveness of past development efforts (Malawi Government/United Nations 1993).

### **3.3 National development issues**

#### **3.3.1 Policy directions**

At the time of independence in 1964 Malawi was extremely poor and underdeveloped. According to a study by the United States Agency for International Development (USAID), the country's entire monetized economy was smaller than that of an American town of 16,000 inhabitants (USAID 1983). Only 33 university trained Malawians existed in the country and a sum total of 200 kilometers of paved road existed. Facing bankruptcy with large debts outstanding to Great Britain, the goal of the Life President was to achieve rapid macroeconomic growth as quickly as possible through the development of physical infrastructure and the promotion of an agricultural-led export strategy.

Unlike the directions taken by many of its African neighbors at independence which favoured the road to industrialization, since independence Malawi has always placed top priority on agriculture. The first Statement of Development Policy (DEVPOL I) 1971-1980 laid out in clear terms that the basic economic priority was to develop agriculture as quickly as possible as the country's export base (Malawi Government 1971). The social sectors, including health and education, were considered low priorities under this development strategy and received little attention. Instead priority was given to strengthening the country's infrastructure, including transport and communication, as essential preconditions

for promoting growth. This policy emphasis on macroeconomic growth through the development of agriculture and economic infrastructure continued up until the late 1980s in the form of the National Rural Development Programme (Malawi Government 1977) as well as the second Statement of Development Policies 1987-1995 (Malawi Government 1988). The key indicators used as the means by which the progress of the country's national development policy could be monitored were comprised of statistics on the macroeconomy, for example, growth of GDP, investment and savings. Very little attention was given to social statistics and the wellbeing of the country's people.

A central tenet in the national development policy from independence up until the present time has been the achievement of national food self-sufficiency, especially in maize which is the main food crop. This had also been a major concern of the Nyasaland colonial government (Pryor 1990). As will be discussed later in Chapter 5, Dr Banda's number one political motto was that Malawian people were able to feed themselves from the land. Above all the Life President insisted that Malawi must stand alone without depending on the food handouts of Western donors. Up until the late 1980s the concept of food self-sufficiency was in practice defined as the ability of the country at the national level to domestically produce enough food, especially maize, to satisfy market demands so that food imports would not be necessary. Until the late 1980s the question of meeting the population's nutritional requirements did not enter into the analysis of national food self-sufficiency nor was the analysis extended down to the household level. These issues are pursued further below under the section on food self-sufficiency and security.

### **3.3.2 Budget investment patterns**

Table 3.1 presents an overview of the Malawi Government's investment patterns (recurrent and development combined) by sector during the twenty year period from 1964 to 1984. Reflecting the Government's explicit policy priorities, since independence a major share of the budget has been spent on natural resources, comprised mostly of agriculture as well as

transport and communications. In comparison, the allocation to the social sectors of education, health and community development has been lower.

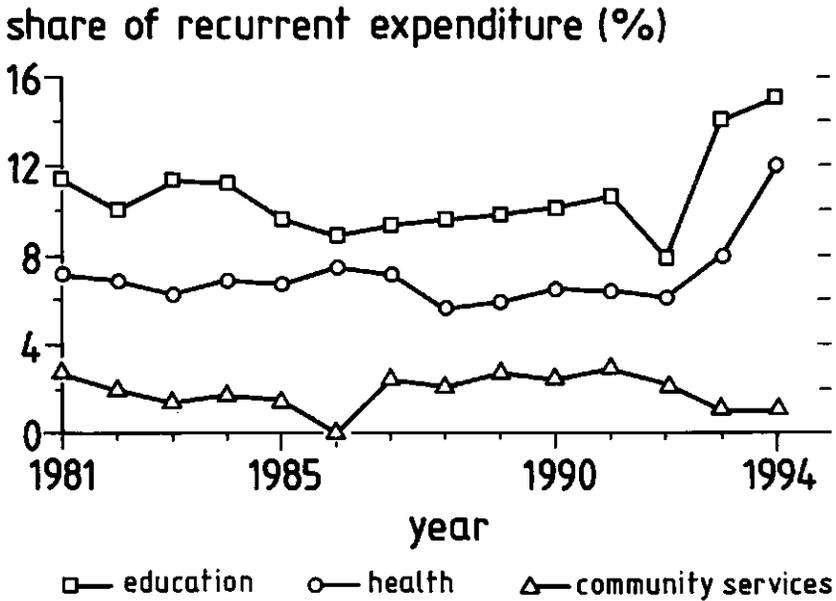
**Table 3.1: Proportion of central government expenditure (recurrent and development combined), by function since 1964<sup>5</sup>**

Sector	1964	1974/75	1984/85
general	11	10	8
defense	2	3	5
justice	8	5	6
education	13	11	11
health	5	6	7
community development	2	3	1
natural resources (agriculture)	8	16	11
transport/com munications	11	14	12
debt charges	17	12	28
pensions and gratuities	10	3	1
other	14	17	29
all combined	100	100	100

Source: Pryor 1988

<sup>5</sup> Only covers expenditures of central government. Only about one fifth of local government's expenditures are financed from their own revenues and central government's grants to local government are functionally classified in the central government's budget. Community development includes housing, culture, youth and sports, and social welfare; natural resources includes primarily agriculture (extension and investment); other services includes power, buildings, miscellaneous economic services.

Figure 3.1 shows the share of the social services in total recurrent Government expenditure from 1981 to 1994 during the period of macroeconomic adjustment.



**Figure 3.1 Share of social services in total recurrent government expenditure: 1981 to 1994**

(Source: Malawi Government/United Nations 1993; Malawi Government 1992)

As can be seen, after a gradual decline throughout the 1980s the budget allocations to health and education rose significantly over 1992 to 1994, from 6 to 12 percent for health and from 8 to 15 percent for education. These increases reflect the Government's adoption in 1990 of a national policy of growth through poverty reduction which places more emphasis on human resource development and stipulates more investment to be made in the social sectors, especially the primary services of health and education.

In respect to the low investment in the social sectors, in the past Malawi has compared poorly to other Sub-Saharan African countries which in 1978 as a group allocated on average about 26 percent of the total budget to the social sectors as compared to Malawi's 20 percent (Sahn, Arulpragasam and Merid 1990). For example, during the 1970s the proportion of the total budget allocated to health averaged about 5 percent - considered low even by the standards on the African continent (Malawi Government/United Nations 1993). The situation has improved in recent years with an average share of the total budget for health increasing to about 7 percent from 1984/85 to 1988/89 and to 12.5 percent in 1994/95, which now places Malawi in better standing (Malawi Government/United Nations 1993; Malawi Government 1994; World Bank 1994). A large proportion of the health budget, however, is allocated to curative health care, mainly the three urban hospitals. From 1983/84 to 1986/87 curative care received on average 82 percent of the recurrent budget as compared to only 6 percent for preventative health care (Malawi Government/United Nations 1993).

For many years in Malawi investment in education was also a low priority, especially primary education. For example, as shown in Table 3.1 the share of the total budget for education between 1964 to 1985 averaged 11 to 13 percent which was lower than the average figure of 15 percent in 1984/85 for other sub-Sahara African countries (World Bank 1990a). However, in 1994/95 the Malawi Government sharply increased the allocation to education in the total budget to 14 percent which pushes the country closer to the 1989 average of 18 percent for other countries in sub-Saharan African (UNDP 1992; Malawi Government 1994). However, there also exists a bias in education spending towards higher education levels, such as university education, although this situation has improved somewhat in recent years. For example, in 1981/82 primary education received 38 percent of the education budget with this increasing to 48 percent in 1989/90. However, university level education, in which only a small proportion of Malawian youth participate, received 25 percent of the budget in 1981/82 and somewhat less at 17 percent in 1989/90. In

1988/89 the average recurrent expenditure per university student was 188 times greater than that for a primary school pupil (Malawi Government/United Nations 1993).

Mention also needs to be made of the heavy dependence of the Malawian economy on outside financial assistance from donors. Over 70 percent of all development work is financed by multilateral and bilateral grants and soft loans (Malawi Government/United Nations 1993). In addition, the share of the Government's development budget financed by donors rose from 1984/85 to 1990/91 from 75 to 81 percent.

### 3.3.3 Macroeconomic performance

Considering the low resource base from which the country started at independence, Malawi was highly successful in achieving strong macroeconomic growth during the 1960s and 1970s. This was primarily the result of its agricultural-led export strategy with the major share of the revenue coming from the export of high value cash crops such as tobacco.

The country's GDP growth averaged about 4.9 percent during the 1960s and increased to 6.3 percent in the 1970s. This far out-paced the average GDP growth rate of 1.7 percent recorded for all other sub-Saharan African countries during the 1970s (Sahn, Arulpragasam and Merid 1990). Despite the rapid growth in population, Malawi's annual average growth of GNP per capita was able to grow at a rate of 2.9 percent between 1960 to 1970, a figure only surpassed by six other countries in the region.

By the late 1970s the macro-economic growth of the country was being hailed by development experts and the large financial donors as spectacular. Unlike her African neighbors, many of whom followed the socialist path to eventual economic ruin, Malawi pragmatically charted a development course based on free market enterprise. The World Bank's assessment of Malawi's achievements was that the "**progress achieved since Independence was remarkable**" (Kydd and Spooner 1986:35) and justified this statement

in terms of the country's impressive rates of growth of GDP as well as investment and savings.

However, by the end of the 1970s the macroeconomic success years came to an abrupt end when a series of exogenous shocks hit the foundation of the country's economy and necessitated a macroeconomic reform programme to be initiated in 1979 with the assistance of the large financial donors such as the World Bank, the International Monetary Fund and USAID (Sahn, Arulpragasam and Merid 1990). GDP recorded a negative growth rate of -0.38 percent in 1980 followed by a further drop to -5.25 percent in 1981. GDP regained growth in 1985 to 4.5 percent but this dropped sharply to 0.5 percent in 1987. However, by 1991 the economy appeared to be back on track with GDP growth recorded at a high of 7.8 percent. Unfortunately the country was hit by major drought in 1992, the most severe in living memory, which caused GDP to plummet to a negative growth level of -7.9 percent (Malawi Government/United Nations 1993).

Debt charges have also plagued the country since independence starting with its financial obligations to Great Britain (see Table 3.1 above). Expenditure from the total budget for debt charges averaged 17 percent in 1964, dropped to 12 percent in 1974/75 and jumped to 28 percent in 1984/85. The budget deficit as a percent of GDP was 12.5 percent in 1982, however, this dropped to 6.5 percent in 1990, only to increase to nearly 14 percent in 1992 (Malawi Government/United Nations 1993). As a result of the handicap placed on the budget by the large debt burden, expenditure in other sectors has been constrained.

### **3.4 Key development issues in Malawi**

In order to understand the development challenges facing the country, particularly from the standpoint of human welfare, a profile of some of the key sectoral issues found in Malawi is presented below which includes statistics on population growth, land pressure, agriculture development, food security, income trends, poverty, health and education.

### 3.4.1 Population

In reviewing Malawi's progress since independence a central issue has been that of population growth since the rapidly increasing number of Malawians has affected all aspects of development in the country. As shown in Table 3.2 over the forty year period from 1947 to 1987 the population has almost quadrupled from 2.2 million to nearly 8 million inhabitants. Between the 1977 census and the 1987 census Malawi's inter-censal growth rate was measured at 3.7 percent which places the country amongst the fastest growing of the world (Malawi Government 1991). This implies that in the future Malawi's population will double approximately every nineteen years.

**Table 3.2: Estimated population in Malawi from 1947 to 1987**

Year	Populations (millions)
1947	2.2
1957	3.0
1967	4.2
1977	5.6
1987	8.0

Source: Pryor 1988; Malawi Government 1991

The burgeoning population has also had significant ramifications on many aspects of the quality of life by increasing pressure on the country's limited natural resources, especially land. In this way population growth has acted as a brake on progress being made since the limited financial resources have had to be stretched more thinly over the ever increasing population. As will be discussed later in the first section of Chapter 5 concern for the deleterious effects of the rapidly growing population on the environment, especially in regards to food self-sufficiency, have existed in Malawi since colonial times (Hornby 1934; Nyasaland Government 1955; Berry and Petty 1992).

### 3.4.2 Land pressure

Close to 88 percent of the population live in rural areas and make their living from agriculture. However, as a result of the rapid population growth, as illustrated in Figure 3.2, from 1966 to 1987 there has been a sharp decline in available arable land per capita from 0.86 to 0.44 of a hectare. It has been projected that by the year 2000 available arable land will have decreased to 0.31 of a hectare per capita (Malawi Government/United Nations 1993).

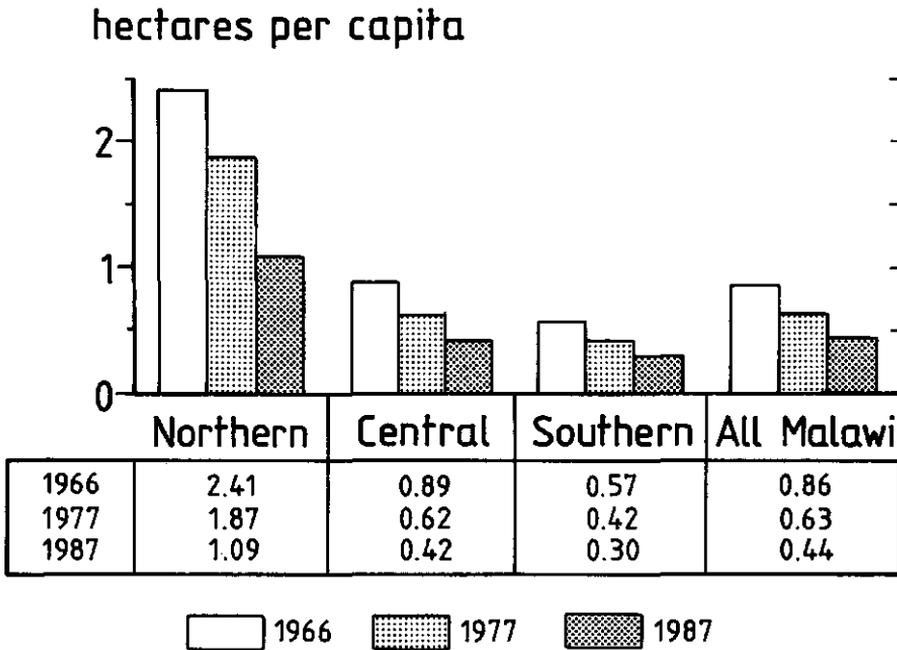


Figure 3.2: Arable land per capita: 1966 to 1987 by region

(Source: Livingstone 1983)

Table 3.3 compares the distribution of farm sizes from the two national sample surveys of agriculture conducted in 1968/69 and 1980/81. The proportion of very small farms below 0.7 to 0.8 of a hectare has increased from 29 to 37 percent during this twelve year period<sup>6</sup>. The average cultivated land holding also has declined over this same period from 1.54 to 1.14 of a hectare (Pryor 1988).

**Table 3.3: Size distribution of cultivated area: 1968/69 and 1980/81**

Year	Holding size (hectares)	Percent (%)
1968/69	<0.8	29
1980/81	<0.7	37
1968/69	0.8 to 1.59	34
1980/81	0.7 to 1.49	36
1968/69	>1.6	37
1980/81	>1.5	27

Source: Malawi Government 1970; Centre for Social Research 1988

The trends shown in decreasing landholding sizes suggest a likely deterioration in food self-sufficiency and security since farmers with less than 0.7 of a hectare using traditional methods are not able to produce enough food to meet their family's basic nutritional requirements (Malawi Government 1988). Even with modern technology these families will still remain dependent on off-farm income. **Food self-sufficiency** is defined here as the ability to produce enough food to fulfill nutritional requirements throughout the year and can be viewed at either the national or household level. **Food security** encompasses the concept of *access* to food and is defined as the ability to acquire food either through

<sup>6</sup> The plot size categories differ in the 1968/69 NSSA and the 1980/81 NSSA since in the first NSSA land size categories in acres were used, and in the last NSSA hectares were used. The cut-offs used in Table 13 were as close as could be calculated to give comparable figures over time using the tables and data presented in the two NSSA reports. One acre approximates 0.405 of a hectare

production, purchases or other exchanges to fulfill nutritional requirements throughout the year. Food security can also be viewed at the national or household level. In regard to nutrition the major concern is meeting energy requirements<sup>7</sup>. However, in Malawi the working definitions of both food self-sufficiency and food security have in practice been seen only in terms of fulfilling effective market demand at the national level. The issue of meeting the population's nutritional requirements or what was occurring at the household level never entered the analysis until the late 1980s as will be discussed in Chapter 5.

### 3.4.3 Agricultural development

By all accounts Malawi's successes in the agricultural sector have been impressive and have provided the basis of the strong macroeconomic performance. In 1993 just over 90 percent of all export earnings were derived from agriculture (Malawi Government/United Nations 1993). Agriculture accounted for an average of 37 percent of GDP during the 1980s and by 1991 employed about 80 percent of the country's labour force (Malawi Government/United Nations 1993). During the 1970s Malawi was only one of three countries in sub-Saharan Africa to exceed a 4 percent rate of growth of agricultural output (World Bank 1981a).

In Malawi the agriculture sector is dualistic with a commercial estate sub-sector which is mainly involved in the production of export crops such as tobacco, tea and sugarcane, and a smallholder sub-sector which is mainly engaged in subsistence agriculture and is dominated by local maize. A few words are first needed on land tenure. The smallholder sub-sector operates through a traditional system of customary land tenure. Land is allocated and controlled by the Traditional Chief and the village headmen under him (Malawi Government/United Nations 1993). Families who are allocated land are entitled to cultivate it within the family group but are not allowed to sell it or give it away to non-family members. The estate sub-sector is based on leasehold or freehold land tenure. Since

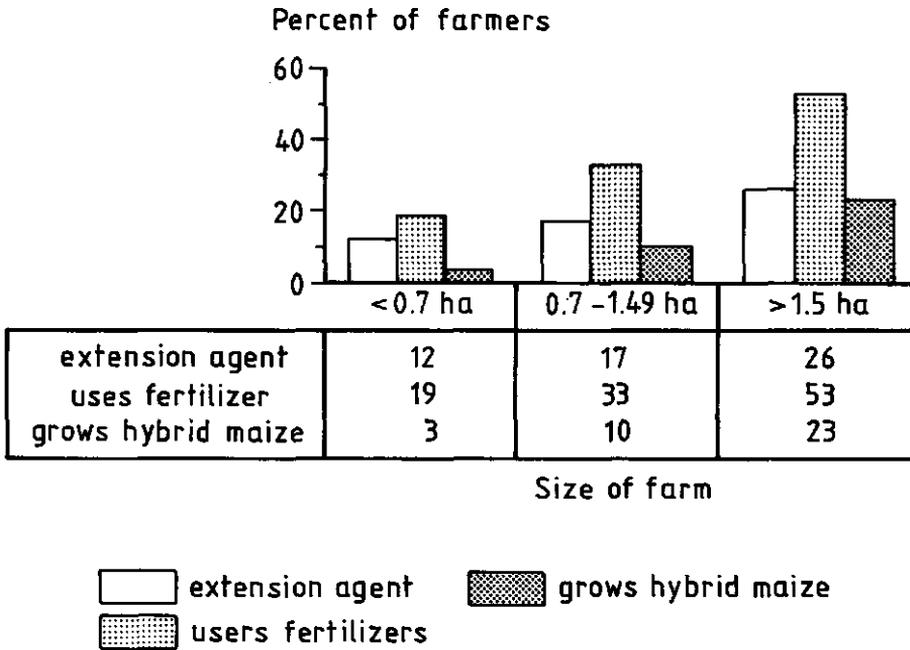
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<sup>7</sup> Others define food security as the ability to obtain adequate food, both quality and quantity, to meet nutritional requirements throughout the year (Maxwell & Frankenberger 1992).

independence an increasing amount of customary land has been transferred to the estate sub-sector and this has been blamed for increasing land pressure in the smallholder sub-sector in addition to the rapid population growth. For example, the total acreage of customary land decreased from 1965 to 1985 from 1.9 million to 1.7 million hectares (World Bank 1987a).

The smallholder sub-sector based on customary land tenure provides the bulk, nearly 80 percent, of the country's food production and involves over 1.6 million families (Malawi Government/United Nations 1993). Low yielding local maize accounts for 75 percent of the cropped area. As shown above in Table 3.3 a large proportion of farmers have very small holdings. Smallholders in the smaller land holding categories are typically not able to afford production raising inputs such as fertilizer and hybrid seed (Malawi Government/United Nations 1993). During the 1980s only 10 percent of smallholder maize was under hybrid varieties and most of this was being grown by larger smallholders. As shown in Figure 3.3 in 1980/81, of the farmers having less than 0.7 of a hectare, only 12 percent had any contact with an extension agent, 19 percent used fertilizer and only 3 percent grew hybrid maize.

At the same time only 0.7 percent of all farmers owned a wheelbarrow, 2.3 percent a sprayer, 2.0 percent a ridger, and 3.5 percent a plow (Pryor 1990). In addition, half of farm families neither owned a chair nor 65 percent a table nor 67 percent a paraffin lamp. In essence, the majority of smallholder farmers in Malawi have seen little advancement in their own position since independence with most of the smaller smallholders remaining virtually untouched by the Government's agricultural extension programme (World Bank 1989a).



**Figure 3.3: Contact with extension agent, use of fertilizer and cultivation of hybrid maize by farm size**

(Source: Centre for Social Research 1988)

By 1990 the commercial estate sub-sector consisted of close to 15,000 estates which is much more than the 1,200 estates registered in 1979 (Mkandawire, Jaffee and Bertoli 1990; Malawi Government/United Nations 1993). However, the majority of new estates are smaller than before. In 1979 the average estate size was 207 hectares and this dropped to 53 hectares in 1989. Estates occupy close to 9 percent of the country's total land area, approximately 850,000 hectares, most of which is lease-hold (Mkandawire, Jaffee and Bertoli 1990). However, it is thought that only a small proportion of estate land is under cultivation with recent estimates in 1989 showing this level to be about 28 percent.

During the 1980s major structural changes occurred within the agricultural sector with the trend being towards a growing importance of the estate sub-sector and a stagnation of the smallholder sub-sector. Table 3.4 presents the growth in GDP for these two sub-sectors since 1974.

**Table 3.4: Average annual growth rate of real GDP in the agriculture sector**

	1974-1980	1980-1983	1983-1987	1987-1991
	(percent)			
Agriculture	3.5	0.8	2.5	4.1
of which:				
smallholder sub-sector	2.5	0.9	2.7	2.6
estate sub-sector	8.6	7.6	1.6	8.9

Source: Malawi Government/United Nations 1993

On an aggregate basis the agriculture sector as a whole appears to have rebounded from the low growth rates of 0.8 to 2.5 percent during 1980 to 1987 to a 4 percent growth rate during 1987 to 1991. However, it appears that much of this growth has emanated from the commercial estate sub-sector which grew close to 9 percent from 1987 to 1991. On the other hand the growth of the smallholder sub-sector has stagnated since the mid-1970s starting at 2.5 percent during 1974-80, dipping to 0.9 percent in 1980-83 and ending back at just under 3 percent from 1983 to 1991. At this slow rate the growth of the smallholder sub-sector has not been able to keep pace with the rapid population growth rate. The explanations behind the growth pattern seen in the two sub-sectors of agriculture are too many to explore here, however, some of the key issues are discussed below.

Essentially the priority of Government in the first few decades after independence emphasized agricultural production and infrastructure. Although a large share of the budget was invested into agriculture, it was primarily the commercial estate sub-sector which benefitted rather than the smallholder sub-sector (Gulhati 1989; Lele and Meyers 1989;

World Bank 1989a; Sahn, Arulpragasam and Merid 1990; Pryor 1990; Christiansen and Kydd 1990). A major part of the problem was that the estate sub-sector was supported by the productivity of the smallholder sector at the expense of the latter (Lele 1989a; Harrigan 1991). At independence the country's agricultural development strategy operated through a programme of integrated rural development projects (IRDP) which were launched between 1968 to 1972 with World Bank and German Government support (Ghai and Radwan 1983). The results of the IRDPs in raising smallholder production were much less than originally hoped and a revision of the strategy was made which resulted in the National Rural Development Programme (NRDP) being initiated in 1978. However, as will be discussed later in Chapter 5 (see Case Study 5), fundamental problems existed with the theoretical basis and technical approach of the IRDPs and the NRDP to rural development in Malawi which resulted in many of the smallholders, particularly those with smaller holdings, being left out of the mainstream of development (Kydd and Spooner 1986; World Bank 1989a)

Some of the major problems underlying the stagnation of the smallholder sub-sector include the small and decreasing holding sizes, the low adoption rates of improved technology as well as labour constraints (World Bank 1989a; Quinn, Chiligo and Gittinger 1990; Malawi Government/United Nations 1993). Price policies have also not been favorable to the smallholders. For example, the prices paid to smallholders through the Agricultural Development Marketing Corporation (ADMARC) were far below world levels for the same produce (Lele 1989a). A considerable share of the profit margin thus obtained from these low producer prices was re-invested into the commercial estate sub-sector as well as into agro-industries, rather than back into the smallholder sector. Licenses to grow certain high value cash crops, such as burley tobacco, were also restricted to estates. Smallholders had little opportunity to earn income through cash crop production. However, in recent years part of the macroeconomic reform programme dealing with poverty alleviation has resulted in the Government, with urging from the donors, liberalizing certain cash crops such as burley tobacco for smallholders to grow.

In essence since independence a structural bias has existed in the Government's agricultural development strategy in favor of the estate sub-sector as well as larger smallholders. As a result a large proportion of the smallholder sub-sector, especially the 56 percent of farm families with less than 1 hectare, have in effect been bypassed by the Government's agricultural development programme and have neither had much contact with the extension services nor have had access to production raising inputs such as improved seed and fertilizer.

#### **3.4.4 Food self-sufficiency and security**

The stagnation in the smallholder sub-sector and the factors leading to this are related to the growing problems of food self-sufficiency and food security both at the national and the household levels. In the majority of years up to 1979 Malawi was able to produce sufficient food to satisfy domestic market demands except after the occasional poor harvest due to natural disasters such as drought (World Bank 1990b). As a result in most years there was no need for food aid imports. Because of the country's apparent success at the aggregate level to produce enough food domestically to meet effective market demand, Malawi acquired an international reputation of being one of the few African countries able to feed itself (World Bank 1981b; WFP 1983). This image was heightened when contrasted to the large food imports being made by other nearby countries plagued by famines. However, what was finally realized in the late 1980s was that the apparent ability of the country to secure adequate food at the national level to satisfy commercial market demands in fact masked the growing problems of food self-sufficiency and security at the household level.

The main staple food eaten in Malawi is overwhelmingly maize, however, in some areas cassava is also a mainstay of the local diet. Table 3.5 shows the trends from 1976/77 to 1987/88 for maize production at the national level as well as on a per capita basis. As can be seen there has been a gradual decline in maize production per capita from 1976/77 to 1987/88 from 257 to 193 kg.

**Table 3.5: National maize production  
1976 to 1988: Trends in per capita  
production levels**

Year	Total maize production (10,000 MTs)	Production per capita (kg/capita)
1976/77	1,321	245
1977/78	1,428	257
1978/79	1,393	244
1979/80	1,198	204
1980/81	1,237	204
1981/82	1,244	200
1982/83	1,369	214
1983/84	1,398	212
1984/85	1,355	200
1985/86	1,295	185
1986/87	1,211	168
1987/88	1,427	193

Source: Sahn, Arulpragasam and Merid  
1990

Based on Malawi's demographic structure, it has been estimated by the World Bank that the minimum energy requirement on average for the entire population is approximately 2,219 calories per capita per day (World Bank 1989a). In Malawi dietary surveys have shown that about 75 percent of dietary calories come from maize. Based on this information the annual field production level for maize to meet the population's minimum energy requirements from maize is equivalent to 219 kg per capita<sup>8</sup>

<sup>8</sup> This is based on the calculations made by the World Bank (1989a 1990b). This calculation assumes that 100 grams of maize provides 340 calories and that the losses incurred are 3 percent for seed, 5 percent for storage and 10 percent for processing.

As shown in Table 3.5 after 1979/80 national per capita maize production levels fell below 219 kg per capita. Therefore contrary to the international image of the country being self-sufficient in maize, if measured in terms of nutritional requirements since 1979/80 this has simply not been true. However, the policy focus in Malawi has been on satisfying effective market demand not nutritional requirements. Since national maize production levels were in most years more than adequate to meet effective market demand it was then assumed the national food self-sufficiency had been achieved.

The concept of national food security reflects the ability of the country to obtain adequate food either through production, purchases or other exchanges. Figures 3.4 and 3.5 present the trends in maize availability and total food availability. Availability is defined here as the sum total of domestic production and net imports. As can be seen in Figure 3.4, since the early 1960s the per capita availability of maize has remained at levels below the minimum 219 kgs nutritional requirement for maize. This means that at the national level since independence the country has not achieved food security in terms of maize when assessed against nutritional requirements.

It is perhaps more appropriate to look at total food availability since trends in a single crop may be misleading. As can be seen in Figure 3.5 if all food crops<sup>9</sup>, including maize, which are produced or imported into the country are added together, for most years up until 1960 and 1983 the total calorie availability on a per capita basis has been above the minimum nutritional requirement of 2,219 calories per day. However, an erratic but clearly downward trend has also been evident in regard to total calorie availability over 1972 to 1986 with a drop from 2,800 to 1,800 calories per day.

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<sup>9</sup> Food crops include maize, millet/sorghum, paddy/rice, wheat, pulses, cassava and groundnuts.

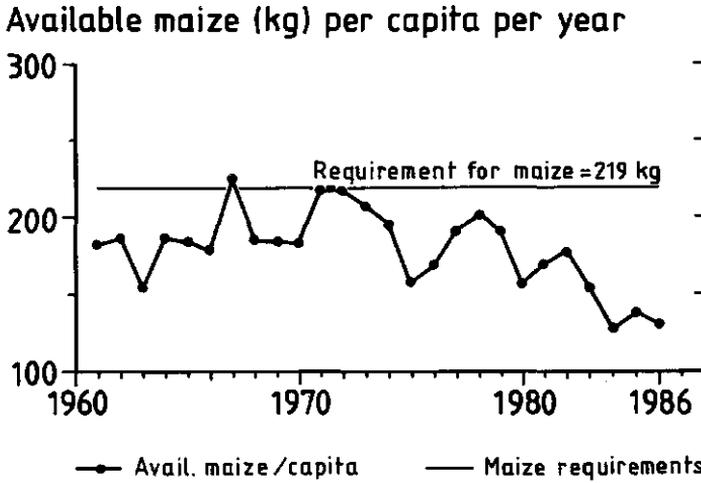


Figure 3.4: Annual per capita maize availability (production plus net imports): 1961 to 1986

(Source: World Bank 1990b)

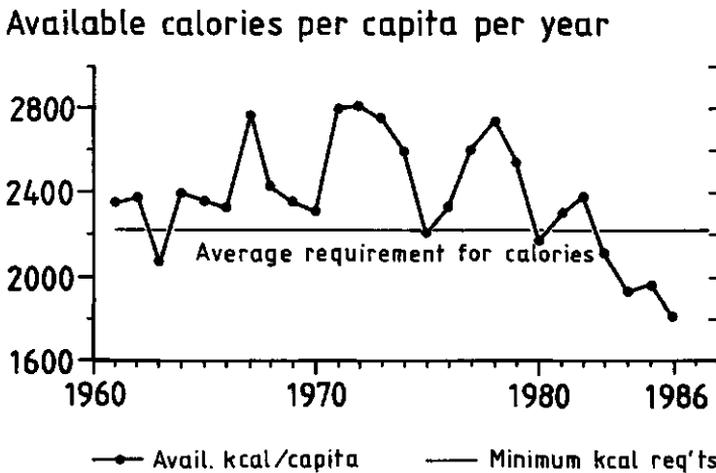


Figure 3.5: Annual per capita caloric availability from all foods (production plus net imports): 1961 to 1986

(Source: World Bank 1990b)

A major caveat which needs to be recognized in these types of aggregate analyses is that even if adequate food is available at the national level this does not mean that all households will have access to this food. In other words national food security does not necessarily equate to household food security since not all households may have equal access to food to satisfy their basic nutritional requirements.

It is also important to examine the food situation at the household level. Figure 3.6 shows that in 1985/86 in no Agricultural Development Division (ADD) for which information was available can farmers cultivating less than 0.5 of a hectare produce more than half of their families' energy requirements. Approximately 24 percent of smallholders fall into this category of landholding. Families with 0.5 to 1.0 hectares, who comprise about 31 percent of the rural farming sector, fair slightly better but still in many of the ADDs shown this size of farm produces below the family's needs.

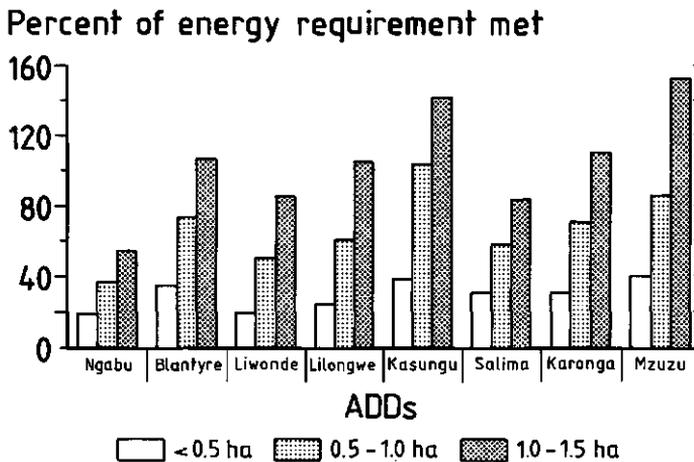


Figure 3.6: Percentage of families' energy requirement met from own farm production

(Source: Carr 1988)

As a result many of these smaller households deplete their own produced food stocks many months before the next harvest. Data from 1990 show that in seven out of the country's eight ADDs 70 percent of households had depleted their food stocks by December and were faced with extreme difficulty until the next harvest in March or April (Malawi Government/United Nations 1993). Many of these families must turn to other sources of food to survive after their own stocks are depleted. At this time a major source of food appears to be through purchases made at ADMARC (Malawi Government/United Nations 1993). Another important food coping strategy is informal labour for payment in food which in Malawi is referred to as '*ganyu*' labour. The search for food becomes a daily challenge with many of the resource poor families surviving on a day to day basis.

### 3.4.5 Income and wages

Although the majority of Malawians are engaged in subsistence agriculture, it has been estimated that due to low yields, small landholding sizes and to some extent the commercialization of agriculture, upwards to 80% of the rural population are net purchasers of maize (Sahn, Arulpragasam and Merid 1990; Pinstrup-Andersen 1989). As discussed above many households deplete their food stocks several months before the next harvest and must rely on other ways to obtain food either through marketed purchases or other types of exchanges, for example, *ganyu* labour. In addition, virtually all urban and estate employees can be considered to be net purchasers of maize. Given this reliance on off-farm food sources, the situation of income and wages becomes central to the issue of household food security.

Data on incomes levels in Malawi are limited and at best methodologically problematic, however, the evidence shows that income levels are low. Results from a national survey conducted in rural areas in 1980/81 indicated that cash incomes per household ranged from an equivalent of US \$97 in the Central region to US \$136 in the Southern region (CSR 1988)<sup>10</sup>. GNP per capita was estimated to be only US \$210 in 1992, as compared to the

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<sup>10</sup> In 1980/81 1 MK was equivalent to 1.23 US dollars.

average of \$390 for other low-income countries (World Bank 1994). Only five other countries in sub-Saharan Africa had lower per capita GNP levels in 1992.

Data on actual wages are not collected in Malawi and the best proxy of wage rates is the minimum wage level, although this is still far from providing an exact picture since it is not known what proportion of the working group actually receives the minimum wage. Minimum wage levels have increased very slowly over the years (Malawi Government/United Nations 1993). From 1966 to 1972 there were no increases in minimum wage. By 1979 there had only been one increase of 5 percent. Since 1979 minimum wage levels rose steadily but in real terms purchasing power has greatly declined.

As shown in Figure 3.7 the minimum wage in 1992 had dropped in value by 23 percent as compared to its index value in 1982. In 1990 the urban minimum wage was about US \$0.75 per day and for rural areas was US \$0.60 per day (World Bank 1990c). These low wage levels have also been regarded as consistent with the agricultural-led export strategy since the profits of the estate sub-sector has largely arisen from the abundant and cheap labour force which derives from the smallholder sub-sector.

To illustrate the negative effect of such low wage levels on household food security, Figure 3.8 shows the average number of days a rural worker earning the minimum wage rate would need to work in order to purchase enough maize to meet his family's calorie requirement at the Government's official consumer price for maize<sup>11</sup>.

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<sup>11</sup> This assumes an average family size of five members who require approximately 90 kg maize per month to meet their minimum energy requirements.

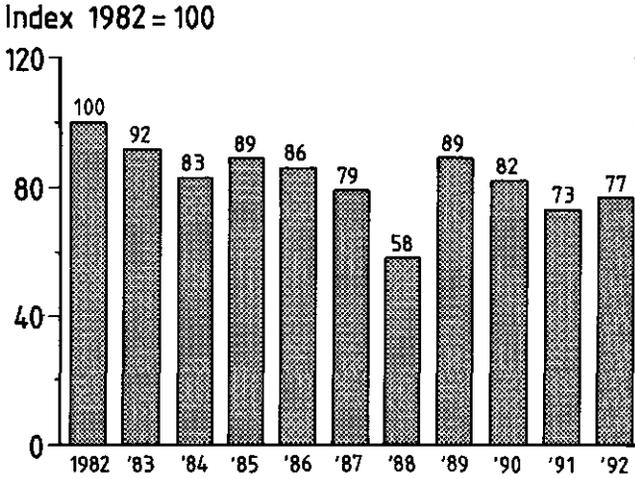


Figure 3.7: Real minimum wage: 1982 to 1992

(Source: Malawi Government/United Nations 1993)

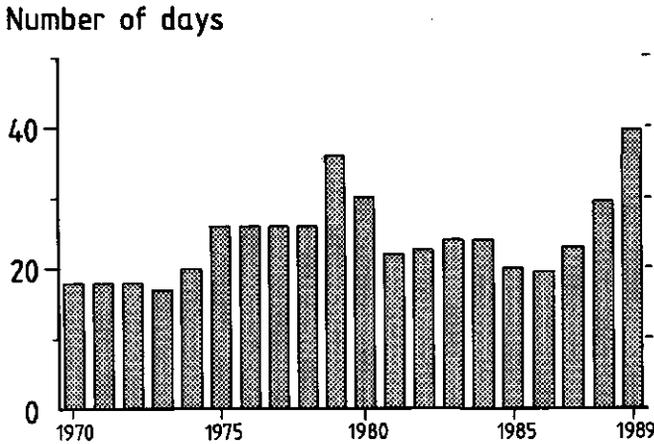


Figure 3.8: Number of day's work at rural minimum wage to purchase a 90 kg bag of maize from ADMARC: 1970 to 1989

(Source: Food Security and Nutrition Unit 1989)

In nearly all the years after 1974 over 20 days of work per month were necessary to purchase an average family's maize requirement. This analysis assumes that all the monthly salary is put towards the purchase of maize, however, this is unrealistic since other cash demands also exist. The picture portrayed indicates the minimum wage earners have for many years been at high risk for food insecurity.

#### **3.4.6 Poverty**

A number of different statistics concerning Malawi's development patterns have been presented above, although much more data do exist, however, for a lack of space can not be presented here. Nevertheless by all accounts Malawi is recognized to be among the poorest countries of the developing world. Some statistics are presented in Appendix 2 of this thesis on other countries in eastern and central Africa to provide a comparison of economic and social development.

As will be discussed later in the last section of Chapter 5 of this thesis, in Malawi more attention has been given in recent years to poverty and the ways in which it can be addressed through the country's national development policies and strategies. A major study carried out by the World Bank in 1990 concluded that the poverty found in Malawi is predominately rural and conservatively estimated that one half of the population are poor (World Bank 1990a). The poverty line used to define who is poor is based on minimum nutritional requirements for food and approximates US \$ 40 per capita per annum which corresponds to about 55 percent of the total population. The most vulnerable groups in Malawi for poverty are smallholders with less than 1.0 hectare of land, estate workers, estate tenants, the urban poor and children. Considering the rapid population growth and the implications that this has on land, food security and the ability of the Government to provide basic health, education and other needs, the country will be faced with a formidable challenge in the future to address the serious poverty which is endemic across the country.

### 3.4.7 The social sectors

Whereas the previous section described the macro-economic, agricultural, food security, income and poverty situation in the country an equally important aspect is the development of the social sectors since the future foundation of a family's welfare depends on the health status and educational levels of its members.

**Health.** In regards to health conditions a 1990 World Bank health sector review stated that **"health conditions in Malawi are among the worst in the world"** (World Bank 1990a:54). The basis of this statement arises from the fact that infant and child mortality rates in Malawi, in the words of the World Bank, are **"shockingly high in themselves, and far above normal peacetime levels over most of Eastern Africa ... suggest(ing) the existence of some particular problem or problems of child health which are not present to the same degree in other countries around"** (Hill 1986:22).

In addition, not only have childhood mortality levels always been extremely high in Malawi but little decline has been evident after the late 1950s unlike that observed in other nearby African countries. Malawi's childhood mortality levels were about 37 percent in the late 1950s and dropped only to around 33 percent by the early 1970s. In comparison, Zambia experienced a drop in childhood mortality from 22 to 17 percent over the same period and Zimbabwe from 16 to 14 percent (Hill 1986). In recent years some progress appears to have been made since a comparison of the 1977 and 1987 censuses shows that the infant mortality rate dropped from 151 to 135 deaths per 1000 live births and underfive mortality from 320 to 250 deaths per 1000 live births (Malawi Government/UNICEF 1987a; Malawi Government/United Nations 1993).

However, despite the serious problems of infant and child mortality, the health system in Malawi is fairly good if compared to other African countries (Malawi Government/United Nations 1993). About 80 percent of the population lives within an 8 kilometer radius of a health facility (Malawi Government 1984a). The number of health facilities has been

estimated to be at 1 per 10,000 people (World Bank 1990a). Table 3.6 shows the coverage of the population by health personnel in the decade between 1973 and 1983. In 1973 there were 47,000 people for every physician. Due to the rapid rise in population by 1983 the situation had deteriorated to 55,000 people for every physician. However, the absolute numbers of other types of health staff have increased at a sufficiently fast pace since 1973 to reduce the ratio of people per non-physician health staff by half from 2,000 to 1,100 in 1983.

**Table 3.6: Ratio of population per health staff member by type of personnel during various years**

Year	Population per:	
	Physician	All other health staff
1973	47,000	2,000
1978	49,000	1,400
1981	52,000	1,100
1983	55,000	1,100

Source: Pryor 1988

Given this background, some experts have proposed that Malawi's serious child mortality statistics do not necessarily represent weaknesses in the existing health infrastructure, but instead might reflect the extremely serious problems of child malnutrition in combination with the growing problem of malaria (World Bank 1990a; World Bank 1990d).

**Education.** Education is the foundation of economic and social development and has been shown to be linked to improvements in health and nutrition as well as to increased agricultural and industrial productivity (Sahn, Arulpragasam and Merid 1990; Levinger 1994). As discussed earlier for many years investment in education in Malawi not only lagged behind other African countries but was also biased towards higher education. However, in recent years as shown above in Figure 3.1 the Government significantly

increased the budgetary allocations to education with greater emphasis being given to primary education.

Until 1976 the Government took no responsibility for capital expenditure on rural primary schools, which according to Kydd (1984) was left to local self-help initiatives. This reflected the Government's policy in DEVPOL I which gave low priority to primary education and instead emphasized the secondary and university levels (Malawi Government 1971). However, despite later emphasis and investment by the Government to strengthen the primary school teaching force, population growth has eroded the gains made in the expansion of schools and numbers of teachers. As a result pupil-teacher ratios have increased from 1969 to 1987 from 32:1 to 70:1 (Kydd 1984; Malawi Government/United Nations 1993).

In addition, although the absolute number of children in primary education increased from around 360,000 in 1964 to more than a million in 1990 population growth has put a brake on gains being made in enrolment levels. For example, in 1980/81, the net enrollment rate for primary school was 47 percent and by 1987/88 it had only increased to 53 percent (World Bank 1989b). This means that nearly half the primary school aged population are still not enrolled in school. Secondary school statistics present a more somber picture. In 1987 the net enrollment rate of secondary school age children was 4 percent, as compared to the average figure for other Sub-Saharan African countries of 17 percent (World Bank 1990d).

Trends in literacy rates in Malawi are difficult to estimate because of the different methodologies used in the three censuses of 1966, 1977 and 1987. An indirect method to estimate literacy was used in 1967 and 1977 which was based on the percentage of the population age 15 years and older who had attended at least up to Standard 4 (Malawi Government 1984b). Using this criteria the 1967 adult literacy rate for males was 26 percent compared to only 2 percent for females. In 1977 adult literacy rates increased to

41 percent for males and 17 percent for females. A different methodology for assessing literacy was used in the most recent census of 1987 which asked respondents whether they could read and write either Chichewa, English or both (Malawi Government 1991). The results showed that in males 15 years or older, 65 percent claimed to be literate as compared to 34 percent of females. However, this type of self-reporting could be expected to lead to an upward bias, so these most recent literacy rates should be considered to be the maximum levels which could exist.

### **3.5 Summary**

The above description of Malawi was intended to provide the appropriate historical, political, economic, agricultural and social background on Malawi from before independence to the present time. Understanding the constraints which exist in the country which relate to policy-making and development priorities is necessary in order to place the attempts made at nutrition planning from 1936 to 1990 into proper context.

Chapter 4 which follows specifically addresses the problem of child malnutrition in Malawi, in particular whether there have been any observed changes over the past five decades since the first nutrition planners arrived in the country in the late 1930s.

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## CHAPTER 4

### TRENDS IN NUTRITIONAL STATUS IN MALAWI<sup>12</sup>

The purpose of this chapter is to describe trends in anthropometry in Malawian children and adults since the 1930s. The main focus is on the problem of stunting (low height for age) especially in underfive children. Tracking height over time provides not only a means to monitor trends in malnutrition but also provides an indirect reflection of changes in socio-economic conditions. In industrialized countries improvements in living conditions particularly in diet and health have resulted in a gradual increase in body size which is known as secular trend.

The first section of this chapter presents a brief background to the problem of child malnutrition in developing countries, particularly the problem of stunting. This is followed by a discussion of the secular trend in height which has been seen with improved living conditions in different regions of the world. The second section of the chapter presents the anthropometric results of nutrition surveys conducted in Malawi since the late 1930s. In the third section an analysis is undertaken of the available anthropometric data on Malawian children and adults to investigate whether any secular trend has taken place over the past 50 years.

#### 4.1 Child stunting in developing countries

##### 4.1.1 Aetiology of child stunting

The Conceptual Framework of young child nutrition in developing countries was shown earlier in Figure 2.2. The immediate causes of malnutrition include inadequate food intake and disease. The family and community environment within which children are born and

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<sup>12</sup> Parts of this chapter are based on the paper "The Growth of Malawian Preschool Children from Different Socioeconomic Groups" by V.J. Quinn, M.O. Chiligo-Mpoma, K. Simler and J. Milner, accepted for publication in August 1994 by the *European Journal of Clinical Nutrition*.

brought up in developing countries is typically characterized by low income levels, limited access to food and health care, unsafe water and poor sanitation facilities. Child feeding and caretaking practices may be inadequate, especially if the mother is overworked and the family supplies of food, water and fuel scarce. Traditional weaning foods used for infants in many parts of Africa tend to be bulky and have a low energy and nutrient density. This means that unless children are fed frequently throughout the day they are physically unable to consume enough to satisfy nutritional requirements particularly for calories. If other foods apart from breast milk are given too early or too late a child's nutritional status may be compromised. The diarrhoea which is often present during the transition from a solely breastmilk diet to solids exacerbates nutritional status as nutrient needs are higher during illness at the same time that appetite is depressed due to anorexia. There is also an inter-generational link between maternal nutritional status and the size of their newborns. A cycle of malnutrition therefore exists between a malnourished mother and her child which may take several generations of improved maternal nutrition and health to undo the effect of poor environment on birthweight (Tanner 1978).

The cumulative effect of inadequate food intake and poor health results in a gradual slowing of linear growth early on in a child's life which eventually progresses to measurable deficits in height referred to as stunting. The peak time for stunting is between six and 24 months of age. Under conditions of severe impoverishment high levels of stunting are found in preschool children. Because it provides a reflection of past nutrition and health, the height of children in developing countries is considered to be useful as an indirect indicator of overall socioeconomic conditions (Mason *et al.* 1984; Beaton 1989; ACC/SCN 1990; Waterlow 1991). In sub-Saharan Africa the problem of child stunting is widely prevalent in the children of poorer families and it is not uncommon to find between 30 to 60 percent of underfive children to be affected (De Onis *et al.* 1993). However, although a high level of child stunting provides a marker of environmental adversity, it is not specific to the exact cause of the stress, for example in regards to the relative contribution of inadequate dietary intake versus disease.

It is also generally agreed that the real issue is not short stature itself, but rather the factors in the environment which lead to the stunting. However, there are several problems which are the physiological consequences of short stature (ACC/SCN 1990; Martorell, Rivera and Kaplowitz 1990). First, small adult size is associated with reduced fat-free mass and this appears to be linked to decreased work capacity which in turn may negatively affect productivity (Pinstrup-Andersen *et al.* 1993). Second, short maternal stature is associated with greater risk of problems during pregnancy. As mentioned in Chapter 2 the cost of malnutrition is high in both economic and human terms. Recent research has shown the increased relative risk of death which is associated with child malnutrition even in its milder forms (Pelletier, Frongillo and Habicht 1993).

#### 4.1.2 Assessing child growth

The accepted procedure for assessing child nutritional status is based upon a comparison of children's weights and heights with those found in the NCHS/WHO International Child Growth reference population which is comprised of a large sample of well-nourished healthy North American children. There has been a long history of debate regarding the use of growth standards based on North American children for assessing the nutritional status and growth of children from other ethnic groups, particularly those from developing countries. Nevertheless the evidence from the many studies which have been conducted shows that children from developing countries who are well nourished and healthy have similar growth patterns in weight and height as the NCHS/WHO reference children<sup>13</sup> (Habicht *et al.* 1974; Tanner 1978; Alnwick 1980; Stephenson, Latham and Jansen 1983; Martorell and Habicht 1986; Agarwal *et al.* 1991). Within the same ethnic group children from lower socioeconomic classes have significant deficits in growth which are especially marked in regards to attained height. The conclusion reached by international experts is that below the age of ten years growth is most greatly influenced by environmental and socioeconomic factors and not genetic or ethnic determinants (Habicht *et al.* 1974).

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<sup>13</sup> The only exception may be with certain Asiatic populations who are slightly shorter than the NCHS/WHO reference population (Martorell and Habicht 1986; Waterlow 1993).

### 4.1.3 The phenomena of secular trend

Recent research has shown that individuals who become stunted in childhood have a high probability of becoming short adults (Martorell, Rivera and Kaplowitz 1990). For a child living under chronic conditions of inadequate food intake and high levels of diseases with little opportunity to escape their surrounding poverty, once they become stunted they remain so for life. Therefore, a significant proportion of the short stature seen in adult populations of developing countries can be attributed to stunting in childhood (Martorell and Habicht 1986).

If living conditions steadily improve in terms of diet and health, it can be expected that an increase in adult body size will occur especially in height. As far back as the early 1880s this phenomena of secular trend was observed in certain European populations:

**"Human height becomes greater and growth takes place more rapidly, other things being equal, in proportion as the country is richer, the comfort more general, houses, clothes, and nourishment better, and labour, fatigue, and privation during infancy and youth less; in other words, the circumstances accompanying poverty delay the age at which complete stature is reached and stunt adult height" (Villermé 1829 as quoted in Tanner 1981:162).**

This increase in body size is a gradual process which takes generations to occur and has been documented in almost all European countries (Tanner 1978). Whereas adult male Norwegians of 1761 were as short as 159 cms, today they are upwards to 180 cms tall. Over the 45 year period from 1933 to 1978 the mean stature of Dutch military conscripts 18-19 years old increased as much as 7.5 cms (Deurenberg *et al.* 1988). A comprehensive study of historical trends in height in the United Kingdom by Floud, Wachter and Gregory (1990) shows that the average height of British adult males, obtained from a large variety of sources, has increased by about 10 cm during the 200 year period from the middle of the eighteenth century to the end of the 1950s.

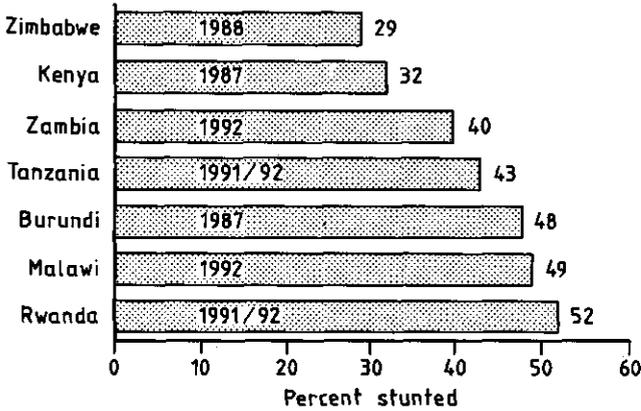
Increased size with improved socio-economic is particularly apparent in children. From about 1900 to the late 1970's European children between the ages of 5 to 7 years living under average economic conditions have increased in height by approximately 1-2 cms per decade (Tanner 1978). Much of the trend in children's height has been explained by their earlier maturation. As public health conditions and diets improve populations achieve both a given level of height at an earlier age as well as a greater final height (Floud, Wachter and Gregory 1990).

Although much has been written about the secular trend observed in the growth of populations in Europe, North America and Japan (Tanner 1978; Martorell and Habicht 1986; Deurenburg *et al.* 1988; Floud, Wachter and Gregory 1990), less work has been undertaken to document secular trend in developing countries where conditions of poverty are widespread. The few studies which have been conducted have shown no secular trend in the heights of adults. In their study of two villages in the Gambia Billewicz and McGregor (1982) found no evidence for any increase in adult height over a period of 25 years. These authors noted that this finding was to be expected since the conditions of village life in this West African country remained much the same during this time span. Researchers working in Brazil, Colombia, Guatemala and Mexico also found no evidence of secular trend in the height of adults which was put down to the poor living conditions found for the bulk of the population which have remained basically unchanged for the past century (Ruel *et al.* 1992).

## 4.2 Overview of child stunting in Malawi

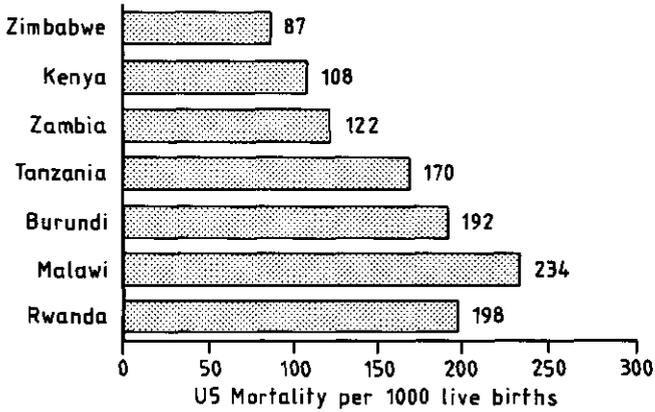
As shown in Figure 4.1 Malawi has one of the highest levels of child stunting in Africa. Different national surveys conducted over the past 10 years have estimated the stunting level in the underfive population to be between 49 to 64 percent. As mentioned earlier an association exists between child malnutrition and child mortality whereby malnourished children are at greater risk of death (Puffer and Serrano 1973; Kielmann and McCord 1978; Pelletier, Frongillo and Habicht 1993). Figure 4.2 presents the underfive mortality rate for Malawi as well as the other countries shown in Figure 4.1. The ranking of countries by underfive mortality is very similar to that for stunting. Malawi has by far the highest level where out of every 1000 live births 234 children die before their fifth birthday. As mentioned earlier in Chapter 3 although the causes of Malawi's high levels of mortality are not yet fully understood, it has been suggested that the two main factors are malnutrition in combination with malaria (World Bank 1990a, 1990d).

The results of nutrition surveys conducted in Malawi in recent years are shown in Table 4.1. Several national level surveys have been conducted over the past decade. The first and second were conducted by the Ministry of Agriculture in 1981/82 and 1991 and covered the rural population only. The rates of stunting in the underfive population found in these surveys were 56 percent and 64 percent, respectively. The third national level survey was carried out in 1992 and covered both rural and urban areas. The level of stunting found in this survey was somewhat lower at 49 percent which is what would be expected considering the sample also included urban areas which in Malawi tend to be nutritionally better off than rural areas (Roe 1992; Quinn *et al.* 1994). A number of local surveys have also been conducted in recent years in selected districts in the country and these are also shown in Table 4.1. As can be seen there is no evidence of any improvement in nutritional levels over the past decade. This issue of whether nutritional levels have changed will be looked at in greater detail later in this chapter.



**Figure 4.1: Child stunting (0-59 months) in selected eastern and central African countries: National surveys**

(Source: De Onis *et al.* 1993)



**Figure 4.2: Underfive mortality rate in selected eastern and central African countries: 1990**

(Source: UNDP 1992; Government of Malawi/United Nations 1993)

Table 4.1: Percent of children stunted (below - 2.00 SD height-for-age) in different surveys in Malawi: 1981 to 1992

Age (months)	National 1981		National 1991		National 1992		Zomba district 1986		Ntchisi district 1989		Mchinji district 1991		Dowa district 1991		Low income towns 1990		
	rural	:	rural	:	both	:	rural	:	rural	:	rural	:	rural	:	rural	:	
< 6	:	:	:	:	10	:	:	:	32	:	22	:	23	:	23	:	29
6 - 11	34	:	:	:	27	:	:	:	44	:	41	:	42	:	42	:	23
12 - 23	55	:	:	:	52	:	:	:	74	:	42	:	53	:	53	:	52
24 - 35	65	:	:	:	60	:	:	:	75	:	54	:	58	:	58	:	64
36 - 47	61	:	:	:	66	:	:	:	84	:	55	:	:	:	:	:	70
48 - 59	61	:	:	:	60	:	:	:	91	:	55	:	:	:	:	:	75
All	56	:	64	:	49	:	57	:	70	:	47	:	50	:	50	:	59
(n)	(4468)	:	(:)	:	(3236)	:	(376)	:	(1217)	:	(595)	:	(862)	:	(862)	:	(363)

Key: The symbol ':' denotes that data were not available.

Source: see reference list at end of Chapter 4

As shown in Table 4.1 the level of stunting in Malawi increases with the age of the child. In most of the studies shown close to half of the children are stunted by the second year of life (12-23 months). By the third year as many as 60 percent are stunted. In the case of the 1989 Ntchisi sample and the 1990 low income urban sample the levels of stunting continued to increase to 91 percent and 75 percent by four years of age. Other researchers working in the country have noted that stunting in Malawian children appears to continue beyond the age when height deficits no longer accumulate in other developing countries (Pelletier, Low and Msukwa 1991). This may be an indication of the severity of the environmental adversity within which Malawian children live.

The toll of too little food and too much disease on Malawi's children is illustrated by the absolute deficits in height which result from the process of growth retardation. Figure 4.3 presents the results from a study conducted in 1991 which compares the height of high income Malawian children to low income children from urban and rural areas (Quinn *et al.* 1994). As would be expected the high income Malawian children grow the same as the International NCHS/WHO Child Growth Reference Population. Chimwaza (1982) found similar results in her smaller study of high income Malawian children. However, when compared to Malawian children from low income families a substantial gap in height is seen as early as two years. As shown in Figure 4.3 at 24 months of age the sample of high income children are on average close to 7 cm taller than the low income urban children and 9 cm taller than the rural children. By 59 months of age the gap in height increases to 10 and 11 cm, respectively.

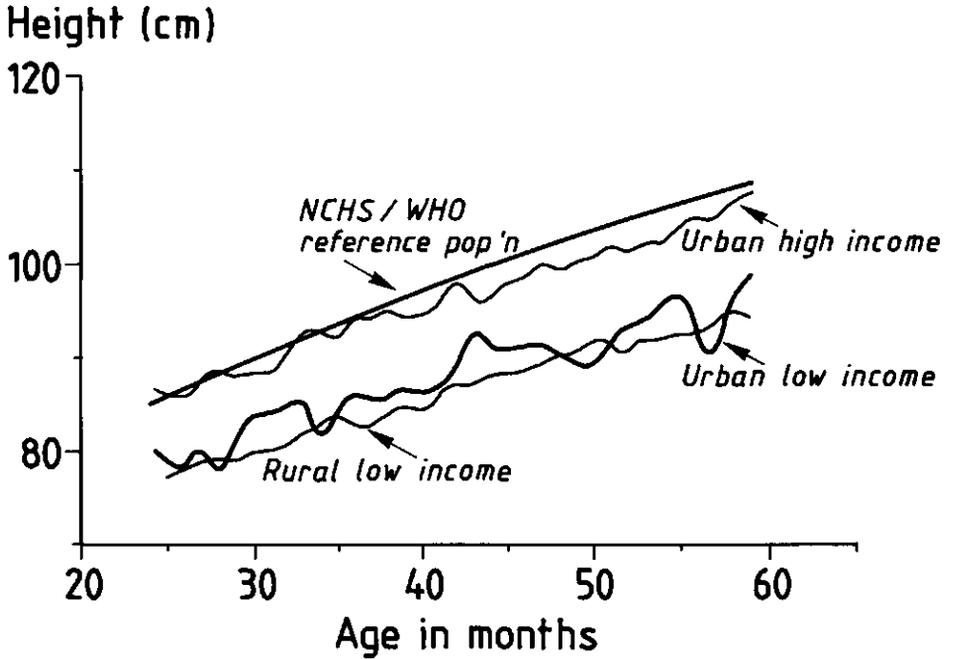


Figure 4.3: Average height by age: Comparison of different groups of Malawian children to the NCHS/WHO population

(Source: Quinn *et al.* 1994)

### 4.3 Trends in child and adult anthropometry

In this section an analysis is made of trends in child and adult anthropometry over time to investigate whether there has been any secular trend. The main variable of interest is height since it provides a stable measure of chronic malnutrition which unlike weight is not confounded by problems of seasonality.

#### 4.3.1 Description of samples

It was possible to locate a number of anthropometric studies conducted in Malawi since 1938 for this analysis. Most of these studies were found in unpublished and published papers and reports from the Government and the donor community. In a few instances the complete data sets were available on computer disk. In most cases, however, only the summary data (mean values and standard deviations) were available. A number of the surveys shown in Table 4.1 could not be used in the secular trend analysis since only prevalence levels for malnutrition were reported.

The first anthropometric data were collected in Nyasaland during 1938-41 by the Nyasaland Nutrition team sent out by the British Colonial Office (see Case Study 1 in Chapter 5). Most of this work involved field surveys of villages located in what are now Nkhosakota and Ntchisi districts. In addition, members of this team also measured children found at mission schools around the country. After the Nyasaland nutrition work was completed it was not until 1965 that further anthropometric studies were undertaken. These were conducted by a British medical doctor who wrote a series of papers on the anthropometry of Malawian men who had undergone medical exams as part of their application for work with the South African mines employment agency, WENELA (Nurse 1975; Nurse no date). In addition, during 1969 and 1970 three small scale nutrition surveys were carried out on children and adults by a joint Ministry of Health and WHO team (see Case Study 4 in Chapter 5) (Burgess and Wheeler 1970; Driessen and Burgess 1970; Burgess, Cole-King and Burgess 1972; Burgess, Burgess and Wheeler 1973). The next major anthropometric work was the 1981-82 national nutrition survey which was carried out as part of the 1980-81 National Sample Survey of Agriculture (NSSA) (see Case Study 9 in Chapter 5). After this a number of small scale nutrition surveys were conducted throughout the 1980s in various localities around the country. Tables 4.2 and 4.3 provide a description of the data sets on children and adults, respectively, which were used in this analysis.

Table 4.2: Description of the samples of children

Name of sample	Date of survey	Description of subjects	Location of survey	Source of data	Measurements taken	References
Nyasaland infants	1938-41	infants < 18 months	rural: selected clinics across the country	summary data extracted from child growth records	length	unpublished data obtained from Centre for Human Nutrition, London School of Hygiene & Tropical Medicine
Nyasaland children	1938-41	children 18-59 months	rural: villages in Nkhotakota & Ntchisi districts and mission schools across the country	raw data on weight, height, age and sex taken from data field sheets and entered into computer	height	unpublished data obtained from Centre for Human Nutrition, London School of Hygiene & Tropical Medicine
Malawi	1969-70	children 0-59 months	rural: villages in Nkhotakota, Ngabu and Blantyre districts	summary data extracted from tables given in report of the surveys	length	Burgess and Wheeler 1970; Burgess, Cole-King and Burgess 1972; Burgess, Burgess and Wheeler 1973
National Sample Survey of Agriculture (NSSA)	1981-82	children 0-59 months	rural: nationwide	computer tape obtained from original survey analysis	length	Computer disks obtained from the Centre for Social Research, University of Malawi, Zomba
Mzuzu	1986-87	children 0-59 months	rural: Mzuzu Agricultural Development District	summary data extracted from tables given in published journal article	length	Pelletier, Low and Msukwa 1991
Ntchisi	1989	children 0-59 months	rural: Ntchisi district	computer disk obtained from original survey analysis	length	Computer disk obtained from UNICEF/Malawi country office, Lilongwe

Table 4.3: Description of the samples of adults

Name of sample	Date of survey	Description of subjects	Location of survey	Source of data	References
Nyasaland young adults	1938-41	young adults 12-29 years	rural: villages in Nkhosakota & Ntchisi districts and mission schools across the country	raw data on weight, height, age and sex taken from data field sheets and entered into computer	unpublished data obtained from Centre for Human Nutrition, London School of Hygiene & Tropical Medicine
Rural miners	1965-66	adult males applying for mining jobs outside of Malawi	rural: Ntcheu district	summary data based on medical records extracted from published journal article	Nurse 1975
Nkhosakota Lower Shire Namitambo	1969-70	adult females and males	rural: Nkhosakota, Ngabu and Blantyre districts	summary data extracted from tables given in report of the surveys	Burgess and Wheeler 1970; Burgess, Cole-King and Burgess 1972; Burgess, Burgess and Wheeler 1973
Peri-urban miners	1970	adult males	peri-urban: Lilongwe town and district	summary data based on medical records extracted from published journal article	Nurse no date
Rural miners	1970	adult males	rural: Lilongwe district	summary data based on medical records extracted from published journal article	Nurse no date
Lilongwe	1982	adult females	rural: Lilongwe district	summary data extracted from tables given in PhD dissertation	Chimwaza 1982
Mzuzu	1986-87	adolescent and adult males and females	rural: Mzuzu Agricultural Development District	summary data extracted from tables given in published journal article	Pelletier, Low and Msukwa 1991
Ntcheu	1990	adult females	rural: Ntcheu district	summary data extracted from tables given in PhD thesis	Brouwer 1994

### 4.3.2 Methods

**Children.** The data sets shown in Table 4.2 come from different surveys which varied widely in objective, scope, coverage, representativeness and methodology. All but one of the data sets on children originate from cross-sectional field surveys. The one exception is the data on Nyasaland infants which were extracted from longitudinal child growth records from health facilities around the country and collated by the Nyasaland nutrition team.

Complete computerized data sets were available on three of the surveys shown in Table 4.2. These include the 1938-41 Nyasaland Nutrition survey, the 1981 post-harvest component of the National Sample Survey of Agriculture (NSSA) and the 1989 Ntchisi district survey. In order to study trends in child growth the computerized data sets which existed for these three samples of children were combined into one computer file. The computer programme used was the Statistical Package for the Social Sciences (SPSS/PC+).

Since the method for taking height varied in these three surveys (*i.e.* recumbent length versus standing height) each of the data sets had to be standardized in order to make them comparable to one another as well as to the NCHS/WHO Reference tables. The NCHS/WHO Reference Tables use recumbent length for children 23 months and below and standing height for children 24 months and above. Since the Nyasaland children were all measured standing up, the height measurements of children under 23 months and below were adjusted by a correction factor to approximate recumbent length<sup>14</sup>.

Since children in the 1981 NSSA survey and the 1989 Ntchisi survey all had recumbent length measured, length measurements of children 24 months and above were adjusted by a correction factor to approximate standing height. In the Nyasaland sample some children

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<sup>14</sup> The correction factor used in this analysis is based on Dibley *et al.* 1987 who recommend that 1.5 cm be added to standing height to approximate recumbent length and that 1.5 cm be subtracted from recumbent length to approximate standing height.

did not have complete age data recorded. Therefore only those children who had at least the month and year of birth were included in the analysis<sup>15</sup>. This was not a problem in the NSSA and Ntchisi samples since day, month and year were present for all the children. The procedure recommended by WHO (1983) was used to calculate the indicators of nutritional status which were expressed as Z scores for height for age (HA) and weight for age (WA).

Analysis of variance (ANOVA) was used to investigate potential differences in nutritional status between the three samples of children. Two ANOVA equations were used. The first equation had HA Z score as the dependent variable with sample, sex and age as independent variables. The second equation had WA Z score as the dependent variable with sample, sex and age as independent variables. When significant interactions precluded the use of an analysis of variance, a graphical examination of the mean Z scores and their standard errors was made to make visual comparisons of the growth patterns of the different samples of children.

*Adults.* As shown in Table 4.3 all the data sets on women originated from cross-sectional surveys. In regard to the data on men, apart from those on miners which came from medical examinations of prospective job applicants, all the data originated from cross-sectional surveys. Complete computerized data sets were available on the Nyasaland men and women, however, only summary data were available for the other samples of adults. The tribal composition of the different adult samples was not always reported. However, due to the widespread and severe nature of child malnutrition in Malawi, it is likely that any ethnic differences which might exist in adult height would be overshadowed by early environmental influences on child growth.

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<sup>15</sup> When day was not recorded the mid-point of the month was used to calculate age.

### 4.3.3 Results

**Children.** Table 4.4 presents the mean height values and standard deviations (SD) for all the groups of children shown earlier in Table 4.2. Since the Nyasaland sample had very few children below the age of 36 months, only children 36 months and older were included in the ANOVA analysis to investigate differences in height between the three samples of children. The results of this ANOVA are given in Table 4.5 and show that the mean HA Z scores of the three groups of children were statistically different from one another ( $F = 99.73, P < .001$ ). The trend appears to be a deterioration in mean HA Z scores over time with the 1938-41 Nyasaland children being the tallest, the 1981 NSSA children being shorter and the 1989 Ntchisi children being the shortest. Mean HA Z scores did not differ significantly by age group or by sex. In addition no significant interactions were found.

Table 4.6 presents the mean weight and SD values for the children in the different samples shown earlier in Table 4.2. As briefly mentioned above, weight is a problematic indicator to use in an analysis of secular trend especially in the context of an agrarian and underdeveloped country such as Malawi since the seasonal effects of food supply, disease levels and labour patterns can significantly affect weight gain and loss in children and adults. This can confound the interpretation of results. The 1982 NSSA nutrition survey showed that the prevalence of underweight children in Malawi can fluctuate as much as from 35 to 27 percent over the pre-harvest to post-harvest periods (Malawi Government 1984a). Surveys of adult Malawians have shown substantial seasonal weight changes from 1.3 to 3.3 kg in adult men and 1.9 to 4.2 kg in non-pregnant adult women (Beckerson 1983; Brouwer 1994). Therefore, comparing the weights of children and adults collected from different surveys carried out during different months of the year can be problematic.

Table 4.4: Mean heights (cm) of children since 1938 from clinic and survey data (SD's in parentheses)

Age (months)	Nyasaland infants*		Nyasaland children		Malawi	NSSA	Mizuzu	Ntchisi
	1938-41	1938-41	1938-41	1938-41	1969-70	1981-82	1986-87	1989
< 6	53	:	57	:	(4.9 - 5.3)	:	:	60 (2.8)
6-11	63	:	66	:	(3.9 - 4.6)	67 (3.8)	:	65 (3.6)
12-17	68 <sup>b</sup>	:	72	:	(4.2 - 7.0)	72 (4.1)	:	71 (3.3)
18-23	:	78	78	:	(5.0 - 5.3)	77 (4.8)	:	76 (3.8)
24-29	:	84	80	:	(3.5 - 5.6)	81 (4.8)	:	78 (3.4)
30-35	:	87	84	:	(6.1)	85 (4.9)	:	81 (4.8)
36-47	:	93	89	:	(5.4)	90 (5.7)	89 (5.9 - 7.3)	86 (5.2)
48-59	:	99	95	:	(5.3)	97 (5.8)	94 (6.8)	92 (4.4)
n	200	153	1584	4421	1091	1217		

Notes: \* These data were obtained from longitudinal child growth records from on average 200 infants in each age group; <sup>b</sup> Includes 12-14.9 months only.

Key: The symbol ':' denotes that data were not available.

Table 4.5: HA Z-scores by age and sex for three samples of children in 1938, 1981 and 1989

Sample Group	36-47 months		48-59 months	
	Girls: mean	SD	Boys: mean	SD
1938 (n)	-1.39 (25)	1.24	-1.60 (21)	1.53
1981 (n)	-2.31 (465)	1.36	-2.34 (438)	1.29
1989 (n)	-3.06 (83)	1.09	-3.10 (110)	1.23
			Girls: mean	SD
			-1.47 (34)	1.09
			Boys: mean	SD
			-1.54 (45)	1.29
			-2.31 (417)	1.18
			-3.16 (98)	.96

HA Z-scores are significantly different between Sample Groups,  $F = 99.73$ ,  $p < 0.001$ . No significant differences exist between age or sex groupings

Table 4.6: Mean weights (kg) of children since 1938 from clinic and survey data (SD in parenthesis)

Age (months)	Nyasaland infants <sup>a</sup>		Nyasaland children		Malawi		NSSA		Mzuzu		Ntchisi	
	1938-41	1938-41	1938-41	1938-41	1969-70	1981-82	1981-82	1981-82	1986-87	1986-87	1989	1989
< 6	5.1	5.1	5.1	5.3	5.3	5.2	5.2	5.2	:	:	5.7	5.7
			(1.2)			(1.2)	(1.2)	(1.2)			(1.2)	(1.2)
6-11	7.3	7.2	7.2	6.9	6.9	7.4	7.4	7.4	:	:	7.5	7.5
			(1.1)			(1.2)	(1.2)	(1.2)			(1.1)	(1.1)
12-17	8.4	8.5	8.5	8.1	8.1	8.7	8.7	8.7	:	:	8.5	8.5
			(1.5)			(1.3)	(1.3)	(1.3)			(1.1)	(1.1)
18-23	:	9.5	9.5	9.4	9.4	9.9	9.9	9.9	:	:	9.7	9.7
			(1.4)			(1.5)	(1.5)	(1.5)			(1.2)	(1.2)
24-29	:	10.8	10.8	10.3	10.3	10.9	10.9	10.9	:	:	10.7	10.7
			(1.2)			(1.7)	(1.7)	(1.7)			(1.4)	(1.4)
30-35	:	12.5	12.5	11.4	11.4	11.9	11.9	11.9	:	:	11.7	11.7
			(2.1)			(1.7)	(1.7)	(1.7)			(1.7)	(1.7)
36-47	:	13.4	13.4	12.6	12.6	13.4	13.4	13.4	12.8	12.8	13.1	13.1
			(1.9)			(1.9)	(1.9)	(1.9)	(2.0-2.1)	(2.0-2.1)	(1.8)	(1.8)
48-59	:	15.3	15.3	14.4	14.4	14.9	14.9	14.9	13.9	13.9	14.4	14.4
			(1.8)			(1.9)	(1.9)	(1.9)	(2.1-2.4)	(2.1-2.4)	(1.6)	(1.6)
n	:	282	282	1583	1583	5141	5141	5141	1091	1091	1275	1275

Notes: <sup>a</sup> These data were obtained from longitudinal child growth records from on average 300 infants in each age group

Key: The symbol ':' denotes that data were not available.

The data on the sample of Nyasaland children were collected from 1938 to 1941, however, it is not known during which months the measurements were taken on the village children or the mission children. The 1981 NSSA survey was carried out during the post-harvest months of August to October and the 1989 Ntchisi survey in September. An ANOVA analysis was carried out with WA Z score as the dependent variable and sample, age and sex as independent variables. The results, however, showed that significant interactions existed with a differing effect of age and sex on weight in the three samples. Therefore, instead the data were plotted separately by sample and sex (see Figures 4.4a and 4.4b). Both the mean WAZ value and one standard error were plotted. As can be seen there is no distinctive difference in weight between the three samples of children and much overlapping of standard errors is evident. In the lower age groups the Nyasaland girls and boys appear to weigh less than the two more recent samples. However, the range of the standard error for these children, especially under 36 months of age, is very wide and in some instances overlaps the 1981 and 1989 samples. In addition, the sample sizes in some of the younger age groups of Nyasaland children below 36 months are very small (*i.e.* less than 10 children) and this may also account in part for some of the variation seen. Seasonal differences related to the time when the data on the different sub-groups of Nyasaland children were collected may also contribute to the variation observed. In summary, looking at the data shown in Figures 4.4a and 4.4b it can not be said with any certainty that the weights of these three samples of children differ from one another.

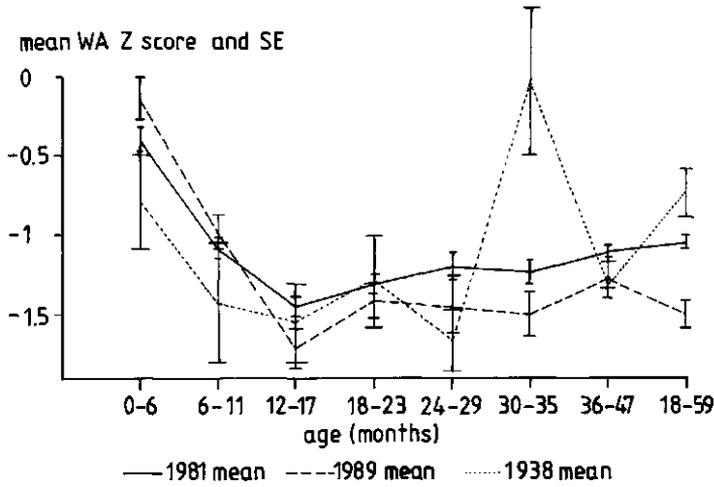


Figure 4.4a: Comparison of WA Z-scores for 1938, 1981 and 1989 samples of children: Girls

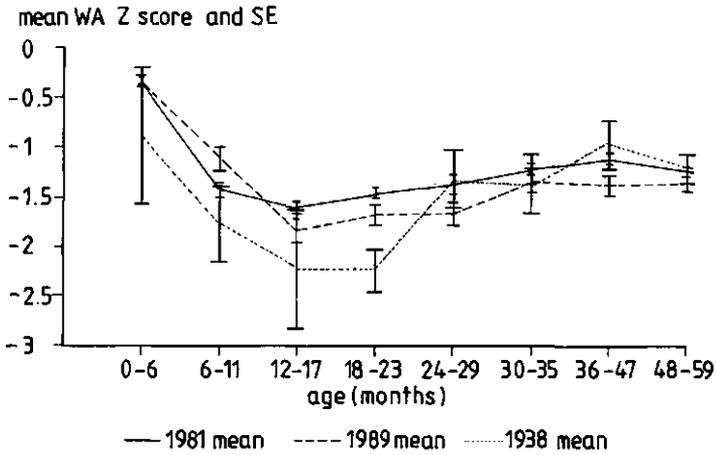


Figure 4.4b: Comparison of WA Z-scores for 1938, 1981 and 1989 samples of children: Boys

*Adults.* The data on the adults described above in Table 4.3 are shown in Tables 4.7 and 4.8 for women and men, respectively. The data on women show basically no change over time with height remaining fairly constant at about 154-155 cm. The Nyasaland women appear somewhat taller than the rest of the more recent samples at 158 cm, however, this group of Nyasaland women 20-29 years old consists of only 13 women. In addition, as will be shown later in Table 4.10, Nyasaland women 18 years and above have very similar height and weight values to a 1986 sample of Malawian women. The 1990 sample of Ntcheu women are also somewhat taller than the rest at 157 cm. Unfortunately no information was available on the tribal composition of the samples of women. Height also appears to have remained fairly constant within each sample across the different age groups. Other researchers studying secular trend in populations have noted the problem of shrinkage in height with increasing age, however, this is not evident in the Malawian women studied here (Ruel *et al.* 1992).

As shown in Table 4.8 the height of men has also remained much the same at 165 to 167 cm over the past fifty years. Because of the presentation of the data on men in the original survey reports it is not possible to disaggregate the results by age. In addition, the tribal composition of the samples of men was not always known. However, the limited data on tribal groups shown in Table 4.8 do not suggest any height difference by tribe at least between the Chewa, Ngoni and Ntumba.

Table 4.7: Mean height (cm) by age for rural Malawian women: 1938 to 1990

	Age (years)				All
	20-29	30-39	40-49	50-59	
Nyasaland 1938-41	158.1 6.4 (13)	:	:	:	:
Nkhotakota 1970	153.9 5.6 (134)	154.1 6.1 (82)	153.6 5.1 (32)	:	:
Lower Shire 1970	154.1 1.1 (119)	153.5 1.0 (164)	154.1 1.3 (99)	156.3 4.0 (10)	:
Namitambo 1970	153.8 5.8 (190)	154.5 5.4 (140)	152.9 5.3 (39)	:	:
Lilongwe 1982	155.0 5.7 (25)	154.4 4.5 (30)	154.8 4.5 (21)	153.8 5.8 (9)	:
Mzuzu 1986-87	155.0 6.6 (1701)	154.9 6.6 (767)	155.5 5.6 (326)	:	:
Ntcheu 1990	:	:	:	:	157.0 5.6 (100)

Key: mean  
SD  
(n)

**Table 4.8: Mean height (cm) of rural Malawian men: 1938 to 1987**

	Tribal Group	Age (years)		n
		Mean	SD	
Nyasaland 1938-41	Mixed	164.7	6.9	312
Miners 1965-66	Ngoni Ntumba	166.0	na	7027
Lower Shire 1970	na	164.7	na	205
Peri-urban miners 1970	Chewa	166.9	6.1	80
Miners 1970	Chewa	165.3	6.6	80
Mzuzu 1986-87	na	164.7	7.2	1760

Key: 'na' denotes not available

It was also possible to make further comparisons of adult height and weight using the data from the 1938 Nyasaland nutrition survey as well as from a research study conducted in 1986-87 in Mzuzu Agricultural Development Division. As shown in Tables 4.9 and 4.10 a high degree of similarity exists in the height, weight and body mass index of the young women and men surveyed in these two surveys which were conducted over 50 years apart.

**Table 4.9: Anthropometric comparison of young men from Nyasaland survey 1938-41 and Mzuzu ADD survey 1986-87 (SD in parentheses)**

	<b>Nyasaland 18-23 years</b>	<b>Mzuzu 18-29 years</b>
<b>Males:</b>		
n	312	604
mean age (years)	20.2 (1.9)	25.3 (2.6)
mean weight (kg)	54.9 (7.3)	57.1 (6.7)
mean height (cm)	164.7 (6.9)	164.9 (7.4)
mean Body Mass Index (kg/m <sup>2</sup> )	20.2 (1.9)	21.0 (2.0)

**Table 4.10: Anthropometric comparison of young women from Nyasaland survey 1938-41 and Mzuzu ADD survey 1986-87 (SD in parentheses)**

<b>Females:</b>	<b>Nyasaland:</b>		<b>Mzuzu:</b>	
	<b>12-17 years</b>	<b>18-23 years</b>	<b>12-17 years</b>	<b>18-29 years</b>
n	398	43	1042	1701
mean age (years)	14.8 (1.7)	19.9 (1.9)	14.6 (1.6)	22.8 (3.4)
mean weight (kg)	40.3 (8.7)	52.2 (7.3)	41.5 (9.4)	51.3 (7.0)
mean height (cm)	148.6 (8.4)	154.8 (6.9)	147.6 (9.4)	155.0 (6.6)
mean Body Mass Index (kg/m <sup>2</sup> )	18.1 (2.5)	21.5 (2.4)	18.8 (2.8)	21.3 (2.5)

#### 4.3.4 Discussion

*Children.* The secular trend analysis on children 36-59 months of age shows that the more recent 1981 and 1989 samples of children are shorter than the 1938 Nyasaland sample. This suggests that nutritional status as measured by stunting may have deteriorated over the 50 years studied. However, there are a number of factors which need to be reviewed before any final conclusions can be drawn since a variety of sampling and non-sampling errors may in fact be distorting the practical significance of the differences observed.

Firstly, several arguments can be posed to question the legitimacy of this type of comparison. The major problem is that the sampling frames from which the three samples of children were drawn are very different from one another. Whereas the Nyasaland data were collected over several years in a number of villages and from mission schools, the 1981 NSSA sample was from a nationally representative survey of villages conducted over a period of three months and the 1989 Ntchisi sample from a survey of a small number of villages in one district which was carried out within a month. None of these surveys were originally designed with a secular trend analysis in mind. As it happened these data sets were the only ones available and the secular trend analysis carried out on them could be described as an opportunistic attempt to make the most of a rather limited collection of data.

Secondly, there are also questions regarding the representativeness of the three samples which may affect their comparability especially the interpretation of results. The 1938 Nyasaland sample consists of children sampled from rural villages in what are now Nkotakota and Ntchisi districts as well as children sampled from mission schools around the country. Some of the sample from mission schools were the children of teachers. It perhaps could be argued that the mission children may represent a higher socio-economic group than village children and as a result might be taller. This could explain why the overall height of the Nyasaland sample is greater than the village children in the 1981 and

1989 samples. Although the background information on the Nyasaland sample is limited, it was possible to determine roughly whether children were sampled from village areas or from mission schools. The height of these two sub-samples of children was then compared using an ANOVA analysis with HA Z score as the dependent variable and sub-sample, age and sex as independent variables. However, no significant differences in height were found between the village and mission school children. Therefore, it is difficult to show that the Nyasaland children were indeed representing a socio-economically better off group.

Comments are also needed on the representativeness of the other two samples of children. Whereas the 1981 NSSA data came from a nationally representative survey, the 1989 Ntchisi data originate from a small scale survey conducted in one of the poorest districts of the country which is known for its high child stunting and mortality rates. In the 1981 NSSA nutrition survey the larger administrative area in which Ntchisi district is located had an overall stunting rate of 63 percent as compared to the national average of 57 percent (Malawi Government 1984a). As can be seen from Table 4.1 the Ntchisi children had much higher levels of stunting than the other nutrition surveys conducted in the late 1980s. The infant mortality rate for Ntchisi district at 228 is much higher than the overall national figure of 151 (Malawi Government/UNICEF 1987). Since the Ntchisi children come from one of the worst areas in the country for poverty, they could be expected to have higher levels of stunting. Therefore, it could be argued that the shorter stature of the 1989 Ntchisi children is probably due to these sampling characteristics rather than to a true deterioration in nutritional status over time.

Thirdly, there are also some uncertainties regarding the accuracy of the Nyasaland data. Problems with height measurements are suggested by the disjointed growth pattern seen between the Nyasaland infants (below 18 months) and the older Nyasaland children (see Table 4.4). The Nyasaland infants appear to be shorter than more recent samples of Malawian children while the older Nyasaland children appear to be taller. Considering the rustic field conditions found in Nyasaland during that era and the inexperience of the

enumerators, who were likely to have had limited education levels, it could be expected that there may have been problems with data collection. For example, if the hair of African children is not completely pushed down flat on the head during height measurements an overestimation of height could have been made. In addition estimating the age of children may have been difficult during the 1930s which was a time when very few people were literate. If a consistent underestimation of age was made then the Nyasaland children would look taller than they really were. However, whether this type of problem existed is not known. The quality of the age data on the Nyasaland children was questioned by other researchers who had access to the original field notebooks of the Nyasaland survey team. Unfortunately no firm conclusions were drawn on the types of errors which may have been present (Driessen 1978).

In summary, the results of the ANOVA comparison of the heights of children 36-59 months of age shows that the 1938 sample is taller than the 1981 and 1989 samples. The 1981 NSSA children also appear to be taller than the 1989 Ntchisi children. However, it is still by no means certain that the observed trend of decreasing height represents a true *deterioration in nutritional status over time* or rather is the result of factors related to the representativeness of the groups being compared as well as to the quality of the data collected especially in the 1938 survey. In addition, the results from the analysis of weight over time do not produce a clear picture. Although it is difficult to say with any certainty that child nutritional status has deteriorated over the time studied, it can be said with confidence that no improvement has taken place.

**Adults.** The picture which emerges from the analysis of anthropometric data on adults indicates that little change has taken place in the height of Malawian men and women from 1938 through the late 1980s. It also appears that weight and body mass index have remained much the same as shown by the limited data available. Indeed the similarities between adult heights for the different samples of men and women studied are quite remarkable considering the diversity of the data sets used for the comparison.

The height data on Malawian adults also provide a reflection of the past situation of child nutrition. Taking the minimum and maximum ranges of the years of birth for the adult samples, the first sample of Nyasaland adults would have been born somewhere between 1909 to 1920, while the most recent sample of adults from the Mzuzu survey would have been born between 1957 to 1968. Therefore, it can be inferred based on the constant level of adult height found that at least during the years from approximately 1900 to 1970 the situation of child nutrition appears to have remained much the same.

#### 4.4 Conclusions

It is unclear whether a deterioration in child nutritional status has occurred since the late 1930s. The results of the secular trend analysis on adults suggests that child nutritional status has remained fairly constant at least from the early 1900s to the early 1970s. Certainly there is no evidence to indicate an increase in height or an improvement in nutritional status in the population as a whole.

This lack of secular trend is not unexpected since living conditions for the majority of Malawi's population have remained much the same over this past century. However, whereas the type and level of malnutrition as measured by stunting appears to have remained constant throughout the 1900s, the configuration of the immediate, underlying and basic causes no doubt has changed over time as a result of the evolving situation of household food security, population pressure, health care, disease patterns and other related factors such as those which affect the wellbeing of women and their capacity to care for their children.

For example, as shown in Chapter 3 while some advances have been made in health care, education, water and sanitation, some of the gains achieved have been eroded by the country's high population growth rate. Infant and child mortality rates have decreased somewhat since the 1950s, no doubt as a result of the improvements in health infrastructure.

However, even though mortality levels have declined the rate at which they fell has been much less than that seen in neighbouring countries such as Zambia and Zimbabwe (Hill 1986). While health care may have improved, other debilitating infections such as malaria appear to be on the increase (Malawi Government 1989). Child feeding practices overall do not appear to have changed much in rural settings. As found by the Nyasaland nutrition team in 1938 (see Case Study 1 in Chapter 5) the major problems appear to be inappropriate weaning practices combined with traditional weaning foods which are bulky and lacking in calories and nutrients (Berry and Petty 1992). Similar problems with child feeding habits are found today in Malawi (Malawi Government/UNICEF 1987). One research study conducted in the early 1980s showed that some traditional child feeding practices which were beneficial to nutrition have been discontinued due to the increasing work load and time constraints placed on rural mothers (Chimwaza 1982). Perhaps the biggest factor working against any improvement in nutritional status is the high population growth rate especially the intense pressure this has placed on arable land (see Table 3.2 in Chapter 3). This in turn has led to increasing stress on household food security particularly for the poorer segments of the population as landholding sizes have shrunk below the level required for household self-sufficiency. Soil depletion has also become a problem since the traditional practice of leaving land to lie fallow has had to be abandoned in face of the declining availability of cultivable land. In addition, few farmers are able to afford to use fertilizer which would replenish the depleted soils and enhance production levels.

In Malawi only the children of a small segment of the population considered to be socio-economically better off have shown an increase in height to levels similar to North American children (see Figure 4.3). If socio-economic conditions were to improve at a steady rate across the country for the bulk of the population, it could be expected that the height of Malawian children would have the potential to increase by 11 cms. The velocity of this increase, however, is difficult to predict and would directly depend on the level and rate of improvement in living conditions. If socio-economic improvements were made which are comparable to those observed in Europe from the early 1900s to the late 1970s

then height could increase upwards to 1-2 cms each decade (Tanner 1978). This would mean that a minimum of 50 years would be needed for Malawian children to achieve their full growth potential for height. Given the massive development challenges which confront the country in the future in regard to the economy, agricultural production, the environment, health and education amongst other issues, it could be argued that socio-economic improvements similar to those seen in Europe earlier this century are unrealistic. Therefore, a more realistic time frame for children in Malawi to achieve their genetic potential for height might be much longer.

The purpose of this chapter was to describe the nature and levels of the child malnutrition problem in Malawi at different points in time. As such this provides the background for Chapter 5 which will examine in detail the attempts made at national nutrition planning from the late 1930s until the present time. A central part of this analysis will be reconstructing the general perception held by the Government and the donor community of the nutrition situation in the country at different points in time as well as the various types of actions taken to address the perceived problems.

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## CHAPTER 5

### NATIONAL NUTRITION PLANNING IN MALAWI FROM 1936 TO 1990

This chapter presents a comprehensive overview of the state of nutrition planning from 1936 to 1990 in order to test the hypothesis that:

**Nutrition planning, as defined by the model of planned development, has not been successful in Malawi and this has been due to the lack of fulfillment of four prerequisites which are necessary for planned development, namely the existence of:**

- 1.) mutually agreed objectives;
- 2.) political will;
- 3.) appropriate planning theories; and
- 4.) the means and capacity to take action.

A number of case studies on nutrition planning attempts as well as nutrition interventions will be presented for each of the three time periods being reviewed. These eleven case studies (see Table 5.1 below) will provide the information necessary to evaluate the status of nutrition planning at various points over time in regard to the fulfillment of the four prerequisites. Taken as a whole these eleven case studies present a nearly complete history of the major nutrition planning activities undertaken in Malawi over the past 50 years.

**Table 5.1: List of the eleven case studies on nutrition planning in Malawi**

**PERIOD I: 1936 to 1963**

**Case Study 1: Nyasaland Nutrition Survey and Nutrition Development Unit - 1938 to 1941**

**PERIOD II: 1964 to 1979**

**Case Study 2: WHO Review on Nutrition in Malawi - 1964**

**Case Study 3: Nutrition Education Initiatives - 1964 to 1971**

**Case Study 4: Ministry of Health Initiatives - 1968 to 1971**

**Case Study 5: UK Freedom from Hunger Campaign Mission - 1972 to 1974**

**Case Study 6: National Rural Development Strategies - 1964 to 1979**

**PERIOD III: 1980 to 1990**

**Case Study 7: UNICEF supported Integrated Basic Services Project: Results from an Evaluation - 1979 to 1984**

**Case Study 8: National Nutrition Education Programme: Results from an Evaluation - 1982**

**Case Study 9: The Evolution of Nutritional Surveillance in Malawi - 1980 to 1990**

**Case Study 10: Role of UNICEF in Nutrition Planning - 1980 to 1990**

**Case Study 11: Role of the World Bank in Nutrition Planning - 1980 to 1990**

## 5.1 Period I: 1936 to 1963

### 5.1.1 Background

During the 1930s Nyasaland was a country facing severe financial problems brought about from a combination of the world economic recession as well as the large national debt incurred from overly ambitious development projects (Berry 1984). Nyasaland had always been considered to be one of the poorest territories in the British Empire. Little colonial investment had been made in the country since opportunities in agriculture, minerals and industry were thought to be limited. The result was that the Nyasaland Protectorate never flourished and just managed to get by financially. At that time British colonies serving no important strategic purpose were expected to finance themselves and this was the case in Nyasaland. Some revenues were generated by imposing hut and poll taxes on the natives, however the resulting funds were meager and vastly inadequate to provide basic social, health and agricultural services to the country's inhabitants (Pryor 1990). At the end of the 1930s less than ten medical officers were available to undertake district work amongst the African population estimated to total 1.6 million people (Berry 1984).

One of the most important development issues in Nyasaland during the colonial era was considered to be that of environmental degradation especially soil erosion (Hornby 1934). This was a similar concern in other British territories as well (Worboys 1988). It was feared that a decline in domestic food production would be the eventual result (Nyasaland Government 1955; Berry and Petty 1992). Predictions were made that in face of the increasing population the country would soon be unable to feed itself. To address the issue of national food self-sufficiency the Nyasaland Government put into place conservation measures, some of which were enforced by law, to improve local systems of agriculture in order to enhance food production as well as the diet of the people (Berry 1984; Vaughan 1984).

It is against this background of underdevelopment, limited resources and perceived threats to the country's food security that the pioneering nutrition research and rural development work undertaken in Nyasaland during the second half of the 1930s and early 1940s should be viewed.

For the purposes of this review the years under study can be divided into two time periods: the first from 1936 to 1943 and the second from 1944 to 1963. The focus of this analysis of colonial nutrition activities will be on the first period only since it was during these years that significant nutrition work took place and nutrition was considered to be a national policy priority. The commencement of the Second World War marked a decline in non-essential government work, including that in nutrition, since much of the country's resources, especially manpower, had to be diverted to the war effort. After the war ended new political priorities emerged in the country which occupied the attention of the Nyasaland Government. These included the growing political tension created by the nationalism movement led by prominent Africans which eventually resulted in self-rule and independence in 1964. Essentially from the mid 1940s until independence little happened in the way of nutrition therefore this time period will not be dealt with in the analysis presented below.

### **5.1.2 Global nutrition planning theories**

During the 18th century an inadequate diet was viewed as the result of poverty (Rivers 1979). With the discovery of protein in the 19th century the focus widened to include the quality of the diet in addition to its quantity. However, this increased the cost of what was considered to be an adequate diet and according to Rivers (1979) its practical effect was to stress further the effects of poverty. Throughout the 19th century the cost of a basic diet was considered to be the major determinant of nutritional status.

The discovery of the important role of vitamins and minerals in maintaining health during the first two decades of the 20th century marked a distinct change in the view of

malnutrition in scientific circles. This era has been referred to as the 'Newer Knowledge in Nutrition' (McCollum, Orent-Keiles and Day 1939; Petty 1987). The issue of the quantity of food consumed was eventually overshadowed by the issue of the quality of the diet especially with respect to its content of essential micronutrients. According to Rivers **"nutritionists became grossly over-enthusiastic about dietary quality and malnutrition was increasingly seen, not as an attribute of poverty, but a reflection of ignorance"** (Rivers 1979:228).

At about the same time Sir John Boyd Orr, an eminent British scientist, showed from the results of his dietary studies in Great Britain that the adequacy of the diet was associated with income (Boyd-Orr 1936). Although Boyd-Orr recognized the link between health and the quality of the diet, he also appreciated the larger picture and the linkages between malnutrition and poverty. In addition, during the 1930s growing concern was expressed by international bodies such as the League of Nations of the paradox of increasing world hunger in face of agricultural surpluses (League of Nations 1935; League of Nations 1937a; Worboys 1988). This cast more attention on the structural aspects of the nutrition problem.

However, despite the opinion that poor nutritional status and poverty were closely inter-linked, the medical establishment in Britain chose instead to view inadequate nutrition as a problem of ignorance (Rivers 1979). It was their opinion that a scientifically nutritious diet could be obtained at an affordable cost. Despite the fact that the theoretically well balanced and affordable diet was unpalatable and neglected traditional food habits, the technical school of nutrition prevailed over the structuralist school represented by such figures as Boyd Orr.

Therefore, the substantive theory in nutrition planning which was dominant in Britain during the 1930s framed the problem of poor nutrition as a technical issue. Emphasis was placed on the quality of the diet eaten especially in regard to its content of animal protein,

vitamins and minerals. At that point in time a deficiency in any one of these nutrients was referred to as 'malnutrition'. These types of deficiencies were thought to cause general ill health and certain diseases such as tropical ulcer, conjunctivitis, xerophthalmia, pyorrhea, dental caries, night blindness, constipation and retarded growth (Nyasaland Government 1938). On the other hand a shortfall in overall food intake was referred to as 'undernutrition'.

As reflected in this quote from the Colonial Office the problem of 'malnutrition' was clearly seen as more important than that of 'undernutrition':

**"Thirty years ago it was generally believed that the dietary requirements of human beings are satisfied so long as they have a large enough quantity of food to eat. It is now known that the adequacy of a dietary depends on the presence of a number of factors, and that with quantitative sufficiency there may be qualitative defects producing the most serious physical consequences ... In many European conditions the deficiencies of diet are normally not so much in the "energy-giving" foods as in the "protective" foods containing vitamins and mineral salts. While a man may continue to exist on a diet which is sufficient in the "energy-giving" foods but deficient in the "protective" foods, the absence of these latter may render him an easy prey to infectious diseases or may impair all his capacities and his efficiency for any form of activity" (British Government 1936:para.3).**

In summary, inadequate nutrition was seen as arising from a poor choice of foods, or in other words ignorance (Rivers 1979; Worboys 1988). The answer was seen as nutrition education to teach people the basics of a nutritionally sound diet. Although these planning theories were derived from what was then the current understanding of the deficiencies of the British diet, it was assumed that the nutrition problems found in colonial territories such as Nyasaland would be much the same (Worboys 1988).

The subject of nutrition in British colonial territories was very popular during the 1930s and largely connected with the drive to raise the economic standards of the various colonial

people (Richards 1977)<sup>16</sup>. Part of the stimulus which gave rise to so much attention being given to nutrition in developing areas of the world arose from the belief in Britain that knowledge of nutritional sciences, especially in regard to the link between micronutrient deficiencies and health, could be used in policy-making. According to Petty **"nutrition, a subject that crossed the boundaries between the social and physical sciences, was thought to play a key role in this process of social progress through applied knowledge"** (Berry and Petty 1992:5). In addition, the option of relatively low cost measures to remedy the nutrition ills of populations in the Colonial Empire was much preferred to the more expensive and longer term option of large investments in public health.

In 1936 a global review of the nutrition of the indigenous peoples of the British Empire, including Nyasaland, was carried by order of an Official Despatch sent out by the Secretary of State for the Colonies. The following quote from the Official Despatch reflects the high level of interest given to nutrition and national development:

**"expenditure on improved nutrition may well be remunerative itself, leading as it should to a greater well-being, greater efficiency in production and less waste of human life and effort. I am therefore most anxious that the Colonial Empire should not be behind-hand in the attention devoted to this subject. I would invite your cooperation in this end"** (British Government 1936:para.8).

Although attention was given to the technical aspects of good nutrition, the overall approach of the British government was to view colonial nutrition as a structural issue. The major focus was placed on agricultural production and economic development, with significantly less attention given to medical services and public health (Worboys 1988). After three years of work, a lengthy report entitled *Nutrition in the Colonial Empire* was produced by the Colonial Office in 1939.

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<sup>16</sup> Britain was not the only colonial power interested in the nutrition of the people of her territories since the same applied for the Dutch in Indonesia (den Hartog 1989) as well as the French in their African territories.

After the devastation of the second World War, the interest shown by Governments and the League of Nations during the 1930s on nutrition in developing areas of the world continued with much momentum. The momentous United Nations Conference in Hot Springs, Virginia in 1943 marked the birth of the global declaration of 'freedom from hunger' as being a fundamental human right. At this meeting the Food and Agriculture Organization (FAO) was conceived and later the United Nations Children's Fund (UNICEF) established. Along with the World Health Organization (WHO) these three United Nations agencies became actively involved in different aspects of nutrition planning in developing countries. Some of the technical staff of these United Nations agencies in had also been involved in colonial nutrition work. In addition, John Boyd-Orr was named as the first Director-General of FAO.

The field methodologies to assess nutritional status which were used during the 1930s and 1940s were heavily geared towards the identification of what vitamins or minerals were lacking in the diet (League of Nations 1932, 1937b, 1937c, 1937d, 1937e; Bigwood 1939). These included both dietary assessment of actual to recommended intakes as well as clinical assessment to detect physical signs of nutritional deficiencies. Although it was then understood that poor nutrition caused growth retardation, the analytical methods to handle anthropometric data (i.e. body measurements) did not yet exist. It was only in the mid-1960s that the statistical techniques in anthropometry had been sufficiently developed to use measurements of weight and height, amongst others, to assess abnormal growth so that the proportion of malnourished people could be calculated (Jelliffe 1966; Jelliffe and Jelliffe 1989).

### 5.1.3 Nutrition planning in Nyasaland

#### *National Policy Framework*

The first time nutrition concerns entered development planning in Malawi was in 1936 with the arrival of the Official Despatch from the Secretary of State for the Colonies, described earlier, which requested the administrators of all British Territories to submit information on the state of nutrition in their countries, including the nature of nutrition problems and the scope for improvement. This information was subsequently used to compile the 1939 Colonial Office report on *Nutrition in the Colonial Empire*.

In Nyasaland up until the arrival of the 1936 Official Despatch very little attention had been given to nutrition and not much was known on the subject.

**"No special investigations have previously been carried out in connection with human nutrition in Nyasaland, and, with the exception of some observations relating to deficiency diseases which have been recorded in the Annual Reports of the Medical Department it is not possible to refer to any literature dealing with the subject" (Nyasaland Government 1938:3).**

On receipt of the 1936 Official Despatch the Nyasaland Government took prompt action to address the issue of nutrition. Echoing the views contained in the Official Despatch, the Nyasaland authorities based their actions on the belief that improvements in nutrition and diet would **"be the first steps in the general advance towards the improvement of general economic and health conditions"** (Nyasaland Government 1938:1).

With so little information available on nutrition one of the first steps taken by the Government was to conduct a survey of the nutrition situation in the country by sending out questionnaires to knowledgeable people such as Government administrators, district officers, Missionaries and educated Africans. The responses received were compiled by the

Native Welfare Committee and published in 1938 in a report entitled the *Nutritional Review of the Natives of Nyasaland*.

Interest in nutrition soon gained momentum in the upper echelon of Government policy making since by 1939 nutritional concerns had been incorporated into two national policy statements: the *Memorandum on Native Diet and Housing* (Nyasaland Government 1939a) and the *Memorandum on Native Welfare* (Nyasaland Government 1939b). Both emphasized the importance of adequate nutrition in national development. The *Memorandum on Native Diet and Housing* focused on the technical aspects of a scientifically sound diet which employers could use to enhance the health and productivity of their labour force. The *Memorandum on Native Welfare* emphasized the importance of good nutrition to foster social progress and the economic development of the country and had been produced to synthesize the existing Government strategies on the political, social (health and education), economic (land and production), labour and taxation aspects of the Government's work with the native population. However, at the same time the Government realized that more information was needed on the nutrition situation in the country to guide further policies and strategies, especially in regard to a national nutrition education programme. The Nyasaland nutrition survey, described below as Case Study 1, was expected to provide this information.

### ***Perception of Nutrition***

The perception of nutrition found in Nyasaland during the 1930s is embodied in the Government's *Nutritional Review of the Natives of Nyasaland*. The structure of the questionnaires sent out was based on the guidelines provided by the 1936 Official Despatch from the Colonial Office which had a heavy focus on the study of local food production systems. In addition, there was an inherent bias towards the prevailing global substantive theories on nutrition, namely issues regarding the quality of the diet in terms of protective foods especially their vitamin, mineral and protein content. As a result the responses received back from the Nyasaland Government's survey tended to reflect these same

concerns as illustrated by the following passage taken from the *Nutritional Review of the Natives of Nyasaland*:

**"It is assumed that the total caloric requirements of the native are satisfied by his usual diet; how far this diet falls short of the optimum or even the minimum requirements with regard to protein, fats, minerals and vitamins can only be assumed. According to the standards accepted for non-tropical races the natives' intake of first class protein is inadequate, more especially during the important periods of childhood, pregnancy and lactation; the consumption of fats is also too low when measured against the same standards, furthermore, it is mainly of vegetable origin; the intake of carbohydrate is adequate, if not excessive. Death by starvation is practically unknown" (Nyasaland Government 1938:11).**

Much attention was also given to the low intakes of protective foods such as milk, tomatoes, green vegetables and fruit. It was also assumed that the intakes of vitamins A, C and D were dangerously low, as were minerals such as calcium and phosphorous. Low protein intake was singled out as an important problem in the local diet.

In regard to household food security the report stated that **"in a normal year there is usually sufficient food grown to supply the needs of the family until the new crop is ready though the margin between sufficiency and shortage is fine"** (Nyasaland Government 1938:6). It was reported that famine did occur during natural disasters such as drought, but this had only occurred a few times in the country's history.

Some anecdotal accounts were also provided in the *Nutritional Review of the Natives of Nyasaland* on young child feeding habits as well as child and maternal care. For example, it was noted that supplementation of an infant diet with thin gruel during the early days and weeks of an infant's life was not only unnecessary but also probably accounted for the high infant mortality seen from diarrhoea. However, generally speaking maternal and childcare issues only received minimal attention.

The link between poor health and inadequate nutritional status was clearly made in the *Nutritional Review of the Natives of Nyasaland*. It was also recognized that the weight and height of Nyasaland children older than 10 years was less than that seen in British children the same age. However, the report stated that in regard to children under 10 years nutrition appeared to be fair to good and any deviations in growth were thought to be due to parasitic worm infestations (Nyasaland Government 1938).

Although much of the detail contained in the *Nutritional Review of the Natives of Nyasaland* was concerned with the technical aspects of the nutrition problem in regard to the quality of the diet, the foundation of the report was based on what were thought to be the major structural causes of the problem. Separate sections were devoted to such structural issues as agricultural production, labour conditions, fishing and animal husbandry, horticulture, soil conservation, transport, storage and education.

The Government's strategy to address Nyasaland's nutrition problems was planned on the basis of the *Nutritional Review of the Natives of Nyasaland*. Similar to the British nutrition community, the Nyasaland Government saw the answer as being nutrition education "to bring home to the masses by education and propaganda the comparative value of staple foods and the advantage to be gained by an extension of the dietary in certain directions..." (Nyasaland Government 1938:1). However, it was also recognized that the:

**"standard of living must be raised before a substantial improvement can be anticipated from any other measures which may be advised, and it must be emphasized that this can only be achieved by the combined efforts of the technical departments mainly concerned, viz., Agricultural, Education, Health and Veterinary, working in harmony with and receiving the full co-operation of, the District Administration and the Native Authorities"** (Nyasaland Government 1938:16).

The procedural theory of planning which was taken by the Government to address the problem of nutrition was classically top-down. As shown in the preceding quotation it was

also multi-sectoral and covered the range of professional disciplines thought to be important for nutrition. The tone of the Government's document, however, was indicative that the official view of the people of Nyasaland was that they suffered from ignorance and backwardness and that these were major reasons for their poor nutritional situation (Berry and Petty 1992). In addition, the villagers were seen as passive recipients of the development process rather than as active participants.

The *Nutritional Review of the Natives of Nyasaland* was indeed an impressive document which covered most of the key underlying causes thought to be related to poor nutrition. However, the major weakness of the report was that it was not based on any scientific knowledge of the true nutrition situation found in Nyasaland. Instead it relied on the preconceived notions of the Colonial Office for its basic structure and content. In addition, much of what it contained was limited by its anecdotal and non-scientific nature which could be expected to be biased and not representative of the true situation found in the country.

#### **5.1.4 Actions taken on nutrition**

##### **CASE STUDY 1: Nyasaland Nutrition Survey and Nutrition Development Unit - 1938 to 1943**

One direct result of the Colonial Office efforts to investigate the nutrition of the people of the colonial empire was the subsequent decision taken in London that Nyasaland should be the site of a broad based nutrition survey of indigenous food systems. This would include studies on household dietetics, clinical conditions, chemical food analyses, anthropometry as well as agricultural and anthropological surveys. The intention was to undertake a community survey of agriculture, food and health in order to provide the empirical basis for multi-sectoral rural development interventions (Berry and Petty 1992). This approach of linking scientific research with the formulation of public policy which employed a multi-

disciplinary strategy was meant to serve as a case study which if successful could be tried in other territories. Nyasaland was chosen as the location for this pioneering work since some small studies on vitamin deficiencies and anthropology had already been carried out in the country by British researchers (Fitzmaurice 1935; Berry and Petty 1992). The funding for the survey was to be provided by the Colonial Office from their Colonial Development Fund. The Nyasaland Government's contribution was the secondment of a medical officer and agriculturalist to the Survey team.

The Nyasaland Nutrition Survey was planned on the ideas presented in the *Nutritional Review of the Natives of Nyasaland* (Berry 1984). It was carried out over an 18 month period from 1938 to the end of 1939 in three rural communities of Kota Kota district<sup>17</sup> as well as in one peri-urban area outside of Blantyre. The Survey team consisted of a medical officer, an agriculturalist, a food investigator, an anthropologist and a botanist. To ensure that the information generated from the field work would be channeled into the Government's planning system the Native Welfare Committee, which was the group that had produced the *Nutrition Review of the Natives of Nyasaland* and the *Memorandum on Native Welfare*, was put in charge of overseeing the work of the Nyasaland Nutrition team.

The internationally renowned medical doctor and nutritionist Dr Benjamin Platt was chosen by the British Government to direct the nutrition work in Nyasaland. Dr Platt was known for his pioneering research on vitamins in China and was also a scientist who firmly subscribed to the belief that "**nutrition was the panacea for everything**" (Berry 1984:50).

From the beginning it was intended that the nutrition survey would be followed by the establishment of a Nutrition Development Unit (NDU) in Kota Kota district. The plan was that the staff of the NDU would use the research findings from the nutrition survey to design rural development projects aimed at improving nutrition and household food

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<sup>17</sup> After independence Kota Kota district was divided into Nkhotakota district and Nichisi district.

security. It was expected that these projects would include a wide range of activities including improvements in agricultural and soil conservation methods, the introduction of new crops, the improvement of existing strains as well as new animal husbandry practices (Berry 1984). Even by 1938 with funding from the Nyasaland Government a number of pilot demonstration projects had already been begun (Berry and Petty 1992).

By 1940 after the Nutrition survey ended the NDU in Kota Kota district was established with funding from the Colonial Development Fund (Berry and Petty 1992). The professional staff of the NDU included a full time nutritional investigator and an agricultural officer, both to be paid from the Colonial Development Fund. In addition, the Nyasaland Government seconded on a part-time basis a district medical officer as well as a veterinarian officer and a forestry expert.

Dr Platt's dream was that in time the Government would establish NDUs in every district in the country. His intention was that these units would provide the institutional channel through which multi-disciplinary agriculture, health and education programmes to improve nutrition and household food security could be introduced to rural communities<sup>18</sup>.

#### **5.1.5 Fulfillment of the four prerequisites**

The pioneering nutrition planning work carried out by Dr Platt's team is evaluated below in regard to the fulfillment of the four prerequisites necessary for the planned development process identified earlier in Chapter 2, namely 1.) whether mutually agreed objectives existed, 2.) whether the political will existed, 3.) whether the planning theories used were appropriate and 4.) whether the means and capacity to take action existed.

#### ***Objectives***

From the available policy documents it is clear that at that point in history nutrition was considered to be an important development objective both by the British Colonial office as

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<sup>18</sup> A suggestion had even been made that these offices be called 'Platteries'.

well as the Nyasaland authorities. In the 1936 Official Despatch from London the Secretary of State for the Colonies wrote:

**"The subject of nutrition is one in which there has been a great advance of technical knowledge in the last thirty years and one to which much public attention is now directed. It is probably true to say that it is now regarded as one of the most important aspects of public health work in all countries (British Government 1936:para.2).**

This was also the view of the Nyasaland Government as illustrated by their statements quoted earlier from the *Nutritional Review of the Natives of Nyasaland*. In addition, the inclusion of nutrition concerns into the two national policy statements, the *Memorandum on Native Diet and Housing* and the *Memorandum on Native Welfare*, also confirms that a consensus existed in the Government that improved nutrition was considered to be an important objective in the country's development strategy.

### ***Political Will***

Political will to improve the nutritional status of the population did exist in Nyasaland, although over time the level of goodwill for Dr Platt and his team did dwindle. At the beginning a great deal of enthusiasm was shown by the Nyasaland authorities who gave their full support to the Nyasaland nutrition team (Berry and Petty 1992). According to Dr Platt:

**"the nutrition party has roused the enthusiasm of officers and others and the time is ripe for a big forward drive in improving nutrition and, through it, native welfare generally" (Berry and Petty 1992:187).**

Although much of the cost for the work was covered by London the Nyasaland Government did feel committed enough to second district staff to both the Nutrition Survey as well as the NDU (Berry and Petty 1992). In addition, the Nyasaland authorities also provided funds to support some of the pilot rural development activities.

However, not long after the NDU was created political support from the Nyasaland Government began to taper off. Dr Platt found it increasingly more difficult to convince the authorities that a replication of the NDU was needed in other areas of the country. According to the NDU's medical officer, Dr. W.T.C. Berry:

**"the Nutrition Development Unit scheme soon ran into trouble with the Nyasaland Government. Dr Platt's theory - that once shown the way, the Africans would grow more varieties of food, malnutrition would disappear and a new, healthier, more energetic population would succeed the present one - was the brain child of a young and eager man with no experience of Africa. The Nyasaland Government began to have cold feet, for he had failed to convince many of the senior officers of the soundness of his recommendations" (Berry 1984:50).**

In the many years of British rule none of the country's fundamental development problems had been close to being solved. Naturally Nyasaland Government staff were less than enthusiastic when an eager young scientist such as Dr Platt with no African experience suggested that these problems could be solved within a few years through improvements in nutrition.

Political frictions also arose between the members of the NDU and the Nyasaland Government in regard to the colonial practice of indirect rule through which the Government enforced its laws by using the traditional tribal authorities (Berry 1984). Some of the staff of the NDU had written unfavorable comments in one of their progress reports which criticized the indirect-rule policy. They felt this policy was undermining the traditional authority of the Nyasaland chiefs and hence was an obstacle to the some of the NDU's development work with rural communities. When the Nyasaland authorities saw this progress report they responded angrily and accused members of the NDU of disloyalty. Shortly thereafter the funding for the NDU was not renewed and it was finally closed down in 1943.

*Planning Theories*

The major focus of the work of the Nyasaland nutrition team was on native food systems, especially the types and amount of foods eaten (Berry and Petty 1992). Much attention was also given to agriculture practices particularly as these related to food production. This reflected the original interest of the Colonial Office on the structural issues of agriculture production and household food security which was reflected in the 1936 Official Despatch (Worboys 1988). The emphasis on household food security as a major underlying cause in the conceptualization of the nutrition problem is clearly evident in the short and long-term policy recommendations proposed by the NDU to improve the nutritional levels of the population. Most of these recommendations concerned issues of staple food production, horticulture, soil conservation and the like (Berry and Petty 1992). The other important clusters of underlying causes of child malnutrition, namely inadequate maternal and child care as well as insufficient health services and an unhealthy environment (see the Conceptual Framework in Figure 2.2) received hardly any attention in the recommendations made by the Nyasaland nutrition team. This was despite the fact that detailed study had been made by the team on infant and child feeding and caretaking practices, maternal health and nutrition, the multiple roles of women, disease levels, traditional medicine practices, village water supplies and sanitation facilities. The focus of the NDU's attention for future work in nutrition instead was on household food security. This bias was probably the result of the great concern shown by the Nyasaland and British governments at that point in time to issues of population growth, environmental degradation and food self-sufficiency.

In regard to the issue of dietetics, especially the dimensions of quality and quantity of food, perhaps the weakest aspect of the nutrition planning work carried out in Nyasaland during the 1930s and 1940s was that the substantive planning theories originally used by the British nutritionists were inappropriate for the situation found in Africa. The problem was that the scientific knowledge of nutrition problems in Britain and Europe could not directly be applied to an impoverished and agrarian society such as that found in Nyasaland. In addition, the procedural approach initially taken by the NDU to plan and implement their

programme of rural development also proved to be problematic in practice and as will be discussed below did not meet with much success.

*Substantive Theories.* The substantive planning theory used by the British was the *a priori* belief that the nutrition problem in Nyasaland was one of 'malnutrition' or in other words a poor quality diet deficient in animal protein, vitamins and minerals. The major cause was thought to be ignorance and backwardness. The answer to the problem was seen as nutrition education to show the villagers how to produce and eat more nutritious foods (Nyasaland Government 1938).

However, the data collected by Dr Platt's nutrition team began to show quite a different picture with the true problem being 'undernutrition', or in other words too little food, and the primary deficiency being inadequate calorie intake. The problem was not so much ignorance but rather basic constraints imposed by poverty and, as will be discussed later below, what the NDU team referred to as a lack of foresight. According to Dr. Berry, the NDU's medical officer:

**"The amount of caloric energy consumed seemed of considerable importance, and the amounts of vitamins of negligible importance, at least when considered in relation to the life and work of the Bantu and their problems. In Nyasaland the importance of undernutrition was accentuated compared with malnutrition, because the farmer was inefficient, and mainly using an obsolete tool, the 'native' hoe" (Berry 1984:56).**

Dietary data had been collected during the nutrition survey from the village communities using a new methodology then being developed by Dr Platt which compared measured nutrient intake to recommended requirements. As shown in Table 5.2 a running total over a ten month period revealed that the average per capita calorie intake in the three villages was substantially less than requirements for the majority of the months studied. Therefore,

the major nutrition problem facing these communities was one of inadequate food, particularly during certain months of the year.

The issue of dietary quality was also examined by the Nyasaland nutrition team who concluded that the issue of quantity was far more important in the context of Nyasaland. Although their field work did show some marginal intakes in regard to certain vitamins and minerals Dr Platt's dictum became:

**"that save in a few specific respects the Nyasaland native ate the right sorts of food, but not enough of it, save at certain seasons ... Calorie value depends naturally on each year's harvest. There are periods of plenty which are followed by times of shortage in the same year" (Berry 1944:4).**

In regard to protein the view of the Nyasaland nutrition team was that:

**"protein in the diet of the maize eating tribes was adequate, even though almost all of it was of vegetable origin and 90% came from maize. This was confirmed by work done by the Nutrition Unit in which meat supplying animal protein equal to 50% of the optimum was fed to 40 children over a period of one year. No significant gains in height and weight or health were recorded ... This does not apply to cassava eaters; even where fish is available, the protein intake is below the standard recommended" (Berry 1944:4).**

Table 5.2: Average calorie intake per capita per day for different months of the year in 1938-1939: Rural areas by village

Month	Calorie requirement	Calorie intake	Percent difference	Agricultural work patterns
<b>HILL VILLAGE:</b>				
Dec	2,245	2,130	- 5.1	Season of heavy agricultural work
Jan	2,208	1,580	-28.1	
Feb	2,022	2,006	- 0.8	Slack period
Mar	2,115	1,721	-18.6	
Apr	1,967	1,722	-12.4	
May	1,573	1,401	-11.0	
Jun	1,895	1,786	- 5.8	Harvest
Jul	1,966	2,304	+17.2	
Aug	1,620	1,617	- 0.2	
Sep	1,843	1,691	- 8.2	
<b>Average over ten months</b>	<b>1,942</b>	<b>1,784</b>	<b>- 8.2</b>	
<b>FOOTHILL VILLAGE:</b>				
Dec	1,899	1,537	-19.0	Season of heavy agricultural work
Jan	2,051	2,108	+ 2.8	
Feb	1,823	2,354	+29.2	Slack period
Mar	1,980	2,229	+12.6	
Apr	1,760	2,004	+13.9	
May	1,733	1,485	-14.3	
Jun	1,610	1,947	+21.0	Harvest
Jul	1,771	2,958	+67.0	
Aug	1,646	2,308	+40.0	
Sep	1,726	2,033	+17.8	
<b>Average over ten months</b>	<b>1,784</b>	<b>2,050</b>	<b>+14.8</b>	
<b>LAKESHORE VILLAGE:</b>				
Dec	1,773	1,907	- 7.5	
Jan	2,001	1,895	- 5.3	
Feb	1,862	1,567	-15.9	
Mar	1,940	2,099	- 8.2	
Apr	1,812	2,154	+18.9	
May	1,753	1,429	-18.5	
Jun	1,824	1,234	-32.3	
Jul	1,729	1,460	-15.5	
Aug	1,787	1,393	-22.1	
Sep	2,053	1,803	-12.2	
<b>Average over ten months</b>	<b>1,852</b>	<b>1,733</b>	<b>- 6.4</b>	

Source: Berry and Petty 1992

of the nation itself' (Berry 1984:56). This is dealt with in greater detail in the following section.

*Procedural Theories.* Apart from these important lessons which were learned on the nature of the nutrition problems facing the people of Nyasaland, insights were also gained regarding the procedural approach needed to address the problem. The original approach taken by the Colonial Office, the Nyasaland Government and Dr Platt's nutrition team had been highly centralized and heavily top-down, although emphasis had been given to the need for a multi-sectoral planning approach to the problem. However, even though the objective of improving nutrition had been discussed and agreed amongst planners at the national level within the Government structure, this same process of agreement on nutritional objectives had never taken place with the villagers.

It was believed at the beginning that the enlightened nutritional scientists from Britain would direct the ignorant villagers what to do to improve their nutrition and their lives. However, as the NDU team soon discovered there were many problems in getting the villagers to see the value of the improved practices shown to them in agriculture, soil conservation, animal husbandry, food processing and horticultural. Although these practices were proven to work by NDU staff in field trials, as soon as the NDU team turned their attention elsewhere, the villagers returned to their original agricultural practices (Berry 1984).

By the end of 1941 members of the NDU felt that they were proceeding on the wrong lines and that their planning approach to improving the nutritional status of villagers through "compulsion, propaganda and education" (Berry 1984:62) imposed from above by outsiders was unrealistic. Unless the villagers themselves wanted to change their ways sustainable improvements would never happen. A major problem was that the villagers had been left out of the planning process and viewed solely as passive recipients (Berry 1984). The feeling of the NDU's medical officer was:

**"it was very plain that the salvation of these people lay in their own hands, and not in any new crops, new methods, or other short cuts to better living. The limiting factor was not ignorance, it was a lack of foresight and ambition" (Berry 1944:2).**

The every day life of the Nyasaland villagers was at best a hand-to-mouth existence which was punctuated with many hardships. Over the years they had been able to develop coping strategies which were well suited to keep them alive even under extreme difficulties. However this way of life was not sufficient for improving living conditions (Berry 1984). There was also great reluctance on the part of the villagers to try anything new which might involve not only more work but also carry greater risks since under their present situation at a minimum they were able to survive from one year to the next. The medical officer recounted the story during one particularly lean season of a villager's response to questions asked why he did not do more to prevent his problems. The villager replied **"those who didn't work are hungry ... but the ones who have worked, they are hungry too ... so why work?"** (Berry 1984:62).

In addition, for as long as the villagers could remember their fathers and grandfathers before them had been able to survive by the present agricultural practices since land had been plentiful and fertile. However, the situation in Nyasaland was changing and the vast stretches of land and supply of game were not as before. Government planners had forecasted problems in feeding the growing population in the coming years if land degradation and soil erosion continued (Hornby 1934; Nyasaland Government 1955). With what they described as a lack of foresight in the village community, the NDU began to develop the opinion that little could be done during the present day to safeguard against future problems. In essence, **"in the future it will not be a matter of improving the standards of the people, but of working very hard to keep them from falling"** (Berry 1944:3).

It became clear to the NDU team that much more had to be understood about the structure and workings of Nyasaland village society before plans could be made to improve household food security and nutrition. Central to this was that the villagers and local leaders had to be included in the planning approach taken. According to Dr. Berry:

**"any policy to grow more food must be done with the willing cooperation of the Chiefs, as leaders of their people, and not imposed from above, and that responsibility for the success or failure of a scheme should be shouldered by the people" (Berry 1984:81).**

Until the active involvement of the villagers was incorporated into the planning process members of the NDU were of the opinion that **"the scheme for rural development should not be extended on its present lines"** (Berry and Petty 1992:218).

#### *Means and Capacity to Act*

Apart from the serious weaknesses with the planning theories used by the Nyasaland nutrition team, there were also difficulties with regard to inadequate funding, understaffing and supply shortages. As mentioned earlier the funding for the Nyasaland nutrition survey and the NDU came from the Colonial Development Fund in London. However, some of the staff for the nutrition survey and the NDU were seconded from the Nyasaland Government. At that time Nyasaland was one of Britain's poorest territories and Government staff numbers were vastly inadequate to meet the needs of the population especially for district work. Therefore, the Government staff seconded to the nutrition team were stretched in meeting both the work of the NDU as well as their own regular district duties.

In addition, the start of the Second World War had an immediate negative effect on the budget and resources for the nutrition work. As described by the NDU's medical officer:

**"Work began early in 1940. A start had hardly been made when the war situation necessitated the transfer to the K.A.R. (*Kings African***

***Rifles) of two officers ... Funds were restricted, all programmes had to be reduced considerably in scope ..."* (Berry 1944:1).**

Funds were severely "cut down to a grant of pounds sterling 1,025 per annum for three years" (Berry 1984:57) to cover the salary of field staff, the erection of buildings at the field site as well as the purchase of all necessary equipment. In their field notes frequent reference was made by the NDU staff to the lack of adequate housing for the researchers as well as difficulties with transport and a general lack of supplies. Therefore, a major constraint to the nutrition planning attempts of the Nyasaland nutrition team was that adequate resources did not exist to implement the plans which had been conceived.

#### **5.1.6 Summary**

The hypothesis of this thesis is that nutrition planning, as defined by the process of planned development, has not been successful in Malawi, primarily because of a lack of fulfillment of the four prerequisites needed for planned development. It can be said that the nutrition initiatives which took place in Nyasaland during the 1930s and 1940s closely resembled the planned development process as described in Chapter 2. However, it can not be said that these initiatives were successful since there were serious problems with the third prerequisite concerned with understanding the underlying processes especially the substantive and procedural planning theories used. At the beginning of the work the nature of the nutrition problems found in Nyasaland was poorly understood as was the approach needed to implement a rural development programme. Starting with the *Nutritional Review of the Natives of Nyasaland* solutions were recommended to address the country's major nutrition ills which were not scientifically based on the situations found in African countries such as Nyasaland. However, over time with the knowledge and experience gained from the Nyasaland nutrition work a new set of substantive theories evolved which more realistically matched the nutrition problems in the country and the way in which they needed to be approached. The theoretical view of nutrition shifted from the main issue being the quality of the diet to the main issue being the quantity of the diet. Likewise there

was also a shift away from ignorance being seen as the basic cause to viewing the problem more within the context of poverty.

The fact that the Nyasaland nutrition team was able to recognize the shortcomings in the theoretical basis of their early planning attempts arose from the fact that their overall planning strategy was research-based and as such incorporated an on-going process of assessment-analysis-action. The intention from the beginning of the Nyasaland work was that the knowledge gained from the nutrition field survey would be used to plan the NDU's rural development projects to improve nutrition and household food security. Unfortunately since the NDU only operated for a total of three years, there was simply not enough time to incorporate the knowledge and experience gained into future planning cycles.

The issue of household food security figured prominently in the work of the NDU, especially in the short and long-term recommendations they proposed to improve nutrition in the population. This was a point in time when food self-sufficiency was considered to be a top development priority by the Nyasaland authorities. Much less attention was given to the other underlying causes of malnutrition, namely inadequate maternal and child care, insufficient health services and an unhealthy environment. This was despite the fact that a rich data base from the Nyasaland nutrition survey did exist on these underlying causes. Perhaps if the NDU had a longer life, these issues too would have been incorporated into the rural development strategies aimed at improving nutrition.

In addition to the weaknesses associated with the third prerequisite on the underlying processes and planning theories, the fourth prerequisite for planned development on whether the means and capacity to take action existed was also problematic. As described earlier severe constraints existed in the manpower, financial and equipment resources available to the Nyasaland nutrition team which greatly curtailed their work. Apart from the scarce resources available in Nyasaland during normal times because it was one of the Colonial

Empire's poorest territories, the Second World War added further stress on the country available manpower and money.

At the beginning of the Nyasaland nutrition survey the Government had been enthusiastic that the results of the survey would:

**"cause many people who thought that they knew the African and the conditions under which he lives to reorientate their opinions and bring them to appreciate that conceptions formed on superficial study prove surprisingly inaccurate when more detailed observations are made" (Nyasaland Government found in Berry and Petty 1992:226).**

It was believed that "the results will be of value to everyone interested not merely in the nutrition but in the general welfare of backward peoples not only in Africa but in all parts of the world" (Berry and Petty 1992:226). Unfortunately contrary to these high expectations after the NDU was closed in 1943 the interruption caused by the Second World War and the preoccupation of Dr Platt with nutrition efforts elsewhere in the world meant that the work of the Nyasaland team was soon forgotten. No final report of the Nyasaland nutrition work was ever prepared at that time. Incomplete drafts could be found in the Malawi National Archives as well as in the library of the London School of Hygiene and Tropical Medicine's Center for Human Nutrition where Dr Platt went in later years to teach. In recent years there has been a renewal of interest in the Nyasaland nutrition work and in 1992 a report of the work was finally prepared and published<sup>19</sup>. A major problem was that after the Nyasaland nutrition work ended no infrastructure was left behind nor were any local people trained in nutrition. The lack of documentation on the Nyasaland nutrition work in combination with the absence of a local institutional structure for dealing with nutrition issues meant that the valuable lessons learned over the period 1936 to 1943 were lost for many years to come. Indeed this was a great loss since future nutrition and

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<sup>19</sup> Veronica Berry, the wife of the NDU's medical officer Dr W.T.C. Berry, and Celia Petty undertook the editing of the available Nyasaland papers to produce the final report in 1992 which is entitled "The Nyasaland Survey Papers 1938-1943: Agriculture, Food and Health".

rural development planners would have greatly benefitted from the knowledge and experience of the Nyasaland team. As a result as the next two sections of this chapter will show, in Malawi the nutrition planning wheel had to be re-created repeatedly time and again over the next 50 years.

## 5.2. Period II: 1964 to 1979

### 5.2.1 Background

It is useful to reiterate several points made in Chapter 3 as background to the following section looking at nutrition planning during this era of Malawi's history.

The first point is the international image the country had acquired as a development success story during the 1970s (McCracken 1984). Considering the poor resource base found in the country at independence, Malawi's macro-economic and agricultural achievements during the 1970s were hailed by development experts and the large financial institutions as spectacular and impressive (USAID 1983; Ghai and Radwan 1983; Sahn, Arulpragasam and Merid 1990).

**"This period was the 'golden age' of Dr Banda's presidency, and, by the early 1980s, influential commentators, including those associated with the World Bank, were citing Malawi's policies as a model of successful development" (Christiansen and Kydd 1990:34).**

During the 1970s Malawi was only one of three countries in Sub-Saharan Africa to exceed a 4 percent rate of growth in agricultural output, most of which was achieved through dramatic increases in export crops such as tobacco (World Bank 1981a). In addition for the majority of years up to 1979 Malawi was also able to produce sufficient food at the national level to satisfy domestic market demands (World Bank 1990b). Compared to other countries in Africa, only minor quantities of food aid had to be imported<sup>20</sup> (World Bank 1989c; Mellor and Pandya-Lorch 1991). Malawi also acquired an international reputation for its efficient and well-managed civil service and this brought further praise from the donor agencies (Kydd 1984; Gulhati 1989). This sterling image of the country was

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<sup>20</sup> Most of this food aid came into Malawi under the World Food Programme Project S25 which provided supplementary food to malnourished children and mothers as well as hospital in-patients at health facilities (WFP 1983; WFP 1991)

reinforced when Malawi's performance was contrasted with the plight of nearby African countries facing financial crises and food shortages.

The second point to note is the politically constrained policy environment found in Malawi under the Life President, Dr Hastings Banda. During the 1960s and 1970s Dr Banda was extensively involved not only in general policy formulation but also in day-to-day decision-making, particularly in the ministries for which he held the portfolio such as agriculture (Kydd 1984; Gulhati 1989; Christiansen and Kydd 1990; Pryor 1990). Therefore on many issues the Life President had the final say in policy formulation and programme decision-making.

Food self-sufficiency, especially in the staple food crop maize, was a particularly important issue to Dr Banda and as such figured prominently within the country's development strategy as well as in the political rhetoric heard from the party machinery. Frequent mention was made by the Life President that the crop in the fields of the ordinary farmer were his primary budget. To him the budget presented each year in Parliament was of secondary importance:

**"The Ngwazi said that he was happy the objective of fighting the Federation to gain Independence had been fulfilled. He wouldn't have been happy to gain Independence while his people in the villages continued to suffer due to lack of food. To him a balanced budget was when his people live comfortably with plenty of food in their nhkokwes" (Daily Times 23rd July 1979:1).**

The close alignment of Dr Banda with food self-sufficiency meant that the issue of food became highly politicized. By the mid-1970s the political rhetoric heard in the country had created an image of great prosperity and food abundance which had been brought to the country by the Life President. The message was that under Dr Banda's the country had been able to rise above the poverty and hunger which had existed under British colonial rule:

"During the 1970s Banda's position was consolidated by a populist, patrimonial appeal to all strata of society, largely based on continued criticism and exposure of the hardships faced by all groups under the colonial regime" (Harrigan 1991:205).

In Malawi up until the early 1990s the only newspaper which existed was the Daily Times which was controlled by the Malawi Congress Party. By the end of the 1970s the Daily Times often featured large bold headlines, in type sometimes one to two inches high, which proclaimed the great prosperity being enjoyed by Malawians because of Dr Banda:

#### Daily Times Newspaper Headlines

**"Ngwazi's Priority is his People: Life Better Than Before"**  
16 October 1979

**"Everything Excellent: World Bank Hails Malawi's Economic Development"**  
1 November 1979

**"Independence Means Self-Sufficiency"**  
9 November 1979

**"Malawi Thriving"**  
8 July 1980

**"Zambians Say from Malawi, Africa Has A Lot to Learn"**  
11 July 1980

**"Enough to Eat, Well-Dressed and Better Homes"**  
21 July 1980

**"Enough Food for Everyone"**  
30 July 1980

**"No Starvation Here - Ngwazi"**  
21 January 1981

The fervor of this propaganda is epitomized in the following Independence Day radio broadcast made by Dr Banda in 1979:

**"that there is prosperity in the country cannot be denied by anyone, not even our bitterest enemies ... no matter what part of the country one may choose to go ... people look well fed and dressed ... no matter how remote. People in the villages in the remotest parts of the country, in the North, in the South, in the Center, look just as well fed, well dressed, as the people in the cities and towns" (Daily Times, 6 July 1979:1).**

However, an examination of the country's development indicators in 1979 showed a vastly different picture. A World Bank publication reported Malawi to be among the poorest African countries<sup>21</sup> with a per capita Gross National Product (GNP) of \$200, life expectancy of 47 years and adult literacy only 25 percent (World Bank 1981a).

Because of the close personal affiliation between the issue of food self-sufficiency and Dr Banda, the problems of food insecurity, hunger and poverty officially could not exist. For anyone to have suggested otherwise would have been seen as contradicting the Life President. According to one senior British economist who had worked in the Malawian civil service in the early 1970s:

**"Not all the analysis that was done was fed into policy - mainly because, under the idiosyncratic dictatorship of Dr Banda, it was at best useless and at worst dangerous to put forward any view that conflicted with his own known preconceptions" (Giles 1979:219).**

As a result no critical analysis of household food security, hunger or poverty was allowed. This in effect placed a strangle-hold on development planning especially in regard to sensitive issues such as these.

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<sup>21</sup> In 1979 the World Bank ranked Malawi among the bottom five poorest African countries in GNP terms. This comparison excludes the seven semi-arid countries of Chad, Somalia, Mali, Upper Volta, Gambia, Niger and Mauritania which have lower levels of GNP per capita.

The third point is that the development strategy pursued by the Malawi Government was never geared towards poverty alleviation or to an equitable distribution of the benefits expected to accrue from the growth of the macroeconomy. According to Ghai and Radwan (1983) the Government's development strategy during the late 1960s and the 1970s, which received the support of the donor community, was not conducive to equitable development but rather the opposite and further entrenched the impoverishment found in the country. The major development policies followed resulted in a draining of resources from the smallholder sub-sector to fuel the growth of the estate sub-sector from which a small number of elite Malawians benefitted (Kydd 1984; Mwakasungura 1984; Christiansen and Kydd 1990; Harrigan 1991).

During the 1970s donor agencies at international workshops and conferences were calling for priority to be given to poverty alleviation including directing resources to the poorest groups in society. However, in Malawi these same donors never translated these concerns for the poor into the programme strategies which they supported (Kydd and Spooner 1986; Kinsey no date; Mosley, Harrigan and Toye 1991). Kydd (1984) addresses this issue and argues that donors, such as the World Bank, played a neutral role in influencing national policy formulation and development investments during the 1960s and 1970s. This was a period in time when Dr Banda was at his most influential in directing the national development strategy, especially steering the resources towards building up the country's economic infrastructure and investing in large scale commercial agriculture. It has been argued that this was at the expense of investments in basic needs and human welfare (Kydd 1984). Although the donors did not always agree with the development vision of Dr Banda, they did little to change his course of action even when the policies being developed were in direct contradiction to their own international proclamations for poverty alleviation and equitable development:

**"the agencies (specifically the World Bank as the most influential agency) made little attempt to seriously obstruct Dr Banda's policies until the financial crisis of the early 1980s. Unless the relevant evidence**

**becomes available to historians in the future, it may never be possible to provide a full analysis of why the agencies remained neutral for so long in the face of policies which conflicted with their own goals in Malawi" (Kydd 1984:306).**

This neutrality may have stemmed from the general style taken by donor agencies in the early years of independence not to intervene with internal policy issues since these were considered to be matters of national sovereignty. Western donors may have also complied to Malawi's development strategy in order to ensure that Dr Banda would not turn away from his Western capitalistic leanings:

**"whatever its detailed deficiencies, Malawi's relatively open capitalist economy was much preferable to the other development strategies being attempted in the region. Therefore, Dr Banda should not be provoked, for fear of a change in his overall approach to development!" (Kydd 1984:307).**

Part of this neutral stance is also probably related to the exceptionally poor understanding the donors had of development issues in Malawi. Up until the early 1980s the United Nations agencies and World Bank had a very shallow understanding of the sectoral and structural issues facing the country, especially in regard to human welfare. Their focus was almost exclusively on the performance of the macroeconomy (Kydd and Spooner 1986; Gulhati 1989; Harrigan 1991). Any type of scientific assessment and analysis was particularly missing with most analytical work being weak and cursory. Issues perceived to be politically sensitive such as food insecurity, hunger and poverty were never considered. This poor understanding of Malawi's emerging pattern of development was accompanied by a very limited understanding of the factors related to malnutrition in the country. The donors' perception of Malawi was also greatly swayed by the political propaganda which created an image of the country as an African success story. There was simply no need to look further beyond the apparently healthy statistics on the macroeconomy.

### 5.2.2 Global nutrition planning theories

At the international level from the 1950s until 1974 the prevailing substantive theories in nutrition planning continued to place emphasis on the quality of the diet which was much the same as during the colonial period, however, the focus was on animal protein with less attention given to vitamins and minerals. The manifestation of severe protein deficiency in children was thought to be the 'kwashiorkor' syndrome found by Cecily Williams in the 1930s in the Gold Coast (now Ghana). A review by nutrition experts conducted in Africa during the 1950s concluded that kwashiorkor in children was the most serious nutrition problem facing the continent (Brock and Autret 1952; British Government 1954).

As a result for the next 20 to 25 years the most popular substantive theory in nutrition planning subscribed to by most international nutrition experts was the problem of protein: first on protein deficient diets, then protein deficient foods and finally on foods deficient in certain amino acids (Jonsson 1989, 1993a). During the 1960s and up until 1974 the issue of calories and the quantity of food eaten received less attention. Similarly the underlying structural problems related to poverty and access to food were also mostly overlooked. In summary, up until the mid-1970s at the international level the problem of nutrition was framed as a technical protein issue which required scientific solutions.

The high water mark for the protein deficiency era came in 1968 when the world's leading nutritionists and United Nations agencies urgently called for all countries to take concerted action to avert 'the impending protein crisis' (United Nations 1968). Since the problem was seen as an inadequate dietary protein supply the answer was to increase the production and consumption of protein, particularly high quality animal protein. In most cases the procedural approach taken to address the protein crisis was through top-down mono-sectoral projects. This was very different to that taken by the Colonial nutritionists when the problem of malnutrition was seen as requiring a multi-sectoral strategy.

Examples of the applied nutrition programmes popular during the 1960s and 1970s in the agricultural sector included dairy projects, animal husbandry and fishery enterprises, as well as projects to improve the essential amino acid content of staple grains through plant breeding. Health sector nutrition projects also flourished, especially those in nutrition education since it was commonly perceived that a large part of the problem was that people did not know how to choose and plan a nutritious diet rich in animal protein. Supplementary feeding programmes for mothers and children were also popular and many times included the distribution of milk powder or high protein multi-mix food rations (McLaren 1974). The food technology sector was also involved in the production of high protein convenience foods, including high protein biscuits and such innovations as fish and vegetable protein concentrates. The underlying philosophy was that a technological solution could be developed to rid the developing world of the scourge of malnutrition.

By 1974, however, the protein crisis was shown to be a myth and was unceremoniously referred to in one of the most prestigious scientific journals as a 'great fiasco' (McLaren 1974). Human protein requirements were re-evaluated against the protein and energy content of the typical mixed diets found in developing regions of the world. The conclusion made was that there had never been a protein crisis in the first place. Instead requirements had been overestimated and intakes underestimated (McLaren 1974; Waterlow and Payne 1975). It was decided by nutritional scientists that the most limiting factor in the diets of developing countries was the lack of food, or in other words, calories:

**"The concept of a worldwide protein gap, derived from the diagnosis of kwashiorkor as a protein deficiency state, is no longer tenable. Current estimates of children's protein and energy requirements are considered realistic, and by these criteria the problem is mainly one of quantity rather than quality of food" (Waterlow and Payne 1975:113).**

This about-turn marked a fundamental change in the prevailing nutrition planning theories used to address the problem of child malnutrition in developing countries and led to the re-

emergence of the substantive planning theories of the 19th century and early part of the 20th century which had focused on the structural determinants of the problem and the quantity of food eaten (Rivers 1979). This shift meant that the view of malnutrition moved away from a piece-meal approach which relied on magic-bullet technologies to a full attack at the root causes of the problem including its social, economic, agricultural and environmental determinants.

The 1974 World Food Conference held in Rome embodied this re-emergence of the structuralist view of malnutrition as a societal problem:

**"malnutrition is closely linked to widespread poverty and inadequate social and institutional structures, and that its effects are aggravated by infectious diseases and the lack of environmental sanitation; and that increased agricultural production and increased incomes may not by themselves lead to improved nutrition; and that to this end a more just and equitable distribution of food and incomes is essential, among nations as well as within countries among their various social categories"**  
(United Nations 1974: Resolution V).

The World Food Conference identified poverty as the major determinant of malnutrition, along with disease and poor environmental sanitation. Access to food was considered to be the key issue. Increased agricultural production was recognized as important but was not seen as the complete solution since more equitable access to food was needed to ensure all people were able to obtain enough food to satisfy their nutritional requirements. The resolutions of the 1974 World Food Conference called on donor agencies of the United Nations as well as member countries to take concerted actions to address the global problem of malnutrition. These included designing and implementing multi-sectoral food and nutrition policies to improve food consumption through socio-economic and agricultural planning as well as to improve health and environmental conditions.

This major change in the substantive planning theories led to significant changes in the procedural approach taken. The mono-sectoral vertical nutrition planning approach of the

1950s, 1960s and early 1970s gave way to a multi-sectoral approach which was reminiscent to that taken by British nutrition planners during the 1930s and 1940s. In the mid-1970s a systems analysis strategy was adopted for multi-sectoral nutrition planning which resulted in many complicated flow charts and organizational diagrams being drawn up which aimed at a concerted attack on the consumption, production, health and education aspects of malnutrition (Joy 1973; Joy and Payne 1975; Payne 1976; Lynch 1979; Pines 1982). FAO and WHO were particularly active during this time in promoting multi-sectoral nutrition planning strategies (FAO/WHO 1976). However, after what has been described as a multi-sectoral nutrition planning mania, very few success stories can be cited from the numerous attempts made. (Field 1977; McLaren 1978; Field 1987; Berg 1987). The complicated diagrams turned out to be bureaucratically and politically unrealistic. Nutrition planners during this period have since been criticized as being politically naive in assuming that government decision-makers and politicians would automatically give their full support to reducing poverty and improving nutrition. The political economy of the government planning and decision-making process was never taken into account with the end result that little became of the noble multi-sectoral plans put forward since the political will to take action was missing (Ismael 1991; Field 1993; Pinstrup-Andersen 1993a, 1993b).

A note is also needed here to clarify some changes in the terminology used by nutrition planners. The distinction between the terms 'malnutrition' and 'undernutrition' became less common by the mid-1970s. In 1959 the term 'protein-calorie malnutrition' (PCM) was coined to describe dietary deficiencies in protein and calories (Latham 1989). The term 'PCM' differentiated this type of malnutrition from deficiencies in specific micronutrients, such as vitamin A (xerophthalmia), iron (anaemia) and iodine (iodine deficiency disorders). Later the term 'protein-energy malnutrition' (PEM) replaced PCM and is still used today.

From the mid-1960s until the end of the 1970s nutritional status assessment methodologies had also been improved. Statistical techniques to analyze anthropometric data on weight and height were developed to assess nutritional status in children. The concept of child

growth monitoring based on monthly weight measurements to detect the early stages of growth faltering also became popular in maternal and child health programmes during the early 1970s (King *et al.* 1972). Nutrition surveys based on child anthropometry became more widely used by donor agencies and governments in the 1960s and 1970s to determine the prevalence of malnutrition in populations (ICNND 1963; Jelliffe 1966).

On a broader front during the 1970s much was also happening to change the view of what 'development' meant in third world countries. A distinct shift occurred in the prevailing substantive theory in development planning away from an emphasis on macroeconomic growth and trickle-down to the recognition that hunger, disease and poverty had to be directly attacked. The fulfillment of basic human needs became the priority of donor agencies and development planners (Eide, Oshaug and Barth Eide 1991; Mosley, Harrigan and Toye 1991). A number of high level international conferences were held during the 1970s which increased the attention given to human welfare in national development. Apart from the World Food Conference in 1974, the other global conferences held included the World Conference on Employment, Growth and Basic Needs in 1976 and the World Conference on Agrarian Reform and Rural Development in 1979. In addition, the United Nations Decade for Women was declared from 1975 to 1985. At all of these the international donor community, including United Nations agencies such as UNICEF, FAO and WHO as well as the World Bank, publicly affirmed their full support to the alleviation of poverty, including the eradication of malnutrition.

### **5.2.3 Nutrition planning in Malawi**

#### ***National policy framework***

The Malawi Government's development strategy during the 1960s and 70s has been described as a neo-classical growth model based on trickle-down development (Kydd and Spooner 1984; Ghai and Radwan 1983). The underlying assumption was that the benefits

of macroeconomic growth would in time spill over to improve the overall socio-economic conditions for the population as a whole. The top priority of the Government was to achieve macroeconomic growth as rapidly as possible.

The national development strategy elaborated in the first Statement of Development Policies (DEVPOL I 1971-1979) clearly stated that the lion's share of the country's resources would be invested in those sectors which had an immediate and direct bearing on raising productivity, for example, agriculture, infrastructure, communications and transport (Malawi Government 1971a). Unlike other countries in Africa, Malawi emphasized agricultural development not industrialization (Gulhati 1989). In addition, very low priority was given to the social sectors such as health, education and community services, which were perceived as being too costly as well as did not have an immediate impact on increasing productivity:

**"The objective of financial independence must inevitably limit the resources available for the prosecution of other development objectives, especially those in the field of social services. Education and health are goods in themselves, whose obvious intrinsic merits dispense with need for further justification. Yet, as the experience of much richer countries shows, their demand on a nation's resources is insatiable and no country in the world has so far succeeded in meeting all the demands for education and health services. Malawi is at present only capable of providing the most rudimentary facilities, especially in the health field. The pressure on resources is such that due regard must be paid to their economic effects and policy formulations lay stress on the provision of economically useful skills and health improvements as an aid to increased productivity of labour" (Malawi Government 1971a:5).**

As already discussed in Chapter 3, Malawi's success in achieving strong macroeconomic growth did not result in any improvements in the living conditions for the majority of the population particularly those living in rural areas. Even the investments made in the social sectors were heavily biased towards the non-poor groups as well as urban dwellers. For example, emphasis was given to building urban hospitals and improving secondary and

university level education (Malawi Government 1971a; Kydd 1984; Malawi Government/United Nations 1993).

The evidence available on income levels and land distribution shows that during the 1970s the national development strategy pursued by the country was associated with increasing inequalities within the population (Kydd and Christiansen 1982; Ghai and Radwan 1983). The lack of progress seen in social indicators during the 1970s, with the continuing high rates of illiteracy and child mortality, also reflect the poor state of human welfare in the country (World Bank 1981a; Ghai and Radwan 1983).

A central tenet of the country's development policy as outlined in DEVPOL I was the attainment of food self-sufficiency especially in maize the staple food crop. However, an examination of DEVPOL I reveals no nutritional justification for this goal. Instead food self-sufficiency was seen purely in market terms as the ability of the Government to maintain domestic maize production at levels able to satisfy the effective demand for maize (World Bank 1990b). The Life President was obsessed with the issue of food self-sufficiency and frequently made claims of the achievements made since Malawians got their independence from Britain. According to Laslett a typical speech of Dr Banda's would often go as follows:

**"Before Independence ... the people had gone about ill-clothed to the point of indecency. Now they had fine clothes. Before independence, they had lived in tumble-down hovels. Look at the fine houses of Lilongwe now! Before Independence, in some areas, food was so short that for nine months of the year people had lived on the roots of water plants. Now everyone had enough maize all the time" (Laslett 1984:384).**

With so much importance attached to achieving food self-sufficiency it could be argued that the opportunity to include nutritional objectives into the Government's development strategy certainly did exist. However, nutritional objectives were completely omitted as was concern

for poverty issues in general. This omission provides an apt reflection of the lack of political will during the 1970s of the Malawi leadership to pursue human welfare issues especially those related to poverty and hunger.

### *Perception of nutrition*

The general view of nutrition in Malawi from 1964 to 1979 was the opposite to what it had been during the 1930s and 1940s under British colonial rule. Although much was carried over from the Nyasaland Government's policies on agriculture and economic planning (Kydd and Spooner 1986; Harrigan 1991), nothing was carried over from colonial nutrition and human welfare policies (see Case Study 1). The only mention of nutrition in DEVPOL I was in the context of nutrition education and home economics:

**"Arising from the need to work towards realizing this prime objective, specific aspects of policy for the Department of Community Development emerge. The first is to educate the local people in measures relating to village health, water supplies, sanitation and other preventative health measures; in matters affecting maternal and child health; in regard to food and nutrition (through the Department's Home Economics programme); in the setting up of communal village facilities; in the improvement of village layouts, in the construction of better homes, and clothing both for children and adults" (Malawi Government 1971a:106).**

Thus the view of malnutrition of the Malawi Government during the 1970s was that it was a problem of ignorance which could be solved by home economists showing the local population how to eat a healthier more nutritious diet.

Table 5.4 provides a summary of the prevailing views of malnutrition held by the Government, University and donors from 1964 to 1979. Although it was agreed that malnutrition was indeed a problem, it was seen as the result of disease and ignorance. The issue of household food security was never mentioned. This contrasts to the colonial period

when household food security received more attention by the Nyasaland authorities than either health or maternal and child care issues.

As shown in Table 5.4 much of the focus of nutrition planners in Malawi was on protective foods especially animal protein. This reflects the attention being given at the global level during the late 1960s and early 1970s on issues of dietary quality. In Malawi, however, the obsession with dietary quality and protein continued even after the protein myth had been refuted in international nutrition planning circles in 1974 and the focus had shifted to calories and the quantity of food eaten. Even after scientific data became available in Malawi in 1970 which showed the major limiting factor in the diet to be calories not protein, the focus on protein and dietary quality still continued unabated. In addition, although the Malawi Government participated in the 1974 World Food Conference which declared poverty to be the basic cause of malnutrition in developing countries, this did not change the way in which malnutrition was considered in the country. Both the Government and the United Nations agencies continued to consider malnutrition as a problem of disease, ignorance and too little protein. The possible role of food insecurity, hunger and poverty was not contemplated.

**Table 5.4: Prevailing views on nutrition of Government, University and donor agencies during 1964 to 1979**

**1964 WHO Medical Doctor:**

"a striking feature was the general lack of well being of the women, especially the mothers of inpatients. Not only were they small of stature but subcutaneous fat was lacking and their musculature seemed reduced" (Burgess 1964:21).

**1968 Ministry of Health:**

"it is believed that the most important factor contributing to malnutrition in Malawi is lack of knowledge as to the right kinds of foods and how to produce them" (Ministry of Health Working Team 1968:1).

**1968 FAO Nutrition Education Expert:**

"the real problem is the quality rather than the quantity of the food consumed" (Kotnis 1968:3).

**1969 Malawian Doctor Attending Regional Nutrition Meeting in Nairobi**

"it is apparent that the most important problem inhibiting programs to combat malnutrition is the lack of knowledge of proper utilization of foodstuffs, resulting in grossly unbalanced diets" (Misomali 1969:79).

**1970 Results of Ministry of Health Nutrition Surveys**

"the protein-calorie balance of the diet was good and for all nutrients, except vitamin A, it is true to say that when the households had enough calories from their diet, they had enough of the other nutrients... The main dietary problems were, therefore, ... low food intake in some households, leading to low energy intakes" (Burgess and Wheeler 1970:7-8).

**1970 Ministry of Health:**

"we believe the overriding nutrition problem in this country is that the protein sources available are not been fully and correctly utilized by the people themselves and the problem is therefore ignorance primarily an educational one" (Cole-King 1970).

**Table 5.4 (cont'd): Prevailing views on nutrition of Government, University and donor agencies during 1964 to 1979**

**1970 UNICEF Consultant**

"malnutrition is a serious national problem...one of the highest, if not the highest in Africa" (UNICEF 1970:9).

**1971 World Bank Medical Advisor**

"the major health problem - especially (*sic*) in children under the age of five years - is a chronic malnutrition due to an insufficient intake, rather than to a scarcity of protein or calories (wrong feeding patterns)" (De Winter 1971:1).

**1971 Malawi Freedom from Hunger Campaign**

"while food is in abundance, people in the villages do not eat enough of it and this results in malnutrition, particularly among children" (Malawi Government 1971b:4).

**1971 FAO Home Economist Expert**

"the Malawi diet is short in protein" (Van Schelven 1971:1).

**1974 United Kingdom Freedom from Hunger Campaign**

"in every area there appears to be a significant number of families whose production potential is so low ... that they are unlikely to be able to feed themselves adequately" (Thomson, Cameron and Jackson 1974:23).

**1977 UNICEF Consultant**

"relative to neighbouring countries, Malawi has made demonstrable progress in the sector of nutrition and food" (UNICEF 1977:8).

**1979 The Life President, Ngwazi Dr H. Kamuzu Banda**

"no matter what part of the country one may choose to go ... people look well fed and dressed ... no matter how remote" (Speech quoted in Daily Times 6 July 1979).

#### **5.2.4. Actions taken on Nutrition**

Five case studies are presented below to illustrate the major nutrition planning activities carried out in Malawi during the fifteen years following Independence. Case Study 2 describes the first analysis undertaken after independence of the country's nutrition situation by a WHO consultant. This is followed by Case Study 3 which reviews the first nutrition education initiative began in the mid 1960s which later formed the basis of the country's nutrition education strategy for the next twenty-five years. Case Study 4 describes the work of nutrition planners in the Ministry of Health which resulted in the first anthropometric assessment of malnutrition in the country since independence. This is followed by Case Study 5 which describes the work of the United Kingdom's Freedom from Hunger Campaign Committee which was the most rational attempt at nutrition planning made during the 1970s. The section concludes with Case Study 6 which analyses a major opportunity lost for nutrition planning in regard to the omission of nutritional concerns in the country's national rural development programme.

#### **CASE STUDY 2: First Situation Analysis of Nutrition - 1964**

The first analysis of the country's nutrition situation after independence was carried out by a WHO nutrition consultant, Dr H.J.L. Burgess, who visited Malawi for a month long mission in early 1964. Dr Burgess based his review on what he admitted to be a very inadequate and patchy data base consisting of health facility statistics on morbidity patterns, structured interviews with health staff, personal observations as well as some reports concerning local food habits. Since food production data were not available he had to rely on discussions with agricultural staff. He concluded that Malawian food production followed **"the classic pattern of subsistence agriculture by being marginally adequate, lacking in variety and subject to famine"** (Burgess 1964:32). Keeping in the fashion of the day he also noted that the diet was deficient in animal protein.

On the health side he found that most of the health staff "seemed to be living in a 'vitamin era'" and that their training in protein-calorie malnutrition was weak since most of their ideas regarding the country's malnutrition problems were ascribed to "multiple vitamin deficiency" (Burgess 1964:22). After personally examining patients at hospitals around the country, Dr Burgess concluded that of the pre-school children seen "at least 40 per cent showed quite definite signs of protein-calorie malnutrition" (Burgess 1964:21). In his final report he also remarked "a striking feature was the general lack of well being of the women, especially the mothers of in-patients" (Burgess 1964:21) which included short stature and lack of subcutaneous fat and reduced musculature.

It is interesting that in his mission report Dr Burgess made frequent reference to Benjamin Platt and the Nyasaland nutrition survey. However, in 1964 few people in Malawi seemed to be aware of Dr Platt and his work. Realizing that some very extensive work had been done Dr Burgess tried repeatedly to locate the Nyasaland nutrition papers but failed. Had the Nyasaland nutrition papers been available they would have shown that some thirty years before household food security had been considered to be a major problem in the communities studied and that the key nutritional constraint was the quantity of food eaten not the quality. The field experiences of the NDU would have also offered useful insights into the planning approach necessary to address the problem of nutrition in Malawi's rural areas, both in regard to the need to have a multi-sectoral strategy as well as the involvement of the villagers and communities right from the start.

During his visit Dr Burgess was given an audience with Dr Banda, then Prime Minister, who did show interest in the preventative aspects of primary health care and nutrition (Burgess 1964). Regarding prospects for the future the Ministry of Health was pessimistic that it could embark on a nutrition programme since budgetary constraints had already curtailed much of their work:

**"No one in Nyasaland is currently engaged in nutritional work, and the need for this was pointed out if the problem and its causes are to be**

defined and solutions worked out. The kind of aid available from WHO was described and various approaches mentioned. However, Dr Park (*Secretary for Health - ed.*) very naturally did not wish to commit himself at such short notice. He felt that his principle immediate problem was to get basic health service operating satisfactory. For the moment any nutrition work would have to be staffed and financed entirely from outside sources" (Burgess 1964:28).

However, unlike the lukewarm response from health, officials in the Ministry of Agriculture were interested in starting up nutrition work. This eventually resulted in the launching of the Applied Nutrition and Training Project supported by FAO, WHO and UNICEF which is described below in Case Study 3.

Considering the poor food and nutrition information base in the country Dr Burgess stressed the need for more data to assess and analyze conditions in the country. To do this he recommended that a nutrition programme be established to study the problem of malnutrition, its extent and distribution, causes and potential solutions. As will be described in Case Study 4, Dr Burgess eventually returned to Malawi in 1969 to set-up such a nutrition programme in the Ministry of Health.

It needs to be noted that the 1964 Mission Report prepared by Dr Burgess was originally embargoed by the Government after its submission to the Ministry of Health. Officials from the Ministry of Agriculture blocked its final clearance until after certain statements were removed from the text. In particular all mention to famine in the country had to be deleted before the Government would clear it for general distribution<sup>22</sup>. Therefore, political sensitivities on food self-sufficiency and hunger issues existed as early as 1964.

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<sup>22</sup> Letter from the Secretary of Agriculture to the Secretary to the Prime Minister dated 23rd June 1965, Ref. No. 4/921/78, Government Records Office File No. 2.28.1F/12569 .

### CASE STUDY 3: Nutrition Education Initiatives - 1964 to 1971

The longest running nutrition intervention since independence has been nutrition education which has been implemented through the outreach activities of the ministries of agriculture, health and community services. Since the late 1960s female extension staff from all three ministries as well as health personnel based in static facilities have been conducting nutrition education sessions for mothers as part of their normal course of duties. Much of the foundation of the nutrition education programme found today in Malawi originated back in 1964 with the Applied Nutrition and Training Programme (ANTP) which was jointly supported by FAO, WHO and UNICEF (FAO/UNICEF 1964).

As stated in its plan of operations the overall objective of the ANTP was:

**"To raise levels of nutrition in Nyasaland, thus improving the efficiency of the rural people and raising the economic productivity of the nation, through a programme of education in nutrition, emphasizing increased local production, storage and consumption of protective foods and adequate production of staple foods" (FAO/UNICEF 1964:1).**

In the United Nations project document the view held was that the situation of malnutrition in Malawi was similar to that found in most other sub-Saharan African countries, namely a problem of dietary quality especially a diet deficient in animal protein:

**"The pressure on the land is becoming increasingly intense and agricultural evidence indicates a considerable deficiency in animal protein available to the population. Total meat available to the population is estimated to be less than five pounds per head per annum. Another five pounds of fish per head per annum is also available. However, distribution of these expensive foods is such that supplies are available only to a very small proportion of the population and it is known that protein-calorie malnutrition occurs in pre-school children. There is no evidence to suggest that child wastage in Nyasaland differs materially from that in other parts of sub-Sahara Africa ... Short term**

**increases in the production of animal protein can be achieved by improved poultry and fish management" (UNICEF 1964:Annex I).**

The ANTP activities planned included home and village gardening, poultry keeping, fish pond development, woodlots, as well as nutrition education and training of trainers. The nutrition education component was extensive and covered not only developing the content of the messages to be given to rural women, but also the training curricula to be used for agricultural extension workers.

As part of their assistance FAO provided a full-time Nutrition Education Expert to the Department of Agriculture (Kotnis 1968). Complementary assistance was also provided by FAO through a full-time Home Economics Expert to the Ministry of Community Services and Social Development (Engberg 1968). Although no full time technical assistance was given to the Ministry of Health the two FAO Experts did liaise with health staff to strengthen their nutrition education activities.

Short-term technical advisory services related to nutrition were also provided in public health nutrition, agricultural extension, fish farming as well as tropical vegetable production (UNICEF 1964). Total costs on the donor side for technical assistance (two full-time staff and four short-term staff) were not presented in the final budget plan. However, UNICEF did pledge \$150,000 for cash and equipment over the three year duration of the project. The proposed Malawi Government contribution was to be just over British pounds 300,000 which included training and extension, local staff salaries, transport, equipment and housing costs (UNICEF 1964).

The nutrition education work undertaken in the late 1960s through the ANTP provided the foundation on which the country's nutrition education programme would be based for the next 25 years. The nutrition education messages remained virtually unchanged in regard to their overwhelming emphasis given to dietary quality and the concept of the Three Food

Groups: 1.) protein foods for growth and repair, 2.) carbohydrate foods for energy and 3.) mineral and vitamin foods for protection.

The following list of nutrition education materials prepared by the FAO Nutrition Education Expert (Kotnis 1968) illustrates this emphasis on protective foods and protein:

**Malawi Government Nutrition Education Materials - 1968**

- \* Pamphlet entitled "Vegetables for Vigor and Vitality"
- \* Three wall posters on the:
  - Function of Foods**
  - The Three Main Food Groups**
  - A Plan for Daily Meals**
- \* Colored chart on carotene and vitamin C content of some common vegetables and fruits
- \* Pamphlet on food for the family
- \* Folder on how to increase production of protein rich and protective foods

However, in 1964 no one really knew whether the quality of the diet and protein deficiency were indeed the main nutrition problems facing Malawian families since no scientific data existed to describe the food and nutrition situation in the country. Therefore, it can be argued that the nutrition education strategy put into place by the joint FAO/WHO/UNICEF Applied Nutrition and Training Programme had no scientific basis and bore no relationship to Malawi's nutrition problems. In her final report prepared at the end of her contract the FAO Nutrition Education Expert admitted that next to nothing was known about Malawi's nutrition situation:

**"Basic information on the dietary patterns and the degree and extent of malnutrition is a pre-requisite for planning any nutritional programme. No such data on the quantitative and qualitative dietary intake of the population groups in the different regions of the country are available ... In the absence of any data on the food consumption and nutritional status, it is not possible to know exactly the nature and extent of nutritional problems" (Kotnis 1968:9).**

During his 1964 visit to Malawi Dr Burgess had been given a copy of the draft Plan of Operations of the FAO/WHO/UNICEF Applied Nutrition and Training Project to review. Referring to the problem of planning a programme without baseline data, he noted that:

**"Although personally convinced that protein-calorie malnutrition is the main trouble, the base-line data before the commencement of the project is deficient" (Burgess 1964:29).**

His concern was that data first needed to be collected to make a scientific assessment of the nutritional situation in order to design the programme intervention. However, his advice was not followed by the United Nations agencies involved, namely FAO, WHO and UNICEF, and the programme was designed and launched without any baseline information.

All the FAO Nutrition Expert had to base her assessment of the nutrition situation in Malawi was the information contained in the original project document, quoted earlier above, as well as her own professional biases. Her view was as follows:

**"Maize forms the staple diet in most parts of the country. Almost every family grows enough of maize and millets as well as a variety of peas and beans to meet its requirements. Groundnuts are also grown as a food crop as well as a cash crop. The average consumption of meat is estimated at 3 to 4 lbs. per head per year. The real problem is in the quality rather than the quantity of the food consumed ... The Government is alive to the problem of the deficiency of protective foods and good quality proteins in the diet of the people in general and the rural population in particular" (Kotnis 1968:3).**

This quote from the FAO Nutrition Education Expert epitomizes the general perception of nutrition found in Malawi during the late 1960s and 1970s in both Government and donor circles. The idea that rural families were able to grow plenty of food for subsistence as well as had extra for sale matched perfectly Dr Banda's vision of the great strides Malawi had made in achieving food self-sufficiency under his leadership.

Apart from the conceptual weakness of the ANTP there were also operational problems since severe staff shortages meant that the FAO Nutrition Education Expert was never assigned a national counterpart (Kotnis 1968). The lack of a national counterpart also meant that no Malawian received on-the-job training by the FAO Nutrition Education Expert. In his 1964 review of the ANTP proposal Dr Burgess had also emphasized the importance of incorporating an evaluation component into the programme. Staff shortages meant that an evaluation component to assess the effectiveness of the project was impossible to undertake. Therefore, there was no way of knowing whether the mothers who had been exposed to the nutrition education programme had been able to practice what they had been taught and what effect this may have had on the nutritional status of their children.

Apart from the ANTP, other nutrition education activities were taking place in Malawi at that same point in time. Although not directly related to the ANTP two nutrition education booklets were produced by the Ministry of Health in 1970 and 1971 (Ministry of Health 1970a; Van Schelven 1971). In addition, a third nutrition education booklet was produced by the Private Hospital Association of Malawi in 1970 (PHAM 1970). In all three booklets the emphasis was on a diet deficient in animal protein as the leading cause of malnutrition. In addition, emphasis was also given to the severest forms of malnutrition, kwashiorkor and marasmus, with little attention given to the less severe but more common problem of growth faltering.

In all three booklets the most important underlying cause of malnutrition identified was the ignorance of mothers. The nutrition education booklet produced by the Private Hospital Association of Malawi (PHAM) accused Malawian mothers of "negligence", "ignorance", "misuse of foods", "superstition" and "laziness" (PHAM 1970:11). PHAM has always operated a large share of Malawi's health facilities so this view condemning Malawian mothers would have been held by their health staff around the country. In one of the Ministry of Health nutrition education booklets the reasons given for why Malawian families did not eat a nutritious diet included the bad behavior of mothers in overselling food crops, practicing food taboos, buying prestige non-nutritional foods and not producing the right types of foods (Van Schelven 1971). This same booklet presented a highly European portrayal of how to improve the general health and well-being of the family with such items as toothbrushes, glass windows and ovens, all of which were items unknown to Malawian villagers.

Poverty was cited as a contributing factor to malnutrition in two of the nutrition education booklets, however, in neither case was poverty dealt with in any great depth. In the first booklet (Ministry of Health 1970a) only one sentence was used to explain what was meant by poverty which was described as a poor family's inability to grow or buy enough food unless they are given advice how to best utilize their resources. In the second booklet (PHAM 1970) only the word 'poverty' was used with no explanation given as to what it actually meant. This avoidance of discussing poverty provides a reflection of the general reluctance in the country to discuss politically sensitive issues.

The protein deficiency theory was clearly the most popular view of malnutrition held by planners in Malawi during the late 1960s and early 1970s. However, there was one voice of dissent who argued against the protein deficiency theory. This was Jessie Williamson, who had been the Nutritional Investigator in the Nyasaland nutrition work from 1938 to 1943. Mrs Williamson, although living outside of Malawi, published a short article in the

Society of Malawi Journal in 1972 which reviewed the changes found in the Malawian diet from 1938 to 1972:

**"There is little change in the nutritive value of the product (*i.e.* maize flour - ed.) which still contains about 8 per cent protein which, with a daily consumption of nearly 1lb (400g.) per day of flour, gives a protein intake from nsima alone of about 32 g.: this is about 2/3 the daily requirement. Hence with a maize diet, the so-called protein gap is not so large as often portrayed ... Maize protein supplemented by proteins from beans, peas and groundnuts, the mixture providing all the amino acids necessary for the body, hence animal proteins are NOT essential and, in my opinion, their value is over-emphasized in this country, especially in the case of meat which is extremely expensive to produce" (Williamson 1972:51-52).**

Mrs Williamson's professional opinion was that the protein content of the traditional Malawian diet based on maize was sufficient as long as enough food was eaten to satisfy caloric requirements. She also subscribed to the belief that vegetable proteins were equally as good as animal proteins if the correct mixture was eaten.

Whether the United Nations' nutrition experts ever saw or read this article is not known. Even if they had, considering the strong international opinion in the early 1970s that protein was the major nutrition problem facing developing countries, it would have been highly unlikely that a lone voice, such as Mrs Williamson's, could have swayed the opinion of the United Nations nutrition experts sent to Malawi since their headquarter offices were pushing protein as the cure-all to the developing world's nutrition problems (United Nations 1968; McLaren 1974).

In conclusion, the first nutrition planning attempt made in Malawi by the United Nations through the Applied Nutrition and Training Programme was extremely weak both conceptually as well as operationally. The conceptual basis of the nutrition education programme was void of any scientific analysis of the true nutrition situation found in

Malawi. These same weaknesses also applied to those nutrition education initiatives conducted outside of the ANTP. Instead the substantive basis of the nutrition education programme reflected the prevailing nutrition planning theories which were popular in the headquarter offices of the United Nations agencies, especially that of protein. Staff shortages also greatly weakened the operational aspects of the ANTP programme and prevented any evaluations from being undertaken. The procedural theory of planning was also very centralized and top-down. The ultimate clients, Malawian mothers, were completely left out of the planning process. Their knowledge and views on what were the major nutrition problems facing them in caring for their children were never sought by the United Nations nutrition experts.

#### **CASE STUDY 4: Ministry of Health Initiatives - 1968 to 1971**

Although the severe financial constraints found in the Ministry of Health meant few resources could be allocated to preventative health and nutrition work, the Secretary for Health at the end of the 1960s did show some interest in nutrition. He even went as far as attempting to organize a national nutrition survey in 1968 to determine the country's nutrition problems. His opinion was that it was of little use to carry on with nutrition education unless it was known that what was being offered was of some benefit to the people<sup>23</sup>. Permission was granted by Dr Banda, then Life President, to move ahead with a national nutrition survey. The replies, however, from other senior officials in Government were not encouraging as shown in the following quote from the Secretary for Local Government:

**"My personal feelings is that such a survey is not desirable in the present circumstances ... My principal reason for feeling this way is that your Ministry generally acknowledges that one of the basic causes of ill**

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<sup>23</sup> Two letters from Secretary for Health to the Secretaries for Economic Affairs, Education, Local Government and the Treasury dated 3rd January 1968 and 21st March 1968, Government Records Office File No. 4/9/21/Vol. V, 8.6.7F/13914, Zomba.

**health in Malawi is protein calorie deficiency. This being so, it must surely be possible to get to work without the inevitable delay of a preliminary survey. By getting on with the job and putting right the known deficiencies, one would not be far off the mark in any case<sup>24</sup>.**

In other words, the Secretary for Local Government felt nutrition programmes should move ahead based on the general perception held of malnutrition in Malawi. To him it was just a technical matter of fixing dietary deficiencies. A similar national nutrition survey had been undertaken shortly before in Zambia which had ended up being very costly and lengthy. Reference was made in the Malawi Government correspondence that such an expensive survey as Zambia's was to be avoided at all cost<sup>25</sup>.

Eventually the idea for a national nutrition survey was dropped. Instead a small inter-ministerial working group was formed in the Ministry of Health to develop a Public Health and Nutrition Policy. Even without any empirical data on the food and nutrition situation in the country on which to base their view, this working group stated that **"the most important factor contributing to malnutrition in Malawi is lack of knowledge as to the right kinds of food and how to produce them"**<sup>26</sup>. The Working Group proposed that a Nutrition Unit be established in the Ministry of Health, with United Nations assistance, and that a small pilot preventative health care and nutrition programme be tried in Namitambo in Chiradzulu district.

Nothing ever materialized regarding the Public Health and Nutrition Policy. However, in the Ministry of Health nutrition activities were eventually integrated into the newly created programme of Under-Five Clinics which apart from preventative and curative health care

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<sup>24</sup> Letter from Secretary for Local Government to Secretary for Health dated 12th February 1968, Government Records Office File No. 4/9/21/Vol. V, 8.6.7F/13914, Zomba.

<sup>25</sup> Letter from the Secretary for Health to the Secretary for Economic Affairs dated 21st March 1968 6886/18, Government Records Office File No. 4/9/21/Vol.V, 8.6.7F/13914, Zomba.

<sup>26</sup> "Notes for the Preparation of a Cabinet Paper on Preventative Health Services", page 1, circa 1968, Government Records Office File No. 13/5A, 8.17.5R/35898, Zomba.

also offered nutrition education, growth monitoring and supplementary feeding (Cole-King 1975). The expansion of the Underfive Clinic programme was remarkable and from 1968 to 1972 the number of clinics grew from 73 to 362. This had the immediate result of greatly increasing the exposure of mothers to not only health care for their children but also to nutrition activities.

At the end of the 1960s Dr Burgess returned to Malawi as a WHO Advisor in Nutrition to work full-time with the Ministry of Health to establish a nutrition programme. This included initiating a pilot health and nutrition programme in Namitambo. To plan this pilot programme a small-scale nutrition survey was carried out in Namitambo. In addition, two other surveys were also conducted in Nkhotakota and Ngabu districts. These surveys were intended to not only establish the baseline data on which preventative health and nutrition activities could be designed, but also against which future developments could be evaluated. In addition, it was expected that the data from these surveys would feed into the planning and design of the national nutrition programme (Ministry of Health 1969).

The results from these three surveys provided the first anthropometric data ever since Independence on the prevalence of child malnutrition in Malawi. Although Platt and his team had measured weight and height, the statistical techniques for dealing with anthropometric data had not yet been developed at that point in time so they had no means by which to calculate the prevalence of malnutrition in the Nyasaland villages surveyed. The final reports from the Ministry of Health surveys stated that the rates of malnutrition in Malawian children were **"amongst the highest found in similar surveys on this side of Africa"** (Ministry of Health 1969:5). Between 40 to 45 per cent of the 1,600 pre-school children surveyed were found to be underweight and 35 to 40 per cent of a sub-group of 1,000 children to be stunted (Driessen and Burgess 1970; Burgess and Wheeler 1970). Contrary to the popular view that kwashiorkor was one of Malawi's biggest nutrition problems, the Ministry of Health surveys showed that no more than 3 per cent of children suffered from either kwashiorkor or marasmus.

A small dietary study of 23 households was conducted as part of the Ngabu survey. The results showed that the main dietary problem was **"low food intakes in some households, leading to low energy intakes"** (Ministry of Health 1970b:7-8). Burgess and his co-workers found that **"the protein-calorie balance of the diet was good and for all nutrients, except vitamin A, it is true to say that when the households had enough calories from their diet, they had enough of the other nutrients"** (Ministry of Health 1970b:7).

The Ministry of Health team therefore concluded that:

**"if more of the existing diet was eaten, energy and protein requirements could be satisfied. However, for small children especially the consumption of larger amounts of maize porridge could be difficult, as it is a 'bulky' food. The use of high fat foods such as oil and groundnuts, and an increased meal frequency, seem desirable to us"** (Burgess, Burgess and Wheeler 1973:377).

Childfeeding practices, especially the problem of bulky, low energy weaning foods in combination with infrequent feeding, were identified as an important underlying cause to childhood malnutrition in Malawi. These findings were not unlike those of the Nyasaland nutrition team some 30 years earlier (Berry and Petty 1992). In addition, today these three factors, dietary bulk, low energy density and infrequent feeding, are recognized to be important in the aetiology of child malnutrition in regards to child caretaking practices and form a large part of the nutrition education messages still being given to mothers (UNICEF 1990). However, unlike the Nyasaland nutrition work which highlighted the importance of household food security, no comment was given by the Ministry of Health team in the final reports on whether the problem of inadequate food intake was related to household food insecurity. Under the political system in Malawi it was simply impossible to contemplate that Malawian families did not have enough food to eat and it was not unusual to find a total avoidance of mentioning such sensitive issues.

The results of the Ministry of Health surveys were released as three lengthy technical reports (Ministry of Health 1969; Driessen and Burgess 1970; Burgess and Wheeler 1970). The actual numbers distributed and the recipients, however, are not known. In time, international journal articles were also published by Dr Burgess and his colleagues (Burgess, Cole-King and Burgess 1972; Burgess, Burgess and Wheeler 1973; Burgess, Burgess and Driessen 1975).

However, it appears that the findings from the Ministry of Health surveys had little impact on the overall view of malnutrition in the country. Nutrition education programmes continued to emphasize protein deficiency, kwashiorkor and marasmus. For example, although the findings indicated that there was a problem with feeding frequency for children as well as with the low consumption of fat, these two important points were not incorporated into the Ministry of Health's new nutrition education booklet released the following year (Van Schelven 1971). Instead this nutrition education booklet recommended that young children be fed 3 meals a day, which is well below the 4 to 5 meals now recommended and also recommended that Malawians did not need much fat in their diet. Both these two recommendations were directly contradicted by the empirical data produced by the Ministry of Health surveys.

One additional point needs to be made to illustrate the extreme sensitivities felt by the Government on hunger and food security issues at that point in time. In the early months of 1970 a localized famine occurred in Mchinji and Lilongwe districts. This was brought to the attention of Government since a large number of kwashiorkor cases had been reported. An examination of documents in the Government Records Office reveals that over 600 persons died during this crisis (Schmiedeberg 1970a, 1970b). The medical doctor sent by the Government to investigate the kwashiorkor cases concluded "**malnutrition as the main cause of deaths in the area**" (Schmiedeberg 1970a:1). The two reports prepared by the doctor were sent to the Life President and clearly stated the main reasons of the famine to be overcrowding from an influx of Mozambican refugees and the failure of the

rains in early 1970 which prevented the cultivation of intermediate crops. However, rather than admit that famine was responsible for the 600 deaths, the Government instead announced over the mass media that an 'unknown disease' was the cause. According to the medical doctor:

**"the announcement created fear and anxiety and "spreading of the disease" was reported, whereas afterwards investigations could not find any. The announcement also deprived us at least temporarily of the impact of this unique though sad opportunity to teach better feeding, as people now would rather think in terms of bad luck through the unknown disease than accept nutritional status" (Schmiedeberg 1970b:5).**

This provides a good example of the how determined the propaganda system was in Malawi to uphold and reinforce the country's food self-sufficiency and success story image even in face of scientific facts which showed otherwise.

#### **CASE STUDY 5: UK Freedom from Hunger Campaign - 1972 to 1974**

In 1960 the Director-General of FAO in Rome launched a global Freedom from Hunger Campaign (FFHC) to address the problem of world hunger and malnutrition. This resulted in national FFHC Committees being established in both industrialized and developing countries. Malawi initiated a FFHC Committee in 1968 **"with the blessing of His Excellency the Life President, Ngwazi Dr H. Kamuzu Banda"** (Malawi Government 1971b:2). The membership included prominent public figures including the Mayor of Blantyre and representatives from different Government ministries such as the Deputy Secretary for the Ministry of Agriculture and Natural Resources who acted as the Committee's Chairman. Support was forthcoming from a number of National FFHC Committees in Europe, including the United Kingdom and Germany, to initiate a variety

of agricultural and animal husbandry projects. The official view of malnutrition held by the Malawi FFHC Committee was:

**"while hunger still prevails in many developing countries of the world, Malawi is fortunate in that at the moment food production is four years ahead of population. Famine has not been heard of these last two decades. But while food is in abundance, people in the villages do not eat enough of it and this results in malnutrition, particularly in children" (Malawi Government 1971b:4).**

Although the Malawi FFHC declared in this press release that no famines had occurred in Malawi in the past 20 years, in fact the Mchinji famine in which 600 people died had taken place only one year earlier. In this same document the Malawi FFHC Committee also praised Malawi's development achievements in food production as having **"been accomplished by the rural people through the dynamic leadership of the Life President"** (Malawi Government 1971b:7). The document continues that **"with Malawi conditions, fortunately, it is a question of solving the problem of making good use of what is plenty"** (Malawi Government 1971b:7). The illusion was reinforced that Malawi was a land of plentiful food with enough to eat for everybody.

Quite separate from the Malawi FFHC, in early 1972 the United Kingdom's FFHC Committee approached the Malawi Government with a proposal to develop a National Food and Nutrition Programme in the country. Permission was obtained from Dr Banda for the UK FFHC mission to visit Malawi for a one-month reconnaissance mission in mid 1972 and a six-month in-depth mission in the latter half of 1973. Over this period the UK FFHC team undertook a comprehensive analysis of Malawi's food and nutrition situation. The final mission report prepared in 1974 contained a thorough review of the nutrition problems facing the country, especially the likely underlying causes. In addition, recommendations were proposed for establishing a national food and nutrition programme including policy and planning aspects with consideration also given to the required institutional and manpower development (Thomson, Cameron and Jackson 1974)

The UK FFHC committee cited anthropometric from the Ministry of Health surveys in 1969 and 1970 to base their conclusion that:

**"Undernutrition is a problem in all parts of Malawi, but its incidence and seriousness varies according to the age groups and areas. The most critical conditions are found in the 0-3 age group" (Thomson, Cameron and Jackson 1974:23).**

Unlike previous nutrition planners the UK FFHC team identified inadequate household food production and low purchasing power as underlying causes to the country's malnutrition problem:

**"There is no single cause of the undernutrition; it is the end result of a combination of many circumstances. Production of insufficient food to last the whole year, or losses in storage with the same result; nutrient losses through poor processing methods; lack of cash to purchase food; traditional customs concerning intra-family distribution, weaning practices and food prohibitions; physiological and pathological states affecting either the consumer or the cook; the bulk factor of meals may impose further restriction on amounts that can be consumed. All are factors which result in insufficient consumption of food" (Thomson, Cameron and Jackson 1974:23).**

They also mentioned the other underlying causes related to malnutrition such as the role of child feeding practices, intra-family food distribution and poor health.

Survey data were also quoted in the final report of the UK FFHC which showed that food self-sufficiency at the household level was a problem in certain areas of the country which had always been regarded as food self-sufficient:

**"It is perhaps noteworthy that in an area that might be considered to be largely subsistence, a large proportion of households, 72%, are not self-sufficient in maize, and 44% buy rice, cassava, sorghum, etc. An even higher percentage (80%) buy vegetables and fruit" (Agro-economic**

**Survey, 9th Report: Lake Chilwa, MOA 1972 as cited in Thomson, Cameron and Jackson 1974:9).**

The UK FFHC mission also carried out a small survey on family food habits in a rural village area outside of Zomba to investigate the availability of food, water and fuel as well as the local attitudes and practices concerning food and child health. The results of this survey showed that in the 101 families surveyed during the pre-harvest month of October, 43 percent reported that they were short of maize, 63 percent groundnuts and 74 percent beans (Cameron 1973).

The UK FFHC mission also examined data to investigate food consumption patterns. Three different methodologies were used. The first method was based on an examination of the dietary intake data collected from the weighed food intake survey by the Ministry of Health in Ngabu during April/May 1970 (see Case Study 4). The dietary data obtained from the 23 households showed an intake of only 1,363 calories/capita/day which is well below the recommended level of 2,200 calories. The UK FFHC agreed with the original conclusions of Dr Burgess and his health team that the protein content of the diet was satisfactory as long as sufficient food was eaten to meet calorie requirements. The UK FFHC concluded that **"lack of food intake, rather than lack of any specific nutrient is characteristic"** (Thomson, Cameron and Jackson 1974:23). This also echoes the findings of Benjamin Platt and the Nyasaland nutrition team who had also identified calories not protein as the primary deficiency in the diet some thirty years before (see Case Study 1).

The second method used by the UK FFHC to examine food consumption patterns was to estimate consumption levels using data obtained from the 1968/69 National Sample Survey of Agriculture (NSSA)<sup>27</sup>. They calculated the average daily consumption level to be 2,405

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<sup>27</sup> In the 1968/69 NSSA data on consumption levels were collected by weighing the ingredients used for one meal on one day in a sample of families. This information was then combined with dietary recall data from the same families on the amount of other foods used in meals over the previous 24 hours. No allowance was made for snacks or for uneaten food left over from the meal.

calories from all foods. However, they also strongly cautioned that this was likely to be an overestimation:

**"This is likely to be an over-estimation. The intake of food is not entirely in agreement with available evidence of heights and weights in various sections of different communities" (Thomson, Cameron and Jackson 1974:18).**

The Government statisticians responsible for the 1968/69 NSSA survey had written strong reservations in the official NSSA survey report regarding the accuracy of the food consumption data which they felt were too high especially for maize intake:

**"Users are reminded that this type of survey is particularly susceptible to non-sampling errors. Attendance of the preparation of only the main meal might have biased the results and the amounts used in the preparation of the other meals in the twenty-four hour period may well have been overestimated by the housewife. For these reasons it is believed that despite the vigorous editing of the returns, the amounts shown, especially those for maize, are overestimated" (Malawi Government 1970:160).**

The third method used by the UK FFHC to estimate food consumption levels was based on the production levels of seven major food crops plus meat, poultry, fish, vegetables, fruit and sugar (Thomson, Cameron and Jackson 1974). Food available for consumption was estimated by adjusting published crop production levels for losses due to sales, storage and processing. Calculations were made for four areas of the country: Lilongwe, Nkhotokota, Mulanje and the Lower Shire. The average caloric intake was found to be 3,978 calories per day, ranging from a low of 2,847 calories in Nkhotokota to a high of 5,326 calories in Lilongwe. The value for the Lower Shire was 3,844 calories which as pointed out by the UK FFHC mission report was much higher than the intake level of 1,363 calories found in the same area of the country in the 1970 Ngabu weighed food intake survey. The UK FFHC team also noted that the child anthropometric data from the Ministry of Health surveys did not correspond to such a high level of food consumption. They concluded:

**"On an annual basis, there appears to be more than enough available food to meet per caput requirements of both energy and protein. However, on the limited evidence available, the nutritional status of the community in the different areas does not support this high level of food intake ... It must be pointed out that collection of this type of data, particularly with regard to individuals, is difficult to make." (Thomson, Cameron and Jackson 1974:19).**

Therefore, the picture on food consumption in Malawi was not entirely clear. Although the analysis conducted by the UK FFHC did suggest adequate food availability, they cautioned about drawing this conclusion because of the questions concerning the data especially the suspected overestimation of food consumption levels.

The problem of household food security figured prominently in the UK FFHC's conceptualization of Malawi's nutrition problem. In regard to families living in urban areas or those working in the estate sector they identified the key constraints preventing increased consumption levels to be **"the low and slowly increasing urban and estate incomes, the very high percentage of expenditure on food, and the proportion of income still provided by subsistence"** (Thomson, Cameron and Jackson 1974:8-9). The mission's final report also stated that **"from the available information there is no reason to suppose that wage earners as a whole are more capable of meeting their demands for food through the market now than they were in 1968..."** (Thomson, Cameron and Jackson 1974:9). In regard to the capacity of the rural population to increase their food consumption the UK FFHC team stated:

**"In every area, there appears to be a significant number of families whose production potential is so low, through inadequate land, limited quality of the soil or for other reasons, that they will be unlikely to be able to feed themselves adequately even with reasonable improvement in agricultural practices or by prevention of wastage in storage and handling" (Thomson, Cameron and Jackson 1974:23).**

These conclusions were based on their review of agricultural data which were obtained from the Ministry of Agriculture's Agro-Economic Survey (AES) programme. They also observed that there was some **"connection between size of holding, yields and nutritional status"** (Thomson, Cameron and Jackson 1974:21). However, the only elaboration given in their final mission report was the following quote obtained from an AES report on an agricultural project in the Lake Chilwa area:

**"Apart from a very small number of 'rich' farmers, of which most are engaged in non-farm business, most households fall in the low-income category with annual cash earnings under K25.00. The most progressive farmers, applying fertilizer and using oxen, are in most cases the 'rich' farmers, who have a store in their village or are engaged in other business. Their number is limited. This group obtains the highest yield per acre"** (Malawi Government AES Report 9 on Lake Chilwa, page 31 as quoted in Thomson, Cameron and Jackson 1974:38).

In addition, the UK FFHC mission noted that **"much more striking confirmation is provided ... which can not be specifically quoted"** (Thomson, Cameron and Jackson 1974:37-39). Although data did exist in other Government statistical reports, this information was confidential and could not to be quoted because of Government's restrictions on data use.

Much recognition was also given by the UK FFHC mission to the heterogenous nature of the rural population:

**"Special attention will require to be given to those groups for whom the benefit of the Agricultural Development Policy are not being realized, whether because of lack of access, smallness of holdings, size of family, age, labour migration or other reasons"** (Thomson, Cameron and Jackson 1974:24).

The UK FFHC mission also explicitly recognized the problem of female headed households which had resulted from the migration of men in search for work:

**"some of the smaller holdings are run by women because men have left to seek paid employment, often going out of Malawi to do so" (Thomson, Cameron and Jackson 1974:21).**

As will be shown later in Case Studies 9, 10 and 11, these same issues, namely low agricultural production levels, small landholdings, lack of resources, female headed households and household food security, would only receive official recognition in the national policy debate on malnutrition and food security in the late 1980s. This was well over a decade after the UK FFHC's mission report had originally been published.

The UK FFHC mission also commented on the national policy of maize self-sufficiency which they felt was **"not by itself enough to guarantee increased standards of consumption"** (Thomson, Cameron and Jackson 1974:21.). They felt that the present national maize production target levels were probably too low to meet the aggregate nutritional requirements of the population:

**"Self-sufficiency in maize as a major policy aim is laudable, but this is at present based on existing levels of gross availability per head (531 lbs per annum). Maize flour, whether traditionally or commercially processed, suffers considerable nutrient losses. Given the present processing and storage techniques, it is doubtful whether the target of self-sufficiency at this level of "gross availability" is altogether adequate" (Thomson, Cameron and Jackson 1974:para.iv).**

Although this level may have sufficed to satisfy effective demand for maize, it was not enough to meet the country's biological needs for staple food. The UK FFHC mission had thought that the lack of nutritional expertise in the country accounted for the absence of nutritional considerations in DEVPOL I especially in the policy of food self-sufficiency. This may be partly true but it can also be argued that the Government's policy of food self-

sufficiency was never intended to be based on nutritional grounds but rather was conceived and viewed in market terms only. In other words food self-sufficiency was considered to be achieved so long as food imports were not required. This view of food self-sufficiency persisted well up until the early 1990s (World Bank 1990b).

In fact the UK FFHC team could have gone one step further in their analysis of the nutritional adequacy of the Government's national food self-sufficiency policy. A simple calculation of the adequacy of domestic maize production in meeting the population's calorie requirements would have added strength to their argument regarding the issue of food availability in the country. For example, a daily energy intake level of 2,200 calories per capita is often used in developing countries as an average requirement for calories. Typically a staple food such as maize contributes about 75 percent of the calories in a mixed diet, or in other words roughly 1,650 calories per day. The extraction rate for maize processing in Malawi is high at about 65%. Therefore, an average consumption level for maize of 531 lbs of grain per year would only yield approximately 345 lbs (or 157 kgs) of refined maize flour. This amount of maize flour each year would supply on average 1,440 calories per day, which is 13 percent less than the daily requirement of 1,650 calories. In light of the high losses incurred with maize processing, setting annual maize production targets at 531 lbs per capita fell far short of meeting minimum nutritional requirements.

Although a similar calculation as the above was included in the UK FFHC's Reconnaissance Report of 1972 (Thomson et al. 1972), these results were not presented in the final mission report released in 1974. Why this information was left out is not known. However, given the political climate where any questioning of the country's achievements in food self-sufficiency was not welcome, it could be speculated that the UK FFHC mission was playing it safe and avoiding any negative reactions from the Government.

The fragile nature of food self-sufficiency in the country, however, was not new to the Government who openly admitted in DEVPOL I that "**studies on maize production**

**indicate that the rise in population will mean that Malawi remains only just at the point of selfsufficient for most of the decade"** (Malawi Government 1971a:37). However, although it was acceptable for Government officials to make these types of comments, any criticism from outsiders on such sensitive issues was not acceptable.

In essence, the UK FFHC mission viewed the malnutrition problem in Malawi as a structural problem of poverty, with the major issue being the quantity of food eaten. Unlike the piecemeal approach of previous nutrition activities in Malawi which only addressed the health and educational aspects of the problem, the UK FFHC mission felt that nutritional concerns should be *integrated into the entire development planning process* so that the underlying and basic causes of the problem, especially those concerning household food security, could be adequately addressed:

**"In Malawi nutrition policy must and is regarded as an investment in the welfare of the community, closely integrated with development policy in the fields of agriculture and health" (Thomson, Cameron and Jackson 1974:13).**

The substantive nutrition planning theories contained in the conceptual approach of the UK FFHC mission reflected the structural view of malnutrition which emerged at that time around the 1974 World Food Conference. As discussed earlier malnutrition was seen as a societal problem related to poverty and the access of vulnerable groups to adequate food, health care, education, water and sanitation, among other basic needs (United Nations 1974; FAO/WHO 1976). Echoing the same conclusions reached by the World Food Conference, the UK FFHC mission stressed that increased food production alone was insufficient to improve nutritional levels since other factors also intervene to determine nutritional status:

**"sufficient food production is, by itself, not enough to guarantee increased standards of consumption, however equitably Government spreads its development effort. There is little evidence within long-established agricultural development areas, where both production of food and the level of income have risen significantly, that better**

**nutritional standards automatically result. The influence of existing technology for food harvesting, processing, storage and distribution as well as the level of health and hygiene education and food customs affecting consumption, seem to be important constraints even where development is occurring" (Thomson, Cameron and Jackson 1974: summary para.vi).**

The UK FFHC mission also realized the shortcomings of the available data which existed in Malawi in the mid-1970s. They stated in their final report that improvement in the data base were needed since **"a nutrition policy must be based on sound scientific data and updated accordingly"** (Thomson, Cameron and Jackson 1974:22).

In regard to the procedural theory of planning to develop and implement a national food and nutrition programme the UK FFHC mission recommended the flow chart shown in Figure 5.1. There are many similarities between this nutrition planning flow chart and the model of the Planned Development Process shown earlier in Figure 2.1 in Chapter 2. The UK FFHC's approach included steps to collate and analyze data, identify objectives, re-assess proposed measures, appraise and design interventions as well as evaluate the measures proposed.

What the UK FFHC recommended in Figure 5.1 also provides a good example of the popular multi-sectoral nutrition planning schemes which began to be promoted in the mid-1970s by international nutrition planning experts (Joy 1973; Joy and Payne 1975; Payne 1976; Lynch 1978; Pines 1982). The UK FFHC's approach, however, was heavily top-down with no room for bottom up planning. Although some of the background documents found from the UK FFHC mission emphasized the importance of including the community in the planning process, no mention whatsoever was made of community participation in the final mission report presented to the Government. This may have been because of the perceived reluctance on the part of the Government to consider community level planning initiatives in light of the rigid political system which existed in the country at that point in time.

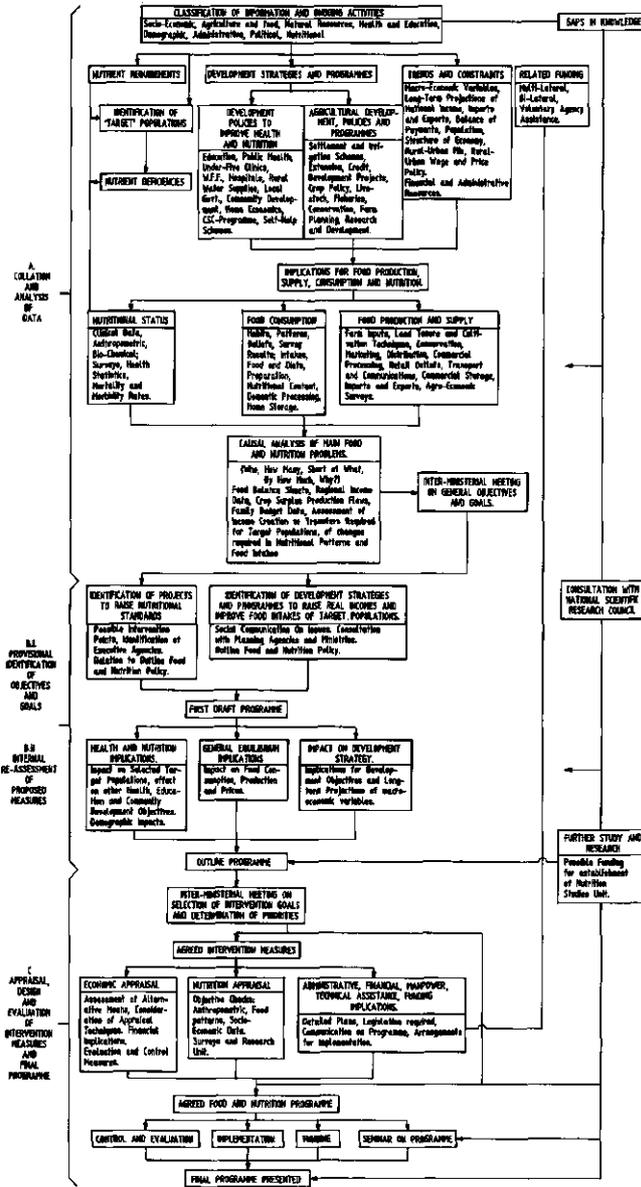


Figure 5.1: UK/FFHC flow chart for multi-sectoral food and nutrition planning

(Source: Thomson, Cameron and Jackson 1974)

The UK FFHC team also noted the weak capacity of the country in terms of planning and research institutions as well as the general lack of trained manpower. They recommended a series of measures to develop the country's institutional capacity. These included the establishment of a Food and Nutrition Programme in the Ministry of Agriculture and Natural Resources (MANR) and a Nutrition Studies Unit at Bunda College of Agriculture, University of Malawi. In regard to staffing, the UK FFHC mission recommended establishing the posts of a Nutrition Programme Officer with a national counterpart in the MANR, a Medical Nutritionist in the Ministry of Health, as well as having several posts created at Bunda College for the Nutrition Studies Unit. In addition, since no Malawian nutritionists existed several fellowships were provided to the Government for university training in nutrition. Other recommendations covered the building of the Nutrition Studies Unit as well as several houses for the MANR nutrition staff.

A total amount of K254,000 was to be sought from the UK FFHC Committee to cover the core components of the Food and Nutrition Programme. Other donors were to be approached to support the costs of local posts as well as the two expatriate posts. In addition an extra K460,000 was also needed to cover other recommendations related indirectly to the food and nutrition programme. The Malawi Government was expected to take over the financing of the Nutrition Studies Unit at Bunda College after five years, as well as the salary costs for the MANR counterpart after 2 1/2 years.

In late 1974 the Life President personally approved the final report of the FFHC mission, however, providing that the whole project would be controlled by the Malawi Government<sup>28</sup>. However, little happened on the Malawian side between 1974 and 1977 apart from the building of a few staff houses. In addition, the UK FFHC committee was unable to identify suitable technical advisors for the project and had not heard anything from the Government on the progress of the programme. By early 1977 the UK FFHC

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<sup>28</sup> Folio 1, Letter from Acting Secretary to the Treasury to all Principal Secretaries dated December 1974, Government Records Office File No. 9-19-F/37096, Zomba.

Committee in London was facing financial constraints and was preparing to close down. It is against this background of financial problems that the London office wrote to the Malawi Government and withdrew from the project with which, in their own words, they had **"so much hope and investment"** (Boothroyd 1977:2). Their letter ended **"however, it is some satisfaction to know that we have left you with two houses and a programme for which we hope you will find a place in your normal development programme."** (Boothroyd 1977:2) After all the intellectual effort on the part of the UK FFHC, the only concrete results were bricks and mortar.

The London Committee's hope that the proposed food and nutrition programme would be incorporated into the Government's planning process never materialized. Although the planning flow chart shown in Figure 5.1 covered the important aspects of nutrition planning it was never tried. However, this was not surprising considering its highly complicated nature especially since it was not geared to the implementation capacity nor mentality of the Malawi Government. Similar problems with multi-sectoral nutrition planning attempts also occurred in other countries when such impressive looking plans proved to be impossible to implement in practice (Pines 1982; Berg 1987; Field 1987).

Although a lack of capacity on the side of the Government to undertake the national food and nutrition planning programme probably accounts for the lack response, no doubt an even greater reason was the lack of political support to move ahead with such a programme. Considering the prevailing political situation, Government civil servants were probably reluctant to follow-up the recommendations of the UK FFHC since doing this would have come too close to such taboo issues as household food security, hunger and poverty. For a civil servant working in the Malawi Government this would have been impossible to contemplate since officially these problems did not exist under the rule of Dr Banda.

It can be argued that the outward appearance projected by the Government to move ahead with nutrition planning as far as it did in terms of the discussions held with the UK FFHC

was not motivated by a sincere commitment to address malnutrition and poverty. Rather the desire on the part of Government was more likely to maintain a politically correct outward image for the donor community, for example the British Government, who had initiated the FFHC planning initiatives in the first place.

On the other hand, it was extraordinary that the bold piece of work conducted by the UK FFHC was able to reach the final report stage and say what it did. This becomes even more remarkable if one examines the statements which had been coming out of the Malawi FFHC Committee in 1971 (see earlier quotes). It is interesting to note that in none of the UK FFHC documents was mention made of the Malawi FFHC Committee, although it is known that their members participated in the discussions with the British experts<sup>29</sup>.

One possible explanation as to why the UK FFHC mission's final report was able to be written and released was that it was sponsored by the British Government which at that time was still one of the most influential donors in the country. It would have been highly unlikely that the final report would have been embargoed especially in light of the many people involved in the discussions held by the UK FFHC mission during their seven months in the country. It may have been felt that suppressing the findings would have drawn too much attention to these sensitive issues and may have resulted in unwanted political embarrassment to both the Malawi and British governments. It is not known just how many copies of the UK FFHC mission report were produced or to whom they were distributed. Today copies can be found in the library at the Bunda College of Agriculture Library as well as the Centre for Social Research and the Government Records Office in Zomba.

The UK FFHC mission's work was remarkable from several perspectives. First, it represents the best example of nutrition planning undertaken in Malawi in the fifteen years

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<sup>29</sup> Loose Minute from Secretary for Agriculture and Natural Resources to the Life President dated 23rd March 1973 Ref. 4/9/21, Government Records Office File No. 17/17/8R/33353, Zomba.

following after independence. Second, it was the first nutrition work since the Nyasaland survey that held a conceptual view of nutrition as a societal problem which extended beyond the boundaries of health and education to include agriculture, macroeconomic planning and labour among other important sectors. Third, the UK FFHC mission undertook a critical review of all existing information on food and nutrition in the country although admittedly the data base on anthropometry, food production and consumption was still somewhat limited in the early 1970s. Fourth, and perhaps most remarkable, was that the UK FFHC team stated quite frankly that the problem of malnutrition was related to household food security. The only surviving aspect of the UK FFHC mission's work, which will be described later, was the eventual establishment of a food and nutrition planning and research infrastructure along the lines of what was recommended in their final mission report.

One final note is needed. The only evidence in later years of the UK FFHC's final report being used was unfortunate. In this case results from their data analysis on food consumption levels were blatantly misused in a 1981 World Bank Report entitled *Malawi: Basic Needs* (World Bank 1981b). Quoting the high consumption levels, on which the UK FFHC had clearly stated their reservations regarding the accuracy of the data, this World Bank report stated that food availability in Malawi was not the problem. Instead the World Bank kept to the official view held by Government that disease and ignorance were the major underlying causes of the nutrition problem which would be amenable to health and education interventions. These sweeping conclusions that food availability was not the problem made in this report would continue to be quoted later by subsequent World Bank missions and sector reviews throughout the 1980s (see Case Study 11).

### CASE STUDY 6: National Rural Development Strategies - 1968 to 1979

This review of Malawi's nutrition planning activities during the 1970s would be incomplete without a look at some of the opportunities missed for nutrition planning. By far the most important one was the complete omission of nutritional concerns in the country's national rural development strategy, even though its overall objective was national food self-sufficiency. This development strategy was launched soon after independence and was implemented through a number of Integrated Rural Development Projects (IRDPs). The concept of the IRDPs was based on rural development through large scale commercialized agriculture.

The major objective of the IRDPs was to increase smallholder production of maize and groundnuts with the goal being to transform subsistence farmers into market orientated producers. National food self-sufficiency was a central objective. Massive support was given to the provision of rural infrastructure (*e.g.* roads, input stores, markets, health facilities), land improvements (*e.g.* irrigation, conservation), agricultural extension services as well as credit facilities for farm inputs (Kydd and Spooner 1986). From 1968 until 1976 the World Bank provided a total amount of \$64.4 million to the Malawi Government for three IRDP's in Lilongwe, the Shire Valley and Karonga (World Bank 1988). A fourth IRDP in the Lakeshore area was supported by German bi-lateral aid.

Poverty alleviation was very popular with the international donor community, including the World Bank, during the 1970s (Mosley, Harrigan and Toye 1991). The IRDP strategy was seen as offering a promising approach to attack rural poverty in developing countries (Cassen and Associates 1986). In its 1973 Annual Report the World Bank was full of praise for the IRDP efforts it was supporting in Malawi:

**"These schemes are gradually maturing and are expected to provide the bulk of the increase in agricultural output in the coming years. They have proved to be remarkably successful and lessons drawn from them**

**are used in similar new schemes" (World Bank 1973:Vol. 1 as quoted by Kydd and Spooner 1986:77).**

An even more enthusiastic attitude towards the IRDP was shown by the Malawi Government in a public relations document they released:

**"In less than 4 years since 1967 there has developed in this area an agricultural phenomenon such as no one has seen before in Malawi. New bridges, a network of roads, satellite townships, hospital clinics, schools and shops - all these dazzle the eye of the observer" (Mwakasungura 1984:43).**

By 1975 World Bank audit reports had judged the performance of the IRDP's to be good in terms of the reaching physical targets and infrastructure development, however, progress towards increasing smallholder production levels was disappointing (Kydd and Spooner 1986). There was also growing opinion that the IRDP approach was too expensive because of the costly infrastructure investments required, particularly those related to social services (Malawi Government 1977; Kydd and Spooner 1986). In order to extend agricultural development to other areas of the country the IRDP strategy was re-vamped to decrease its infrastructure outlay while still maintaining the focus on smallholder production. This led to the National Rural Development Programme (NRDP) which was launched in 1978 with an 18 year planning horizon. The focus of the NRDP was on supporting:

**"projects with minimum capital investments and investing in those elements that have an immediate impact on production. Other investments which are unlikely to have an immediate bearing on production would be undertaken in later stages" (Malawi Government 1977:2).**

The overall objective of the NRDP was to increase smallholder production for cash crop exports as well as for feeding the growing urban population. Providing agricultural inputs as well as strengthening extension, credit and marketing services were the main routes taken

to intensify crop output. The country was divided into eight Agricultural Development Divisions (ADDs) within which certain areas were designated to receive funding from such donors as the World Bank, the German and British Governments as well as the European Economic Community. There were also areas in the ADDs which were not funded and within which little development activity took place. The long term strategy was to eventually cover the entire country with funded agricultural development projects. From 1978 to 1985 the World Bank alone provided close to US \$54 million to the NRDP (World Bank 1988).

However, similar to the IRDP approach, the impact of the NRDP on improving smallholder production was also disappointing (Malawi Government 1988; Lele 1989a; Harrigan 1991). Whereas during the 1970s the estate sub-sector grew at an impressive average rate of over 17 percent per annum, the growth of the smallholder sub-sector was just below 3 percent per annum with food crop production showing signs of stagnation (Harrigan 1991).

What went wrong with the IRDP and NRDP rural development approach? It is argued here that the fundamental weakness was that these rural development strategies were planned with the single-minded purpose of raising aggregate production levels without any consideration given to the potential impact on human welfare, particularly for poorer groups in society. The most glaring omission was that no attention was given at the design phase to the differential impact that this type of agricultural development strategy would have on different groups of the rural population, for example small versus large farmers, and how this in turn could influence the pattern of income distribution and poverty.

The basis of the problem, as identified by Kydd and Spooner (1986), was that from the time of independence to the end of the 1970s the World Bank's development assistance to the country was characterized by "**cursory (and hardly analytical) treatment of sectoral and intrasectoral issues**" (Kydd and Spooner 1986:37). The analytical basis of the original IRDPs was weak right from the start at the conceptualization stage of the strategy,

particularly in regard to the technological basis of the type of agricultural support offered to farmers:

**"Given that the Bank saw agriculture as the priority sector, analysis of the technical basis for achieving increases in agricultural productivity was remarkably absent from the early economic memoranda" (Kydd and Spooner 1986:62).**

Other observers are equally critical of the Bank's early involvement in rural development in Malawi because of its poor analysis of key issues:

**"the Bank's background analysis ... did not demonstrate a clear understanding of Malawi's post-independence development strategy and the associated political economy or the manner in which many of the structural weaknesses were the by-product of this strategy" (Harrigan 1991:213).**

From such accounts it appears that the World Bank evinced little interest in undertaking a deeper analysis of the local circumstances in order to understand the major sectoral or structural issues related to the development potential of different socio-economic groups within the country.

This was particularly true in the agricultural sector where broad assumptions were made without an empirical basis. For example, no consideration was given by World Bank staff in the planning and implementation stages to the possible response of different groups of farmers to the technological package of agricultural inputs being offered to them under the IRDP and NRDP. Kydd and Spooner state that during the 1970s **"at no time during the Bank's operations in Malawi there has been an attempt to differentiate between different groups within the smallholder sector, for project planning or policy analysis"** (Kydd and Spooner 1986:115). Data on farm size categories were in fact available at the end of the 1960s from the 1968/69 NSSA, the Agro-economic Surveys as well as the Evaluation Units of the IRDPs and NRDP projects. Such data could have been used to

describe the heterogenous nature of the smallholder sector especially to plan specific interventions tailored to the needs of different groups of farmers. Instead the smallholder farming sector was treated as a homogenous group. The main focus of data collection within the IRDPs and NRDP was solely on measuring production levels (Kinsey nd).

In 1975 several studies were undertaken in Malawi as part of a larger World Bank Africa Rural Development Study (Kinsey nd). Data from one of the IRDP's Evaluation Units were analyzed which showed that a large portion of smallholders were not eligible to participate in the IRDPs because their landholdings were too small to meet the Ministry of Agriculture's cutoff criteria to receive credit:

**"a significant proportion of farmers were ineligible for credit -- the project's only activity capable of dramatically affecting productivity and incomes -- because they cropped less than the criterion threshold area of half a hectare. Moreover, there were distinct patterns --reflecting geography, farm size, and socioeconomic class -- in the distribution and use of credit-supplied inputs, and these were further associated with patterns of extension visits and default rates. Not surprisingly, crop yields and incomes displayed much the same patterns" (Kinsey nd:9).**

As discussed earlier in Chapter 3, the proportion of farmers with small landholdings sizes is significant in Malawi. In 1968/69 the percentage with less than 0.8 of a hectare was 29 percent and in 1980/81 the percentage with less than 0.7 of a hectare was 37 percent. The proportion with less than one hectare in 1980/81 was 56 percent. Therefore, just over half of the rural farming population were being excluded from the national agricultural development programme because their family plots were simply too small to qualify.

In her review of World Bank assistance to agriculture in Malawi Harrigan (1991) reaches a similar conclusion that only the larger and better off farmers were able to participate and benefit from the IRDP and NRDP agricultural development strategies. She also argues that the strategies supported by the World Bank in fact weakened the position of the poorer farmers:

**"these Bank- and donor-funded smallholder development projects supported and complemented Banda's estate expansion strategy at the expense of the smallholder export crop production ... The main beneficiaries were a relatively small number of progressive smallholder farmers ... who possessed enough land to meet their own food requirements and to produce a marketed crop surplus ... the majority of smallholder subsistence producers, unable to participate in the cash economy and hence benefiting little from the rural development programmes and facing growing land scarcity, became increasingly more impoverished" (Harrigan 1991:214).**

According to Kydd and Spooner (1986) although audit evaluations conducted in the early 1970s showed that there were problems with the existing strategies to increase smallholder production levels, no serious attempt was made by World Bank staff to make changes even when given the opportunity provided by the launching of the new NRDP strategy in 1978. It would not be until 1989 during a technical issues review of the NRDP that the World Bank would finally acknowledge that the bulk of the rural population had not been reached by past agricultural development activities:

**"Past agricultural initiatives have, often inadvertently, favoured those with above average assets, and had little or no impact on the majority of resource poor farmers ... there will have to be substantial changes in strategy from previous initiatives and some quite fresh interventions targeted specifically at those families with less than 1 ha. of land who are most in danger of being caught in a poverty trap" (World Bank 1989a:28).**

Therefore it took over two decades for the World Bank to admit that major problems existed with the rural development strategy in which they had invested tens of millions of dollars over the years. However, fifteen years earlier in 1974 the UK FFHC mission had already recognized these very same issues, especially the problem of small landholdings and disadvantaged farm families and the special attention which would be needed to reach them with appropriately designed interventions (see earlier quotes given in Case Study 5). The final report of the UK FFHC explicitly mentioned this concern for poorer farmers with

smaller holdings. At that time the UK FFHC had argued that nutritional concerns needed to be incorporated into the IRDPs in Malawi:

**"In a subsistence-based economy, it is felt that nutrition should be regarded as an essential element in the general development strategy of raising the welfare of the population through direct investment in agricultural production. In this way, incomes are automatically raised, and the people then have at least the ability to respond to cheap, but effective nutrition measures to raise consumption standards, which themselves enhance the return to health and agricultural investments" (Thomson, Cameron and Jackson 1974:14).**

However, no one had listened to the UK FFHC. Had the World Bank been interested in improving poverty and nutrition in Malawi, issues to which they professed in international circles to be giving priority, then these concerns would have been incorporated into their support to the IRDPs and NRDP in Malawi. Their interest would have extended beyond just measuring production levels to looking at whether food consumption was also increasing especially in the poorer segments of the population. Considering that in 1971 the President of the World Bank had declared the basic problems of development to be **"nutrition, employment, income distribution, and trade"** it is incongruous to think that the major rural development strategy supported by the World Bank in Malawi at this same point in time would completely omit poverty and nutritional objectives (McNamara 1971:Introductory Remarks). This omission becomes even more glaring considering that the major thrust of both the IRDP and NRDP strategies was on achieving national food self-sufficiency.

No reference to nutrition could be found in the World Bank reports produced during the 1970s on the IRDPs and the NRDP. However, the topic of malnutrition was briefly mentioned in a 1971 mission report prepared by a World Bank medical consultant working on the health programme aspects of one of the IRDPs:

**"The major health problem - especially (*sic*) in children under the age of five years - is chronic malnutrition due to an insufficient intake, rather than to a scarcity, of protein or calories (wrong feeding practices)" (De Winter 1971:1).**

In other words, the view of this World Bank consultant was that food availability was not the problem in Malawi rather it was the ignorance of nutritious feeding practices.

Up through the late 1970s if actions reveal true intent then it can be said that the interest simply did not exist on the part of the World Bank to pursue human welfare issues in Malawi. The concept of poverty and hunger did not figure in their view of the country during this period. Instead the World Bank held firmly to the belief that Malawi was an African success story which matched the picture created by the political propaganda machine.

In turn the World Bank's praise for Malawi, as well as the praise from other large donors, provided much of the fuel for the political propaganda. For example, Dr Banda was extremely fond of quoting in his speeches the epithets made by donor officials<sup>30</sup>, such as the World Bank's praise that **"Malawi is not just a performer, but a star performer"**, the FAO's words that **"Malawi is classified as country number one in Africa"** and the International Monetary Fund's opinion that **"financially and economically Malawi is classified as one of the best countries in Africa"**.

If the conceptual understanding of rural development in Malawi had not been so constrained by politics and had also been better supported by a scientific assessment and analysis of the existing situation, the incorporation of human welfare and nutritional considerations into programmes such as the IRDP and NRDP may have been possible. However, this was not

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<sup>30</sup> These words of praise were contained in the Life President's Speech given at the State Opening of Parliament, 10 October 1989.

the case and a potentially great opportunity to improve the human condition in the country was missed.

### **5.2.5 Fulfillment of the four prerequisites**

In order to test the hypothesis of this thesis that in Malawi nutrition planning has not been successful each of the four prerequisites identified as being essential for planned development to work is examined in detail for the period from 1964 to 1979. These prerequisites include: 1.) whether mutually agreed objectives existed, 2.) whether the political will existed, 3.) whether the planning theories used were appropriate and 4.) whether the means and capacity to take action existed.

### ***Objectives***

Improved nutrition was never explicitly considered to be a development objective by the Malawi Government during the fifteen years following independence as evidenced by its complete omission from the first national Statement of Development Policies 1971-1980 (Malawi Government 1971a). The national development strategy followed instead was exclusively concerned with achieving macroeconomic growth and increased agricultural production as quickly as possible. It was also stated in DEVPOL I that due to the severe budgetary constraints facing the country at the time of independence the social sectors would be given lowest priority since these types of programmes would not make an immediate contribution to economic growth.

It could be assumed that an implicit objective of the Government was to improve living standards and the welfare of the population, however it is difficult to find any evidence to support this. The consensus of a number of reviewers of development policy in Malawi is that the Government's macroeconomic, agricultural and labour policies favoured the better off segments of the population with the result being a worsening of poverty in the country (Kydd and Christiansen 1982; Ghai and Radwan 1983; Mwakasungura 1984; Harrigan 1991). In their review of the political economy of agricultural development in

Malawi Christiansen and Kydd (1990) argue the extreme view that the concern of the Life President were far removed from those of poverty alleviation:

**"Dr Banda was not much concerned with equity, either on grounds of ideology or practical politics. Smallholders had very little influence in the political process" (Christiansen and Kydd 1990:43).**

Although food self-sufficiency was a central development objective for the Government and an important political rallying point for the Life President, even this policy had no nutritional basis. Rather the objective of food self-sufficiency was seen purely in economic terms as the ability of the country to produce enough food to meet internal market demands. So long as food imports were not needed, the objective of food self-sufficiency was considered to have been achieved.

### ***Political Will***

Political factors were a major blockage to the attempts made at nutrition planning during the 1960s and 70s. First of all the political propaganda system in Malawi had created a myth that the country was far ahead of her African neighbors in terms of prosperity especially in being able to feed herself. According to the country's leadership the problems of food insecurity, hunger and poverty did not exist, therefore, it was impossible to contemplate these issues as policy objectives.

Political will was especially lacking when attempts were made, for example, by the UK FFHC to address the problem of malnutrition in regard to issues of food insecurity, hunger and poverty. However, it was permissible to discuss the health and educational dimensions of malnutrition since they were not political in nature and did not challenge the food self-sufficiency image of the country. In fact by engaging in politically non-threatening interventions such as those in health, food technology, horticulture and nutritional education the Government could claim they were actively doing something about malnutrition without really addressing its root causes. Even after such international events as the 1974 World

Food Conference when the global discussion of malnutrition and development expanded to place more priority on poverty alleviation, there was no such change of view regarding these issues in Malawi.

Apart from the general lack of political support to pursue such issues as food security, hunger and poverty, there are a number of concrete examples which illustrate the lack of will on the part of the Government to support food and nutrition planning initiatives during the 1970s. These examples relate to the refusal of Government to send Malawian civil servants outside the country to attend nutrition planning meetings. In 1973 a Loose Minute was sent to the Life President from the Secretary of Agriculture seeking his approval to send several Malawians, one of whom was already identified, to a FAO/Danish Government sponsored Food and Nutrition Policy and Planning seminar in Lusaka (FAO 1974). Although the rationale was given that this meeting would complement the work of the UK FFHC, the Life President turned down the invitation citing no particular reason<sup>31</sup>. In late 1974 an invitation was sent to the Malawi Government to attend the 1st African Nutrition Congress in Ibadan Nigeria in March 1975. However, it was turned down by the Ministry of Agriculture citing lack of funding<sup>32</sup>. Again in 1975 a Loose Minute was sent to the Life President from the Secretary of Agriculture requesting his permission to send a Government representative to a meeting of the Multi-regional Project on Food and Nutrition in the United States which was a follow-up to the 1974 World Food Conference<sup>33</sup>. This request was presented in regard to the UK FFHC's recommendations to establish a National Food and Nutrition Programme in Malawi. However, again the request was refused by the Life President who asked that the United States Government be informed that no one could be identified to attend. In fact in the Loose Minute sent to Dr Banda, the Secretary of

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<sup>31</sup> Loose minute from the Secretary of Agriculture to the Life President (PRO Folio 14) of 23rd March 1973 signed by the Life President, Government Records Office File No. 17-17-8R/33353, Zomba.

<sup>32</sup> Letter from Secretary for Agriculture and Natural Resources to Secretary to the Treasurer, dated 25th November 1974 Ref. 12/23/1, Government Records Office File No. 17-17-8R/33353, Zomba.

<sup>33</sup> Loose Minute from the Secretary of Agriculture to the Life President (Folio 13) of the 1st February 1975, Government Record Office File No. 9-19-9F/37096, Zomba.

Agriculture had named a specific individual and had also explained to the Life President that all costs would be met by the United States Government.

If one examines some of the budgetary expenditures during the 1970s it is clear that the political will of the country's leadership was not directed to supporting poverty alleviation (see Chapter 3). For example, there were a number of luxury projects which received funding priority since they were the favorites of Dr Banda. These included the building of the presidential palaces in Blantyre and Lilongwe. Kydd (1984) estimates the construction cost of the presidential palaces to be the largest expenditure in the locally funded component of the development account from 1971 until well into the 1980s. About 84 percent of locally financed expenditure on Government buildings was spent on palaces in 1984/85. Along with the low priority given to the social sectors in general, the high priority given to building luxury palaces strongly indicates the lack of commitment on the part of the country's leadership to address poverty issues.

However, the lack of political will to address these issues was also a problem in the donor community as well. Although the 1970s was a decade when a number of global declarations were made by the international donor community that poverty alleviation and equitable development were top corporate priorities, little attention was given to these issues in the policies and programmes supported in Malawi by these same donors. For example, the opportunity presented by the IRDPs and the NRDP would have provided the World Bank, then a top advocate for poverty alleviation at the global level, the ideal opportunity to address poverty in the country:

**"In view of the changes in the Bank's lending policies toward a greater poverty and equity orientation following Robert McNamera's addresses to its Board of Governors in Santiago in 1972 and Nairobi in 1973, it is also curious that so little effort was made to extract the lessons of experience from what was after all a pioneering integrated rural development project focused on smallholders" (Kinsey nd:6).**

However, as related above in Case Study 6, the interest of World Bank staff was solely on increasing agricultural production and economic growth and not concerned with human welfare.

It can be said that the general policy environment found in Malawi under Dr Banda was severely constrained by political pressures which worked against a rational process of decision-making and planning. This was true in all spheres of Government and not just limited to food and nutrition planning. According to Gulhati (1989) a conflict arose between technocratic elements within the civil service and political loyalists. The technocrats tried to rely on professional analysis in carrying out their responsibilities, whilst the loyalists, mostly ministers, relied on political incentives which were mostly aimed at gaining favor with higher echelons of power. Because of the severe political environment technical arguments based on professional analysis lost out to the political pressures of the loyalists. According to Robert Laslett, a British economist who once served as a technical advisor to the Office of the President, decisions were not made on the principal of public interest but rather on the principal of avoiding conflict with the country's leadership:

**"when faced with the choice between the economic interests of the country and deferring to Banda's public statements, however ill-informed, civil servants had to choose the latter or risk their jobs. Only after Banda himself heard of a problem could effective action be taken. Nor can anyone lower down in the system effectively break in, least of all to sound a note discordant with the prevailing outlook, in which everything is a 'success' and progress is assured under Banda's leadership" (Laslett 1984:385-386).**

In summary, the lack of political will on the part of the Government as well as on the part of the donor community played an immense role in the poor performance of nutrition planning during the late 1960s and the 1970s.

*Planning Theories*

A major problem with the attempts made at nutrition planning in Malawi during the fifteen years after independence was that little effort was made during the design phase of nutrition programmes to scientifically assess and analyze the food and nutrition situation in the country. Instead most nutrition programmes were put into place without an empirical basis or conceptual understanding of the underlying and basic causes of malnutrition. Part of the problem was that in the case of household food security and poverty, political sensitivities blocked research into the role of these issues. Equally as deficient was the planning approach taken since the procedural theories used also tended to be divorced from reality.

*Substantive Theories.* The United Nations donor agencies were the lead actors in nutrition planning in Malawi between 1964 and 1979 in terms of initiating activities, designing programmes and financing their costs. The tendency of these donors, for example UNICEF, WHO and FAO, was to import nutrition project ideas which were fashionable in their headquarter offices at the time. For example, dietary deficiencies in protective foods and protein were considered by the United Nations agencies to be the major nutrition ills of developing countries during the late 1960s and early 1970s. As a result in countries such as Malawi the programmes put into place tended to be those that aimed at increasing the production and consumption of foods high in these nutrients (see Case Study 3). Partly because of political sensitivities little effort was made to research the food and nutrition situation before interventions were designed. The two notable exceptions, however, were the Ministry of Health's national nutrition programme initiated in 1969 (Case Study 4) and the pioneering work of the UK FFHC in 1972-74 (Case Study 5).

The lack of a scientific assessment and analysis of the food and nutrition situation meant that the true nature of the malnutrition problem in the country was never fully understood. Donors became susceptible to the political propaganda they heard regarding the 'Malawi success story' especially the claims of food self-sufficiency and prosperity. This provided the basis of the commonly held view of most donors in Malawi that malnutrition was not

a major problem and was related to disease and ignorance both of which could be addressed through health and education interventions. The substantive nutrition planning theories which were popular during the late 1960s and early 1970s in fact provided an approach to malnutrition which, as mentioned earlier, was particularly suitable to the Government since the emphasis on protein deficiency, disease and ignorance helped to detract attention away from the politically sensitive issues of food insecurity, hunger and poverty.

Throughout the 1960s and 70s, as well as up into the early 1980s, the donor community blindly supported the success story and food surplus image of Malawi. For example, during the 1970s the World Bank's assessment of development in Malawi was solely based on the performance of the macroeconomy. The World Bank was not the only donor at fault in this respect as illustrated by the poor conceptual basis of the 1964 joint FAO, WHO, and UNICEF Applied Nutrition and Training Programme (Case Study 3). Even in 1977 a UNICEF report on the Evaluation of the Needs of Children and Women stated **"relative to neighbouring countries, Malawi has made demonstrable progress in the sector of nutrition and food"** (UNICEF 1977:8). No analysis or data are presented to back up this statement. This was a direct contradiction to an earlier report issued by UNICEF in 1970 which cited the results of the Ministry of Health nutrition surveys and concluded that **"malnutrition is a serious national problem"** and was **"one of the highest, if not the highest in Africa"** (UNICEF 1970:9). This example also suggests problems with the institutional memory of donor agencies, in this case UNICEF, since it appears that earlier documents on Malawi's situation may not have been made available to subsequent consultants and staff members.

Along with the absence of any type of scientific assessment and analysis of the malnutrition situation, little evaluation was made of on-going nutrition activities. Nutrition programmes, for example nutrition education, continued as originally planned with no evaluation of their appropriateness or effectiveness. Although evaluation activities had been planned in the original 1964 Applied Nutrition and Training Programme, a shortage of staff precluded any

from being carried out. However, even when evaluations were undertaken, for example the reviews and studies the World Bank carried out on the IRDPs during the 1970s, the insights gained regarding the poor performance were not used to refine the programme strategy.

*Procedural Theories.* The procedural approach taken to nutrition planning in the case studies presented earlier in this section was without exception heavily top-down. Programme strategies and interventions were planned at the national level with no input from the end clients. The programmes designed tended to involve mono-sectoral interventions in health, education and agriculture. During the 1970s at the national level there was no institutional structure to allow for multi-sectoral nutrition planning attempts, hence, each sector kept to its own planning agenda. This single sector view of combatting malnutrition was the opposite to that held by nutrition planners during colonial times when malnutrition was seen as requiring a multi-sectoral effort which combined the expertise from health, agriculture, education amongst other related disciplines (see Case Study 1). The only multi-sectoral nutrition plans ever prepared in Malawi during the 1970s were those proposed by the UK FFHC in their final mission report which were never tried. However, the planning steps they recommended (shown in Figure 5.1) were extremely complicated and probably would have been impossible to implement in practice since they were neither geared to the implementation capacity nor to the mentality of the Government at that point in time.

#### *Means and Capacity to Act*

Despite the problems mentioned above in terms of the lack of political will and the poor conceptual understanding of the nature of malnutrition in Malawi, there were also severe limitations in the manpower, institutional and financial resources available to support nutrition activities in the years following independence, both on the side of the Government as well as with the donors. It needs to be emphasized that all the nutrition planning initiatives during the 1970s originated from the donor agencies. This was predominantly due to the lack of national capacity in the Malawi Government at that point in time. In

addition the overwhelming share of the financial costs for nutrition programmes were also borne by the donors. The contribution of Government was usually minimal and typically given in the form of staff time.

Up until the late 1970s there was no national capacity to undertake nutrition work since there were no Malawians trained in nutrition nor did local institutions exist which could carry out nutrition related research. Essentially there was no local entry point for nutrition planning. The only focal points were the individual expatriate advisors, most of whom were from the UN donor agencies. However, once these advisors left the country usually nothing in the way of infrastructure or permanent capacity was left behind.

The country's national capacity for nutrition planning was markedly improved by the late 1970s when the institutional and training recommendations of the UK FFHC mission's final report were eventually implemented. In 1978 FAO provided financial assistance to establish a Food and Nutrition Programme in the Ministry of Agriculture. This included the provision of a FAO Nutrition Planning Expert from 1978 to 1982. Shortly thereafter several Malawians who had received overseas nutrition training returned to the country to take up their positions in the Ministry of Agriculture as well as in the Human Nutrition Department at Bunda College. By 1979 an Interministerial Food and Nutrition Committee had been formed by the Ministry of Agriculture to serve as the institutional mechanism through which nutrition programmes could be planned and coordinated across different sectors.

The country's national capacity in the area of research and evaluation was also greatly strengthened by the establishment in 1978 of the Centre for Social Research (CSR) at Chancellor College in Zomba. The CSR was established with UNICEF assistance and was given the mandate to monitor and evaluate development projects for their social impact. Much of the CSR's evaluation work included nutritional issues. By the early 1980s the

CSR would emerge to play a leading role on the Malawian side in advocating malnutrition, household food insecurity and poverty issues in the national policy arena.

Apart from the slim resources on the Government side, mention should also be made that most of the donor agencies in Malawi during the 1960s and 70s did not have resident offices in the country and instead operated their assistance to Malawi through visits made by their staff members based in other countries. UNDP did have a country office by the end of the 1960s, however, this was not the case for most of the other UN agencies. Until 1977 the UNICEF programme was operated out of their sub-regional office in Lusaka. UNICEF stationed their first staff member in the country in 1978 and only opened up a full fledged country office in 1987. The FAO did not open up a full office until 1987. The World Bank only established their resident Malawi mission in 1985. As a result the capacity of donor agencies to plan their programmes of assistance to the Government, was extremely weak during the period under study from 1964 to 1979. Most donor agencies had to rely on outside consultants to undertake project identification, preparation and appraisal work.

As mentioned earlier there was also little money in the Government's budget for social sector activities such as nutrition programmes. In regard to the level of donor funding to support nutrition activities the precise figures are difficult to estimate, however, it appears that the levels of support have been low. To illustrate the overall low level of donor funding being invested into nutrition programmes these costs can be compared to the costs of development projects in other sectors. By far the most expensive nutrition intervention during the 1970s was the food aid provided by the World Food Programme (WFP) under WFP Project 525 which was started in 1972. This project is a health facility-based supplementary feeding programme for vulnerable groups including malnourished children and mothers as well as hospital in-patients. The total costs of Project 525 to WFP were US \$1.7 million from 1972 through 1976 and approximately US \$6 million from 1977 through 1979 (WFP 1983; WFP 1991). Therefore, the total WFP programme cost was

approximately US \$7.7 million from 1972 through 1979. This amount includes not only the cost of the food commodities themselves but also the international and domestic transport costs as well as storage. Based on these budget levels it can be calculated that the WFP Project 525 cost on average about US \$4-6 per participating beneficiary each year<sup>34</sup>.

When compared to the investments made in other development projects such as the IRDPs, it can be argued that the cost of nutrition interventions, such as the WFP food aid, was minuscule. For example, based on the data provided by Mwakasungura (1984), the World Bank and other donors invested US \$86.4 million into the IRDP projects from 1968 through 1978. It can be calculated that the total cost per farmer participating in the IRDP agricultural extension and credit programme by 1978 averaged about US \$800<sup>35</sup>. This amount is enormous compared to the cost of nutrition interventions.

### 5.2.6 Summary

As illustrated by the five case studies presented above a number of nutrition planning attempts were tried in Malawi between 1964 to 1979. In regard to the hypothesis of this thesis none can be described as being successful because of the incomplete fulfillment of the four prerequisites identified as necessary for the planned development process. A major problem was the extreme political climate found in the country which stifled the planning dialogue especially in regard to sensitive issues such as food security, hunger and poverty. The end result was that the political will to deal with these issues simply did not exist. This was certainly the case with the Government, but also to some extent with the donor community who were content to believe the political propaganda that Malawi was an

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<sup>34</sup> The WFP Project 525 Plan of Operations stipulated the target level of beneficiaries to be as follows: 40,000 malnourished children, 10,000 malnourished mothers and 2,500 hospital in-patients (WFP 1983). Although at any one point in time the target level was 52,500 beneficiaries, it can be estimated that upwards to 157,000 - 210,000 separate individuals could be reached each year if the average duration for a beneficiary in the supplementary feeding programme was three to four months.

<sup>35</sup> The planned number of target farmers was 107,800 families in 1978. Target farmers is defined as the estimated number of families adopting improved technology by 1978. These total costs represent the costs incurred over the life of the IRDP from 1968 through 1978 (Mwakasungura 1984).

African success story. Another major problem related to the political climate was that there was an inadequate as well as distorted understanding of the processes leading to child malnutrition. The reasons for this, apart from the political constraints which restricted inquiry into such issues of food security, hunger and poverty, was that nutrition planners did not undertake a scientific assessment and analysis of the food and nutrition situation in the country. This was particularly true of the United Nations donor agencies.

This meant that there was an exceptionally poor conceptual understanding of Malawi's nutrition situation. The end result was that the nutrition planning theories imported into the country by the donor agencies were wholly inappropriate to address the problem of Malawi's malnourished children. The underlying causes which were acknowledged by the Government and the donors during the late 1960s and the 1970s were those which were related to health conditions as well as to the lack of knowledge on the part of mothers of adequate childfeeding habits. The view nutrition planners had of Malawian mothers painted them as the culprits since it was assumed that enough good food was plentiful and the problem was their ignorance, laziness and bad behavior in not caring properly for their children. The possibility that household food insecurity was an underlying cause of malnutrition or that poverty was a basic cause was sidestepped and avoided at all costs because of the political nature of these issues. The one attempt made by the UK FFHC mission to include household food security into the policy dialogue failed because of the absence of will on the part of the Government to pursue these issues. This conceptualization of malnutrition is in great contrast to the colonial view when household food security was considered to be one of the major causes of the problem as well as an important entry point for interventions to improve the situation. Another difference with the colonial period was that in the 1930s the solution to combatting malnutrition was seen as requiring a multi-disciplinary approach that also needed to incorporate the participation of the villagers. Apart from the proposal put forth by the UK FFHC, all the nutrition planning attempts in Malawi during the late 1960s and 1970s were mono-sectoral top-down programmes which had no element whatsoever of community participation.

The central role of the international donor community, especially the United Nations agencies FAO, WHO and UNICEF, in pioneering the early nutrition programmes in Malawi must be underscored. However, their performance rating in this review can only be judged as mediocre to poor since much of the misdiagnosis and subsequent misunderstanding of Malawi's nutrition situation during 1960s and 1970s originated from these same agencies because they helped to propagate the success myth of the country. The failings of these agencies, including the World Bank in the wider context of rural development, was that they made no attempt to look beyond the aggregate statistics on the macroeconomy and critically analyze sectoral and structural issues. Instead the donors in Malawi carried on believing the political rhetoric without question and this was professionally negligent.

### 5.3 Period III: 1980 to 1990

#### 5.3.1 Background

Before describing the nutrition planning activities attempted during the 1980s, several points need to be made to provide adequate background on the major development issues existing in Malawi during this period which pertain to the overall planning environment found in country.

The first point relates to the state of the macroeconomy. While the 1970s were considered to be the golden years for Malawi in terms of the rapid growth of the macroeconomy, in contrast the 1980s were characterized by macroeconomic instability and stagnating growth. In 1979 exogenous factors related to the international recession shook the foundations of Malawi's economy and necessitated a structural reform programme which was supported by such donors as the World Bank and the International Monetary Fund. In addition, structural weaknesses in the country's development strategy, particularly in regard to the agriculture sector and the deteriorating situation of smallholder farmers, had also surfaced and presented major problems for the Government:

**"By the 1980s the central plank of Banda's estate development strategy, namely the exploitation of the smallholder sector to promote estate expansion had run its course. The decline of the smallholder sector was such that ADMARC could no longer extract a surplus, land and cheap labour could not be continually annexed and food self-sufficiency, either nationally (marketed) or individually (subsistence) could no longer be achieved" (Harrigan 1991:216).**

However despite these set-backs Malawi's sterling image with the donor community continued as the country followed the policy prescriptions put forth by the international agencies.

The second point concerns the political sensitivities in the country which were still running high even into the 1990s. The following remarks were made by the Minister of Finance in his speech to Parliament in March 1989 and illustrate the glorification made of the Life President which bordered on divine reverence:

**"Before I proceed, you will permit me... to pay tribute to the Father and Founder of the Nation, His Excellency the Life President, Ngwazi Dr. H. Kamuzu Banda ... Because of the Ngwazi's leadership, this country has prospered in peace and stability in a subregion which is most unstable and much troubled. The Life President has, through his deep understanding of history, unrivalled mastery of the difficult art of Government and the science of Nation building. To each of us He is the mentor who never tires in his drive to educate and to guide in a most inspiring manner ... It is only the leadership of His Excellency the Life President which wins us respect. Malawians are confident in their destiny and confident in their own economy because of the wisdom and foresight with which His Excellency the Life President has steered and managed the economy" (Minister of Finance 1989:3-4).**

The Minister concluded his speech by quoting some earlier remarks made by the Life President:

**"In his opening speech, His Excellency the Life President stated that there can be no question of poverty, dire poverty at any rate any longer, because everywhere I have been I have seen beautiful crops of maize, beans, groundnuts ... The good old days are here again, and they are here to stay" (Minister of Finance 1989:65).**

Therefore, the illusion of Malawi's prosperity continued to be projected during the 1980s by the political system in the country. As in the 1970s the official party line was that the country was prosperous, thriving and amongst the best off in Africa. Officially there was no question of poverty or hunger.

The third and final point concerns the true state of Malawi's food situation which directly contradicts the above image of prosperity. Empirical data began to be collected and

analyzed in the mid 1980s which revealed a vastly different picture characterized instead by chronic food insecurity at the household level. By the late 1980s estimates were made that a high proportion of farmers were not self-sufficient in food and that close to 80 percent of Malawi's population were in fact net purchasers of maize (World Bank 1989a; Pinstrup-Andersen 1989).

Apart from the chronic problem of household food security which existed, the national food situation also entered a precarious state in the 1980s as was discussed earlier in Chapter 3 (see Figure 3.4 and 3.5). The high population growth rate and the stagnating production levels meant that per capita maize production began to fall to levels below nutritional adequacy. The amount of calories per capita available from all staple foods, not just maize, also declined over this period to levels which were inadequate to meet minimum nutritional requirements. The deteriorating food situation in the country was also jarred several times in the 1980s by food emergencies which served to heighten the Government's concern for national food self-sufficiency. The first shock came with two successive poor harvests at the beginning of the decade in 1979/80 and 1980/81 which necessitated large imports of food aid amounting to 67,000 metric tonnes (Sahn, Arulpragasam and Merid 1990). Food aid of this scale had never been needed since independence. To safeguard against future national food shortfalls in 1980 the Government decided to construct a 180,000 metric tonne (MT) strategic grain reserve (SGR). The Malawi Times announced this move in their frontpage headlines of 29 December 1980 as "**Ngwazi tells nation of his anti-famine plan: Malawi is insured**".

To fill up the SGR in 1981/82 the Government raised the producer price for maize by 68 percent. This move was successful since maize purchases by the parastatal marketing board, ADMARC, increased sharply in the following seasons. However, as later analysis would show, this large increase in the producer price for maize did not result in an increase in maize production but instead resulted in a larger share of production being sold to ADMARC (Harrigan 1991). The lack of response in production levels has since been

attributed to the constraints facing the majority of smallholder farmers, for example small land holding sizes and limited resources, which prevent them from being able to respond to price incentives. The increase in maize producer prices resulted in not only households overselling their maize harvest but later resulted in increased maize consumer prices. The end result was that national level food security was improved, however, at a cost to household food security:

**"The achievement of food security at the aggregate national level, in the form of the filling of the strategic reserve prior to 1986-87, occurred at the expense of worsening food security at the individual level in the form of declining per capita maize availability" (Harrigan 1991:220).**

From having to import maize in the early 1980s, by 1983 Malawi had so much maize in the SGR that exports had to be made. By 1987 close to 335,000 metric tonnes of maize were sold to neighbouring countries facing drought (Quinn, Chiligo and Gittinger 1990; Sahn, Arulpragasam and Merid 1990). These sizeable food exports further supported the illusion of Malawi as being food abundant in the eyes of the country's politicians as well as the donor community.

However, by 1986/87 the country was again faced with a national food crisis from an unlucky combination of drought, pest destruction of the cassava crop and an influx of Mozambican refugees. The requirement for external food aid became so great that in 1988 the Government created a Food Aid Relief and Rehabilitation Unit to manage food aid appeals, donor pledges and the movement of food. All of this occurred against the backdrop of major structural reforms being undertaken in maize marketing which further stressed the Government's control of the national food situation.

There was, however, to be a silver lining in the 1987/88 food emergency as it forced the Government as well as the donor community to take a closer look at the country's food situation not only at the national level but also at the household level. By 1990 it was

finally realized that the ability of the country to accumulate large amounts of maize at the national level in marketing channels and the SGR had in fact masked a serious problem of food insecurity at the household level which affected the majority of the country's population (Quinn, Chiligo and Gittinger 1990; World Bank 1990b; Harrigan 1991).

### 5.3.2. Global nutrition planning theories

At the global level during the 1980s a diverse array of nutrition planning theories existed, both in regard to the substantive theories in and the procedural theories of planning. However, a few introductory remarks are first needed regarding some major changes which occurred in the view held of development in third world countries by international donors.

While the outlook of the international donor community during the 1970s had been characterized by concern for poverty alleviation and equitable development, the macroeconomic crises which hit many developing countries in the late 1970s sharply shifted attention and resources to an all out drive to achieve macroeconomic growth as the *raison d'être* of national development.

**"poverty alleviation was demoted to priority zero so that the 'structural adjustment' of the developing economies could take place" (Mosley, Harrigan and Toye 1991:22).**

However, a schism was soon evident in the international community as some donor agencies began to voice concerns for the potentially negative effects that austere macroeconomic policy reforms might have on social welfare, especially on the income, consumption and nutritional levels of poorer groups in society (Jolly and Cornea 1984; Jolly 1988; Bell and Reich 1988). These same donors called for more attention to be given to 'structural adjustment with a human face' (UNICEF 1987). By the mid to late-1980s the effort to achieve macroeconomic growth through austere policy reforms gave way to a more balanced view which combined both human and economic objectives. This new development approach, referred to as *growth through poverty reduction*, places emphasis

on improving the human potential in a country (*i.e.* health, nutrition and education) as the catalyst to promote the process of macroeconomic growth (UNDP 1992; World Bank 1993). The growing attention given by donor agencies to the human dimension of development has also been accompanied by an increasing recognition of nutrition as a basic human right (Eide, Oshaug and Barth Eide 1991; Grant 1992; Jonsson 1992, 1993a). In the past few years the commitment at the global level to this new view of development is reflected in the holding of major meetings concerning nutrition, for example, the 1990 World Summit for Children, the 1991 Hidden Hunger Workshop in Montreal and the 1992 International Conference on Nutrition held by WHO and FAO as a follow-up to the 1974 World Food Conference.

In regard to the global nutrition planning arena, as stated earlier in the second section of this chapter, despite the enthusiasm initially shown in the mid 1970s for multi-sectoral nutrition planning, few successes in fact were ever achieved (Berg 1987; Field 1987). A major problem was that the complicated multi-sectoral plans produced were nearly always impossible to implement in practice. Just as important in most countries the political support to address malnutrition on such a comprehensive level was also lacking both on the side of governments as well as on the side of the donors (Pinstrup-Andersen 1993b). Factors related to the political economies of countries, including the struggle for limited resources between different interest groups, many times undermined efforts to fight poverty and hunger. It also proved difficult for nutrition planners to influence the actions of planners in other sectors such as agriculture, economic planning and labour. This was because nutrition was still perceived to be a health issue and as such nutrition planners were not seen as having the jurisdiction over planning activities outside of health. However, despite these disappointments certain elements of the multi-sectoral approach, namely the importance given in the analysis of malnutrition to its multiple causes did survive and were incorporated into the nutrition planning initiatives of the 1980s and 1990s as will be discussed below.

In the early 1980s the structural view of malnutrition as a societal problem, similar to that evoked by the 1974 World Food Conference, was still popular with nutrition planners in developing countries. In regard to the procedural nutrition planning theories, after the disappointments with multi-sectoral nutrition planning there was a general return to single sector programmes usually in health or agriculture. Following the 1978 Alma Ata declaration of 'health for all by the year 2000' community based health care became a popular strategy with donor agencies and many times included a nutrition component (WHO 1981). By the early 1980s there was also a move in international circles to integrate nutritional considerations into agricultural development programmes (Pinstrup-Andersen 1981; Pinstrup-Andersen 1982).

In 1982 UNICEF launched its global GOBI strategy (growth monitoring, oral rehydration, breast-feeding, immunization) and this marked a return to the technological school of nutrition planning and a magic bullet approach. By 1983 UNICEF's strategy included several more elements which resulted in the acronym of GOBI-FFF (*f*emale education, *f*amily spacing and *f*ood supplements) (Iskander 1987; Cash, Keusch and Lamstein 1987). The latest in scientific knowledge was used to form the basis of this package of Child Survival and Development interventions to combat child malnutrition, morbidity and mortality. A major criticism levelled at the GOBI-FFF approach was that it totally overlooked the structural basis of these problems. This tendency to frame the problems of child malnutrition, morbidity and mortality as technical issues meant that governments as well as donors did not have to contend with the more fundamental as well as sensitive issues of poverty and underdevelopment.

However, despite the popularity of GOBI-FFF during the early 1980s and the technological school of nutrition planning which it embodied, the structuralist view of nutrition as a societal problem also continued to survive. For example, following on from the 1974 World Food Conference there was great interest on the part of donors to establish nutritional surveillance systems in developing countries to describe the nature of the

malnutrition problems as well as to provide information useful for planning policies and interventions programmes (Quinn and Kennedy 1994). By the early 1980s the methodology for nutritional surveillance had been developed which incorporated much of the multi-sectoral elements of the 1970s especially in regard to the basic agricultural, economic, social and health determinants of malnutrition (Mason et al. 1984).

As mentioned earlier by the early 1980s concern also began to grow for the possible negative effects that structural adjustment policies could have on human welfare, particularly on the poorer segments of the population in terms of income, consumption and nutritional levels (Jolly and Cornea 1984; UNICEF 1987, 1988; Pinstруп-Andersen 1988). By the late 1980s the World Bank, with support from other bi-lateral donors, launched a 'Social Dimension of Adjustment Programme' aimed at safeguarding the vulnerable segments of the populations from the negative consequences of macroeconomic reforms. This move further heightened the attention given to nutrition issues in developing countries, particularly their structural dimension.

In addition, the field of food policy analysis and its role in nutrition planning gained more prominence during the 1980s. This was due in part to the close association between food policy analysis and the type of analytical work being undertaken to study the nutritional impact of macroeconomic policies (Scrimshaw and Wallerstein 1982; Timmer, Falcon and Pearson 1983). A national macroeconomic policy framework which included food policies to enhance food consumption in the poorer segments of the population was seen as complementing the more direct nutrition interventions taken in the health and agriculture sectors. Growing interest in the area of food security and nutrition also emerged during the 1980s along side of the structural theorists' concern for macroeconomic adjustment issues and food policy analysis (Sen 1982; World Bank 1986b; Maxwell and Frankenberger 1992). Whereas for many years the focus had solely been on the aggregate food supply situation at the national level, more attention began to be given to the issue of access to food at the household level.

Elements from the multi-sectoral planning systems of the 1970s can also be found in the 'Situation Analysis' strategy adopted by UNICEF in the early 1980s for planning their programmes of assistance to developing countries. The Situation Analysis of Children and Women can best be described as a joint planning exercise between UNICEF and its government partners to systematically analyze all the available data and information in a country on the major factors affecting the wellbeing of children and mothers. Undertaking a situation analysis involves identifying the most pressing issues affecting women and children so that these can be addressed in the planning process. UNICEF further refined this approach in 1990 with the release of a policy paper on a *Strategy for Improved Nutrition of Children and Women in Developing Countries* which is based on the Conceptual Framework of Young Child Nutrition and the Triple A cycle, both of which were discussed earlier in Chapter 2 (see Figures 2.2 and 2.3) (UNICEF 1990). UNICEF's approach to nutrition planning in the 1990s can be described as follows:

**"The overall objective of the strategy is to empower families, communities and Governments to improve the nutrition of women and children on the basis of adequate information and analysis ... The two most important elements of the strategy are a method of assessment, analysis and action (the "triple A" approach) and a conceptual framework for the analysis of the causes of malnutrition in a specific context. The first element describes how information should be used, while the second provides a guide for discerning what information should be collected" (UNICEF 1990:17).**

Looking at the Conceptual Framework (Figure 2.2) it is clear that some aspects of multisectoral nutrition planning have survived. The substantive theory of nutrition planning represented by the Conceptual Framework is based on the view of malnutrition as a societal problem which is the end result of multiple determinants operating at different levels of society. The two immediate determinants include dietary intake and disease. The underlying causes which operate at the level of the household and community include three clusters of related factors: 1.) *inadequate household food security*, 2.) *inadequate child and maternal care* and 3.) *insufficient health services and an unhealthy environment*. Other

more fundamental determinants leading to child malnutrition include aspects of the social, economic and political superstructure found in a country as well as the international factors which affect these. The Conceptual Framework, however, is not meant to be a rigid model but instead is intended to provide a flexible framework to guide the process of assessment and analysis of the child nutrition situation in a given locality:

**"A conceptual framework need not specify relations quantitatively. Rather, it provides an orientation to the variables and relations among them that should be considered. It may determine which relations are ignored. A conceptual framework is always implicit in our thinking and analysis. It defines the variables selected, the methods used, and, at times, the conclusions reached. Therefore, the framework should be explicit so that it can be shared and used for dialogue and communication. It should not imprison, but guide by providing a sense of direction, suggesting priorities, and introducing logic in assessment and analysis" (UNICEF 1992:16).**

In UNICEF's nutrition planning strategy while the substantive planning theory is provided by the Conceptual Framework, the procedural planning theory is contained in the Triple A cycle (Figure 2.3). The Triple A cycle emphasizes both the central role of information in the planning process as well as the importance of undertaking the steps of assessment and analysis on which actions can later be based to address the problem. The UNICEF strategy considers the Triple A process to be continuous and cyclical and one which operates at all levels of society starting from the level of the mother and child up to the community, district and national level. As such the overall strategy to improve nutrition embodies a participatory approach to nutrition planning since the clients, namely the villagers, are considered to be key actors throughout the planning process.

Therefore, in the 1990s nutrition planners working in developing countries have a broad range of substantive and procedural planning theories from which to choose. The structural theorists have remained strong especially with the growing popularity of the UNICEF strategy for improved nutrition. However, there has also been a resurgence of interest on

the part of the technical school of nutrition planning, especially on the issue of dietary quality. In recent years a number of scientific discoveries on the relationship between deficiencies in iodine, vitamin A and iron and an increased risk of mortality, morbidity and functional impairment have renewed interest in micronutrients. This enthusiasm now being shown to micronutrients is not unlike that shown by British nutritionists after the discoveries of the properties of vitamins and minerals during the early 1900s (Rivers 1979; Petty 1987). At the global level much momentum is gathering to move ahead with interventions, most of them technological, to eradicate micronutrient deficiencies in less developed countries (WHO 1992; ACC/SCN 1993b; Csete 1993). To garner political and financial support to this end, in late 1990 a major international conference on 'hidden hunger' was held in Montreal (WHO *et al.* 1991).

These recent developments in micronutrient deficiencies, however, have sparked some controversy between nutrition planners from the structural school and those from the technical school (Berg 1991; Csete 1993). On the one hand it could be argued that the international attention currently being given to micronutrient deficiencies, and the magic-bullet approach this often entails, might detract attention from the more massive and politically complicated problem of protein-energy malnutrition which requires a longer term commitment to eradicate poverty. However, the counter argument posed in favor of an all out drive to eradicate micronutrient deficiencies is that considering their impact on mortality, morbidity and functional performance since the technologies are mostly known, in many ways it is only a matter of mobilizing the political and financial support to 'do the do-able' (WHO *et al.* 1991).

A last footnote is also needed on the protein issue which continues to raise its head in nutrition planning circles and refuses to be settled once and for all. Although it appeared that a consensus had been reached in the second half of the 1970s that calories were the most limiting factor in the diets of children in developing countries, in recent years some international experts have renewed the call to investigate further whether protein intakes of

children in developing countries are inadequate (Waterlow 1992). This has stirred up controversy in scientific nutrition circles in what may turn out to be a new round in the heated debate of calories versus protein (Jackson 1993).

In light of the many different schools of thought regarding how to combat child malnutrition in developing countries, today in any one country there is usually a mix of approaches which incorporates both aspects of the structural and technical schools. In addition, the procedural approach to nutrition planning may also vary with national level top-down approaches complementing community level bottom-up approaches. Therefore, in the 1990s the nutrition planning process has not always evolved into an 'either or' situation since a hybrid of substantive and procedural planning theories may exist side by side to complement one another.

### **5.3.3 Nutrition planning in Malawi**

#### *National policy framework*

Before discussing the national development policy framework which existed in Malawi during the 1980s a few introductory remarks are needed on some of the significant changes which occurred during this decade which affected the overall policy environment and enhanced the general planning process in Government. These changes included the emerging role of the donors in Malawi's policy arena and the improvements this brought to the analysis undertaken. At the same time significant improvements were also made in the overall management style of the civil service which eventually resulted in a gradual shift of the loci of decision-making to senior level civil servants.

With the advent of the macroeconomic reform programme in 1979 the role of the international donors, especially the World Bank, in Malawi's policy arena changed dramatically from a neutral to a highly active role. As already discussed in the second section of this chapter, the early analytical work of the World Bank in Malawi was

criticized as being weak and cursory (see Case Study 6). In order to formulate policy reforms as part of the structural adjustment programme World Bank staff were forced to take a closer look and more rigorous analysis of the structural and sectoral issues facing the country:

**"After 1980, the Bank made a much more positive contribution to policy analysis for Malawi. Structural adjustment lending required the Bank to take a more rounded view of development, asking general economic questions relating to the efficiency of resource use, access to resources and competition for resources ... Thus a beneficial by-product of the work required for policy-based lending was that the Bank's own project and sector work became informed by, and some extent shaped by, a more rigorous general analysis of the economy" (Kydd and Spooner 1986:3).**

In addition, the World Bank, as well as other large financial donors such as the IMF and United States Agency for International Development (USAID), found themselves in a more influential position to exert pressure on the Malawi Government for certain policy changes to be made. This was because their financial support to the structural adjustment programme was policy-based and linked to conditionalities that certain actions would be taken by the Government before subsequent tranches of money would be released.

It has also been argued that the increasing involvement of the international agencies in Malawi's policy circle also strengthened the hand of the technocrat element within the civil service in policy formulation and national decision-making since up through the 1970s the policy arena had been dominated by political loyalists who acted according to the doctrine laid down by Dr Banda (Gulhati 1989). At that same point in time some of the non-political aspects of policy formulation also appeared to shift from the Life President and his small circle of loyalists to the technocrats within the civil service (Pryor 1990). However, because of its immense political symbolism food security issues were still tightly controlled by Dr Banda.

This shift in decision-making authority may have also been the by-product of the new management style brought to the civil service in the mid-1980s by the Secretary to the President and Cabinet (SPC) which opened up the policy environment and gave senior civil servants a more active say in Government policy-making. Evidence of the policy environment opening up is shown by the series of high level symposiums organized by the SPC in the mid to late 1980s for Principal Secretaries on such issues as primary health care, nutrition, illiteracy and agricultural development. At that point in time, some of these topics were still considered to be politically very sensitive especially nutrition and agricultural development, and had never been placed under public scrutiny. Whereas before policy directives on such issues had been issued from the upper most echelons of the political hierarchy, at these symposiums the SPC called upon the Principal Secretaries and their senior staff to contribute to the policy debate. Individuals who attended the symposiums held on primary health care and nutrition, recall the initial reluctance of some of the Principal Secretaries to discuss malnutrition which was still perceived to be politically taboo<sup>36</sup>. Having been left out of decision-making for so long, the transformation of the functional role of Principal Secretaries in policy formulation from passive to active marked a major change in the dynamics of the country's planning process.

However, the general policy environment in Malawi still remained highly erratic throughout the 1980s since the prevailing political factors associated with the autocratic rule of Dr Banda continued to generate considerable insecurity and encouraged risk-averse behavior on the part of a large number of civil servants (Gulhati 1989). This was true especially regarding such issues such as food security, hunger and poverty. Transfers and rotations of civil servants, including Ministers and Principal Secretaries, were common and added to the unpredictable state of Government decision-making.

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<sup>36</sup> The reluctance and hesitation of Principal Secretaries to participate in policy debate was recounted several times during interviews undertaken by myself and the Director of the Centre for Social Research, Mr L.A.H. Msukwa, during late 1991 with various Government officials who had attended the primary health care and nutrition symposiums in 1986.

With this background on the dynamics of the policy arena during the 1980s and the changing role of some of the major actors in decision-making, the major themes of the Government's development agenda will be described below, including the new directions taken at the end of the decade.

Up until 1987 the National Rural Development Programme (NRDP) continued to provide the foundation for the Government's overall development strategy. The focus continued to be on increasing aggregate production to achieve national food self-sufficiency as well as accumulating a food surplus.

After what has been described as a long period of gestation, the second Statement of National Development Policy (DEVPOL II 1987-1996) was released by the Government in early 1988 (Pryor 1990). The overall content and outlook of DEVPOL II reflected the major events which had taken place in the country during the early 1980s, including the problems encountered with the macroeconomy. In addition, DEVPOL II openly admitted the disappointing results of previous policies, especially in the smallholder sector:

**"Available evidence suggest that the impact on smallholder productivity of this NRDP approach has not as yet been as substantial as envisaged at the time the programme was being initiated" (Malawi Government 1988:27).**

DEVPOL II was more human oriented than its two predecessors, DEVPOL I and the NRDP. This added human dimension may have arisen from the growing concern in donor circles, at the international level as well as within Malawi, for the potentially negative impact that macroeconomic reform policies might have on human welfare:

**"Malawi has always had a concern with equity as well as economic progress ... The welfare of the poorest elements of society will receive particular attention with programmes which will address problems of nutrition, food security, child spacing and village housing" (Malawi Government 1988:14).**

Although it did have a greater human focus, the development strategy outlined by DEVPOL II was still geared towards trickle-down development as reflected in its preamble:

**"Malawi's economic and social objectives for the next decade may be summarized as the reduction of poverty, ignorance and disease by the achievement of rapid and sustained economic growth; an improvement in income distribution; and a reduction in the instability of welfare for both the individual and the nation" (Malawi Government 1988:13).**

On balance, however, DEVPOL II did not present a cohesive picture of development issues in the country nor appeared to be based on a consistent analysis. Some have also criticized DEVPOL II for its lack of focus (Pryor 1990). In parts DEVPOL II appeared to offer a shopping list of development issues popular at that time with different donor agencies. Nevertheless, despite its weak conceptual basis the fact that DEVPOL II was more human oriented and explicitly mentioned equity issues and protecting vulnerable groups makes its publication a significant event in Malawi's history of national development planning. It is also interesting to note that according to Pryor (1990) whereas it appeared that the Life President was the main architect of DEVPOL I, in regard to DEVPOL II Dr Banda **"did not appear in the least interested in its preparation"** (Pryor 1990:61)<sup>37</sup>.

The release of DEVPOL II in 1988 marked only the beginning of a bigger process of change in the ordering of the Government's policy priorities. In the next few years increasingly more attention was given by the donor community to human welfare and poverty issues. Much of this policy dialogue was based on the empirical findings from studies conducted by national research institutions on these and related issues such as malnutrition and household food security. The pivotal role of national research groups in uncovering the country's poverty problem is highlighted in a number of the case studies which are presented later below.

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<sup>37</sup> This was the strong impression given to Frederic Pryor during his interview of the 22nd April 1987 with Dr Banda when he attempted to discuss the underlying principals of DEVPOL II (Pryor 1990:66).

The most significant shift which occurred in Malawi's national development strategy was when the World Bank's policy framework of *growth through poverty reduction* was officially adopted by the Government in May 1990 at the Consultative Group meeting on Malawi held in Paris (Malawi Government/United Nations 1993). This new policy approach for national development stipulates that priority be given to increasing the incomes and production capacity of the poor, investing in the country's human resource base as well as establishing safety nets targeted at the most at-risk groups (World Bank 1990c) (see Case Study 11).

In summary the Government's view of food security, hunger and poverty underwent a dramatic turnaround in the 1980s. The role of the donors in stimulating this change in outlook was significant and is highlighted below in Case Studies 9, 10 and 11. Starting from a position in 1980 that officially these issues did not exist, by 1990 they were given top priority in the re-formulation of the Government's development policies. How the issue of malnutrition was specifically viewed by the Government, donor agencies and researchers during the 1980s is the topic of the following section.

### ***Perception of nutrition***

During the 1980s the general perception of malnutrition in Malawi broadened from it being viewed solely in relation to disease and ignorance to finally including household food insecurity and poverty as part of the analysis as well. The evolution of this expanded view of nutrition did not occur suddenly. Instead it could be described as a slow process of enlightenment which resulted partially as a response to developments in nutrition planning at the international level as well as to domestic factors including the expanded data base on nutrition and the increased national capacity to undertake nutrition planning and research. A key element in this process was the increasingly more active role of the donor community in the national policy arena which helped to pull issues such as food insecurity, hunger and poverty into the policy debate even despite the general reluctance on the part of the Government to discuss such topics.

At the international level throughout the 1980s the view of malnutrition as a structural problem related to poverty was very popular. However, up until the mid to late 1980s the Government of Malawi continued to frame malnutrition as a technical problem related to health and education. Table 5.5 presents the views held of malnutrition during the 1980s of the Government, university research groups and donor agencies.

The question of food availability and access to food only began to be contemplated by the Government in 1986. As evidenced by the quotations shown in Table 5.5 from the Ministries of Agriculture and Health in 1980, the World Bank in 1981, WFP in 1983 and FAO in 1984 the general perception in the early 1980s was that Malawi was able to produce adequate food to meet the population's nutritional requirements. Therefore, food availability was ruled out as a cause of malnutrition. This view was supported by the results of various analyses of national food availability made by the Government as well as by some of the donors. The underlying assumption in all of these analyses was that national food security would equate to household food security as well as adequate nutrition. No consideration was given to distributional issues regarding the access of different socio-economic and population groups to obtaining sufficient food to meet their nutritional requirements.

**Table 5.5: Prevailing views on nutrition of Government, University and donor agencies during 1980 to 1990**

<b>1980</b>	<b>Ministry of Agriculture and Natural Resources</b>  "most farmers produce enough to take them all the year round ... The main problem is that families are unaware of their food requirements" (MANR 1980c:11).
<b>1980</b>	<b>Minister for Health</b>  "some feeding habits ... often lead to nutritional impairment and ill health, even where there is sufficient nutritious local food available" (Ministry of Health 1980:7).
<b>1981</b>	<b>The World Bank</b>  "since average annual calorie and protein availability appear to be adequate ... much of Malawi's malnutrition problem appears amenable to relief through education and government preventative health programmes" (World Bank 1981b:ix).
<b>1983</b>	<b>World Food Programme</b>  "on a national scale, sufficient food is produced to cover the nutritional requirements of the population" (WFP 1983:2).
<b>1983</b>	<b>Centre for Social Research</b>  "the basic assumption made by some nutrition educationists, that food availability is not a problem but the problem is lack of knowledge on the part of the mothers is not true everywhere, for every household and all the time" (Msukwa 1983:42).
<b>1984</b>	<b>FAO Home-Economist Expert</b>  "the problems are a product of family food practices rather than of national food scarcity, because Malawi's agriculture is sufficiently productive to provide stores of enough food, including maize, for export after in-country demands have been met" (Weaver 1984).

**Table 5.5 (cont'd): Prevailing views on nutrition of Government, University and donor agencies during 1980 to 1990**

<b>1986</b>	<b>World Bank</b>	"there is evidence that national efforts in securing adequate food supplies on an aggregate basis have not resulted in adequate diets for all" (World Bank 1986a:51).
<b>1987</b>	<b>Malawi Government/UNICEF</b>	"the overall limiting factor of the amount of food a child is able to eat, however, is the availability of food in the household" (Malawi Government/UNICEF 1987:6).
<b>1989</b>	<b>Centre for Social Research</b>	"the major cause of malnutrition in Malawi could be described as lack of access to adequate food for the majority of households during certain parts of the year" (Msukwa 1989).
<b>1989</b>	<b>World Bank</b>	"malnutrition in Malawi is first and foremost a problem of household food insecurity ..." (World Bank 1989d:9).
<b>1990</b>	<b>World Bank</b>	"since 1980/81, the amount of maize produced and consumed has fluctuated between 136 and 198 kilograms per person per year, leaving a substantial deficit even at the national level ... the long-term per capita availability of food as measured in caloric value has displayed a significant downward trend since 1972" (World Bank 1990b:9-10).
<b>1990</b>	<b>Malawi Government</b>	"the knowledge of the Three Food Groups is widespread in Malawi. Many women understand the idea of the Three Food Groups but many cannot practice it because they do not have the access to the foods they learn about" (Malawi Government 1990a:55).

Having the benefit of hindsight and a more complete and accurate data base with which to work today, it can now be said that these aggregate analyses not only were seriously flawed in regard to the grossly mistaken belief that national level food security would equate to household food security and good nutrition, but also in terms of the poor quality of the data used, the erroneous assumptions made, and in some instances the existence of simple mathematical errors.

For example, the results of the Government's aggregate analysis of maize production levels and per capita availability was presented in a paper entitled "Food and Nutrition in Malawi" prepared in 1982 by the Food and Nutrition Unit (FNU) in the Ministry of Agriculture and Natural Resources. This paper included an analysis of per capita maize availability, including projections, for the period from 1973 to 1985. Their conclusions were as follows:

**"Despite seasonal fluctuations due to adverse growing conditions there is an overall trend towards increased supplies of maize for the smallholder ... Net levels of maize are sufficient to provide approximately 50 percent of energy requirements, or 240 kg per head per year" (Ministry of Agriculture and Natural Resources 1982:3).**

However, a close inspection of this analysis reveals that there were serious problems with the assumptions used, in addition to mathematical errors<sup>38</sup>. Had the analysis been based on more realistic assumptions regarding population growth and projected maize production levels and had the calculations been more accurate, then the end result would have portrayed the opposite picture of declining per capita maize availability. Instead of the forecasted maize production level of 240 kgs per capita over the period from 1980 to 1985 the average production level actually reached was closer to 206 kgs as shown earlier in Table 3.5 (Sahn, Arulpragasam and Merid 1990). In either case these levels are well below

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<sup>38</sup> Problems existed with the population estimates used in calculating per capita availability. Too low a population figure was used which overestimated per capita maize availability. In addition, an underlying assumption was that maize only provided 50 percent of the population's caloric requirements which contradicted the findings from the 1968/69 NSSA and the 1979 pilot NSSA nutrition survey both of which showed that maize contributed about 75 percent of daily caloric intake. Lastly, the projections used for maize production levels from 1982 onwards were overly ambitious and too high which created a misleadingly optimistic picture of future maize availability per capita.

the minimum per capita maize production level of 219 kg which is needed to satisfy the population's caloric requirements for maize (World Bank 1990b). However, considering the political sensitivities which surrounded food issues in 1982, it would have been unthinkable at that point in time for the Ministry of Agriculture to have presented anything but an optimistic and positive picture of Malawi's food situation which matched the political propaganda espoused by the country's leadership.

The analysis made by the Ministry of Agriculture was in fact supported by statements made in the early 1980s by two donor agencies, the World Food Programme and the World Bank (see Table 5.5). For example in 1983 the World Food Programme (WFP) using Malawi's food balance sheets calculated that from 1978 to 1980 the amount of calories available from all major food sources produced in the country was 2,160 per capita per day. The WFP concluded that this level was adequate to cover the nutritional needs of the population (WFP 1983). This analysis was later quoted in a number of reviews made of Malawi's food situation as the evidence that the country was able to feed itself (Ettema 1984; Msukwa 1984). In addition, WFP's assessment re-enforced the conclusions reached several years earlier in 1981 by the World Bank that food availability was not a problem in Malawi (World Bank 1981b). However, as mentioned above in Case Study 5 this conclusion was in fact erroneously drawn from the results of the UK FFHC's food consumption analysis.

Almost a decade later the World Bank would make a complete turn-around in their earlier assessment that Malawi was able to feed herself. A World Bank report released in 1990 calculated that from 1980 to 1986 on average only 2,100 calories per capita were available on a daily basis from all staple food sources. This is less than the minimum daily requirement of 2,219 calories per capita needed to cover the nutritional requirements of Malawi's population (World Bank 1990b). In fact using the World Bank's minimum daily nutritional level of 2,219 calories per capita means that the WFP's 1983 assessment of the nutritional adequacy of national food availability was in fact incorrect. **Therefore, these early assessments of national food availability in the country made both by Government and**

some of the donors were not only erroneous but also created a false sense of food security in the country. However, on the other hand they provided an image of Malawi as being prosperous and food self-sufficient which perfectly fit the political propaganda being heard at that point in time.

While the view of the Government and the donors was that on an aggregate basis enough food was available in Malawi to satisfy nutritional requirements, data became available in the early 1980s which suggested that at the individual level calorie intake was the major limiting factor in the diet. Based on the results of the 1979 pilot nutrition survey for the up-coming 1980/81 NSSA, the FNU found that energy intakes were very low, ranging from 64-72 percent of estimated requirements. Similarly the diet was found to be bulky and low in energy density making it difficult for small children to eat large enough quantities to satisfy their calorie needs. Of the children measured 32 percent were found to be underweight<sup>39</sup>. The conclusion reached by the FNU was that low meal frequency was the major problem which in combination with the bulky diet resulted in inadequate calorie intake especially for young children:

**"the basic problem is that of low meal frequency *i.e.* people do not eat often enough ... Energy is the critical factor in the rural Malawi diet, and not protein" (Ministry of Agriculture and Natural Resources 1980b:5).**

The notion of that malnutrition was due to protein deficiency was also rejected by the FNU staff who concluded that the protein energy ratio of the traditional maize-based diet was adequate. Their conclusions were not unlike those reached by the 1938-1943 Nyasaland nutrition team as well as the 1969-1970 Ministry of Health nutrition team. The reasons given by the FNU for the observed low meal frequency included a number of factors:

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<sup>39</sup> These findings are contained in an undated report entitled "Recent Survey Findings and Their Implications for Nutrition Education" which presumably was prepared by the Food and Nutrition Unit in the Ministry of Agriculture and Natural Resources. This report was found in the Government Records Office File No. 18-1-8F/41337, Zomba.

**"... although many rural mothers are aware of proper child feeding practices, they are not carrying them out. Some possible reasons for this could be: the heavy workload of women; fuel problems; distances of water supplies; seasonal food shortages as a result of over-selling of crops; low income" (Ministry of Agriculture and Natural Resources 1980b:5).**

Although the FNU identified seasonal food shortages and low incomes as possible problems, the issue of household food insecurity was never directly mentioned.

The results of the 1979 pilot NSSA survey led the FNU to believe that the nutrition education strategy, which was based on the 1964 Applied Nutrition and Training Programme supported by FAO, UNICEF and WHO, might not be relevant for the nutrition problems facing Malawian mothers. It had finally begun to be realized that the concept of the Three Food Groups and the emphasis on protein rich foods were inappropriate since the major problem appeared to be too few meals and low calorie intake not an imbalanced diet short in protein. This led the FNU in 1982 to organize an evaluation of the country's nutrition education programme (discussed below in Case Study 8). The results of this evaluation, which was conducted by the Centre for Social Research, provided some of the first empirical evidence ever available in Malawi that household food security was a major underlying cause of the child malnutrition problem (Msukwa 1983, 1984).

Throughout the 1980s the data base on nutrition greatly expanded and the evidence began to mount that not only was child malnutrition widespread in the country, but it was also related to household food security and poverty. Table 5.6 shows the increase in the empirical data base which occurred during the 1980s as a result of the numerous studies conducted on nutrition and household food security issues.

The national capacity to undertake research also greatly improved during the 1980s not only in nutrition but more generally in regard to social science and economic issues (McCracken 1984). As shown in Table 5.7 numerous papers and reports related to nutrition, household

food security and poverty issues were prepared by University of Malawi researchers during this decade.

The first reports on the impact of the country's development strategy on income distribution were released in the early 1980s by visiting faculty at the University of Malawi's Chancellor College (Kydd and Christensen 1981; Kydd and Christensen 1982). These papers provided the first inkling that poverty was serious and getting worse in the country under the Government's existing development strategy:

**"Since the mid-1960s the Malawian economy has undergone massive structural changes ... This development was accomplished through the transfer of resources from the smallholder to the estate sector. The process of transferring real resources coupled with a policy of neglect on the part of the government caused/permitted the movement of relative income to the country's ruling elite" (Kydd and Christiansen 1981:67).**

**Table 5.6: Key documents containing data on nutritional status and household food security released during 1980 to 1990**

<b>Date Report Released:</b>	
1980	1979 Pilot NSSA Nutrition Survey (MANR 1980a)
1982	Food and Nutrition Doctorate Dissertation (Chimwaza 1982)
1983	CSR's 1982 Nutrition Education Evaluation (Msukwa 1983, 1984)
1983	Liwonde ADD Paper on Household Food Security (LWADD 1983)
1984	1981/82 National Nutrition Survey conducted as part of the 1980/81 NSSA (Malawi Government 1984a)
1985	CSR 1984 Integrated Basic Services Project Evaluation (Msukwa 1985)
1984	Review of MCH/EPI/PHC Programme (WHO/UNICEF/Malawi Government 1984)
1987	Various Working Papers Released by Blantyre, Lilongwe and Mzuzu ADDs on Household Food Production Levels (BLADD 1988; LADD 1989)
1987	Situation Analysis of Women and Children in Malawi (Malawi Government/UNICEF 1987a)
1988	Characteristics of Nutritionally Vulnerable Sub-Groups within the Smallholder Sector of Malawi: A Report from the 1980/81 NSSA (Centre for Social Research 1988a)
1988	World Bank Technical Issues Review of NRDP (Carr 1988; World Bank 1989a)
1989	CSR/Harvard Agriculture Commercialization Study (Peters and Herrera 1989)
1990	1989 Ntchisi Area-based Programme Baseline Survey (UNICEF/Ministry of Local Government 1990)

By the early 1980s the Centre for Social Research, which was part of Chancellor College in Zomba, had become very active in social science research especially on nutrition issues (Msukwa 1983; Msukwa 1984a, 1984b; Ettema and Msukwa 1985; Centre for Social Research 1986). As early as 1984 CSR staff presented a paper at an international workshop in Edinburgh on Malawi's pattern of development. This paper concluded that:

**"Malawi is one of the few countries in Africa which is able to produce enough food for its population. However, it is obvious that increased food production had not led to improved welfare of the people, in terms of nutritional status ... The narrow focus on increasing production might actually compound the problem of hunger ... Unless the country changes its emphasis from the one on merely increased food production to one of improved nutrition, malnutrition will remain a big problem and infant mortality rate will remain among the highest in Africa" (Msukwa 1984a:524).**

Considering the political sensitivities which existed in the early 1980s on food security, hunger and poverty issues, that such a forthright statement could be made by a Malawian institution was indeed remarkable. However, much of the work undertaken by the CSR was commissioned by donor agencies. Perhaps this close affiliation with the international donors afforded the CSR some degree of insulation and latitude to research and discuss food security, hunger and poverty issues at a time when they were still perceived by many to be highly politically sensitive.

**Table 5.7: Major papers on nutrition, household food security and poverty issues prepared by University of Malawi researchers during 1980 - 1990**

**Date paper released:**

- 1981 *The Distribution of Income in Malawi in 1977* (Kydd and Christiansen 1981)
- 1982 *Structural Change and Trends in Equity in the Malawian Economy, 1964 - 1980* (Kydd and Christiansen 1982)
- 1982 *Food and Nutrition in Malawi* (Chimwaza 1982)
- 1983 *Evaluation of the Nutrition Education Programme* (Msukwa 1983)
- 1984 *Agriculture and Nutrition* (Msukwa 1984a)
- 1984 *Undernutrition in Malawi and its Possible Causes* (Msukwa 1984b)
- 1984 *Food Availability in Malawi* (Ettema 1984)
- 1985 *Food Production and Malnutrition in Malawi* (Ettema and Msukwa 1985)
- 1985 *Integrated Basic Services Project: An Evaluation Report* (Msukwa 1985)
- 1985 *Income Generating Activities among Rural Women in Malawi: A Search for a Viable Strategy* (Chipande and Mkwezalamba 1985)
- 1985 *Women and Agriculture in Malawi: Implications for Development* (Mkandawire and Chipande 1985)
- 1986 *Nutritional Problems in Malawi: Situation Analysis* (Centre for Social Research 1986)

**Table 5.7 (cont'd): Major papers on nutrition, household food security and poverty issues prepared by University of Malawi researchers: 1980 - 1990**

**Date paper released:**

- 1987 *Production Activities, Food Supply and Nutritional Status in Malawi* (Engberg, Sabry and Beckerson 1987)
- 1988 *The Characteristics of Nutritionally Vulnerable sub-Groups within the Smallholder Sector of Malawi: A Report from the 1980/81 NSSA* (Centre for Social Research 1988a)
- 1988 *Smallholder Agricultural Development in Malawi* (Mkandawire and Chipande 1988)
- 1988 *The Impact of Market Reforms on Household Food Security in Rural Malawi* (Kandoole, Kaluwa and Buccola 1988)
- 1989 *Cash Cropping, Food Security and Nutrition: The Effects of Agricultural Commercialization Among Smallholders in Malawi* (Peters and Herrera 1989)
- 1989 *Sources of and Factors Influencing the Incomes of Tenants on Agricultural Estates: The Case of Malawi* (Nyanda 1989)
- 1990 *Expenditure Patterns and Nutritional Status of Low Income Urban Households in Malawi* (Chilowa and Roe 1990)
- 1990 *Intervention Planning in Response to Disaster: A Case Study of the Mealy Bug Disaster in Malawi* (Pelletier and Msukwa 1990)
- 1990 *Survival Mechanisms and Intervention Strategies for Food Deficit Rural Households* (Msukwa, Kandoole and Chilowa 1990)
- 1990 *Structural Adjustment in Malawi: Short Run Gains and Long Run Losses* (Kandoole 1990)

The role of the donor community in the mid 1980s in expanding the view of malnutrition, food security and poverty in Malawi needs to be underscored. This is especially true in regard to the advocacy provided by UNICEF (see Case Study 10) as well as by WHO. A report of a joint WHO/UNICEF/Government evaluation of the Maternal and Child Health (MCH) Programme released in 1984 explicitly identified malnutrition as the key obstacle to progress in the health sector. The conclusions reached reflected the concern of these donors for the paradox of high levels of child malnutrition in face of the country's apparent achievement in national food self-sufficiency:

**"It is recommended that the Ministry of Health should formally bring to the attention of the authorities having the chief responsibility for decisions in development and economic planning, food production, storage and marketing, the present serious situation in regard to child malnutrition; should point out that this is the main obstacle now to reduction of mortality and morbidity; and should request that active steps be taken to resolve the paradox of malnutrition in a country which produces more than enough food to feed the people"**  
(WHO/UNICEF/Malawi Government 1984:3).

As will be discussed below in Case Study 9, with the nutrition data from the 1980/81 NSSA and through the strong advocacy given by such groups as the CSR, UNICEF and WHO, by mid-1986 the Government would finally acknowledge that child malnutrition was a significant problem in the country that needed to be addressed. This recognition led to a number of actions being taken the Secretary to the President and Cabinet which included the holding of a high level Symposium on Nutrition and Development for Principal Secretaries in 1986, the establishment of a Food Security and Nutrition Unit within the Office of the President and Cabinet in 1987 and later the release of the National Food Security and Nutrition Policy Statement in 1990.

However, despite this opening up of the debate on nutrition issues in 1986, initially the Government was still reluctant to pursue malnutrition too vigorously as well as hesitated to open the discussion up to include its food security and poverty dimensions. For example,

by the time DEVPOL II was released in 1988 national statistics on child malnutrition were available and had also been widely disseminated in the country both within Government as well as to the donor agencies (see Case Study 9). The nutrition data revealed that Malawi had one of the highest levels of child malnutrition in all of sub-Saharan Africa. However, these nutrition statistics were never specifically referred to in DEVPOL II nor any general mention made to the seriousness of child malnutrition. Although the overall tone of DEVPOL II showed that the Government did acknowledge human welfare issues as being important, a conservative stance was taken in regard to nutrition which continued to be framed within the context of health, education, community development and social welfare strategies. The nutrition programmes contained in DEVPOL II were much the same as the health and education activities promoted back in the 1960s and 1970s.

The closest that nutrition came to being considered in relation to agricultural development in DEVPOL II was limited to a few sentences on the need to give nutrition education to female farmers:

**"Special farmer training courses will continue with strong emphasis on nutrition, soil conservation and assisting women farmers ... For nutrition, the value of legumes and mgaiwa will be stressed ..." (Malawi Government 1988:29).**

The problem of small landholding sizes and the limitations this placed on agricultural production, however, was mentioned in DEVPOL II. In addition the **"lack of cash or credit access to finance purchases of inputs"** was identified as a key constraint preventing farmers from increasing production levels (Malawi Government 1988:27). However, although some of the themes contained in DEVPOL II came very close to the issue of household food security, it was never explicitly identified as a problem. In addition, similar to its predecessors, DEVPOL I and the NRDP policy statement, although food security with self-sufficiency in the dominant food crop maize remained a central theme in DEVPOL II, no nutritional justification for this policy was given. As before the concept of national food self-sufficiency was conceived and implemented purely on economic grounds. National

maize self-sufficiency was considered to have been achieved when "**marketed surpluses equal domestic demand, plus the accumulation of an appropriate strategic reserve.**" (Malawi Government 1988:31).

After the Symposium on Nutrition and Development and the establishment of the Food Security and Nutrition Unit, the planning capacity within the Government was much improved and more attention could be given to food and nutrition issues. In addition as shown in Table 5.8 a large number of workshops were held on nutrition and food security issues in the second half of the 1980s. These meetings resulted in a wide group of individuals being involved in the discussions of these issues from the Government, donor community as well as national research groups.

In September 1990 the Food Security and Nutrition Policy Statement was released by the Government as a Supplement to DEVPOL II (Malawi Government 1990b). The Food Security and Nutrition Policy Statement provided for the first time Government documentation which defined the goal of food security in relation to the larger objective of improved nutrition. The overall goal of this policy was "**the attainment of food security, at both the national and household level, which is ultimately aimed at improving the nutritional status of the population, particularly the most vulnerable members of society**" (Malawi Government 1990b:1). By 1990 the Government's view of food security had radically changed from what had been presented only two years before in DEVPOL II to the following:

**"food security at the national level is achieved when all households in the country are food secure and, hence, have the access and ability to satisfy their nutritional requirements to maintain a healthy and active life throughout the year"** (Malawi Government 1990b:1).

**Table 5.8: Workshops held on nutrition and food security issues during 1980-1990**

1980	Second National Seminar on Maternal and Child Health - National Nutrition Problems (Ministry of Health 1980)
1981	Workshop on Monitoring and Evaluating Rural Development Projects (Centre for Social Research 1981)
1984	Nutritional Surveillance Workshop (Ministry of Agriculture 1984)
1986	Principal Secretaries Symposium on Nutrition in Development (Ministry of Health 1986a)
1986	Principal Secretaries Symposium on Primary Health Care (Ministry of Health 1986b)
1986	Six Week Training Course on Nutritional Surveillance for Eastern and Southern Africa (Centre for Social Research/Cornell University/UNICEF)
1987	Workshop on the Mealy Bug Disaster (Ministry of Agriculture: no report produced)
1987	Review of the National Rural Development Programme (Ministry of Agriculture/World Bank: no report produced)
1987	Situation Analysis Workshop (Malawi Government/UNICEF 1987a)
1988	National Symposium on Agricultural Policies for Development (Ministry of Agriculture/USAID: no report produced)
1988	Household Food Security and Nutrition Workshop (Centre for Social Research 1988b)
1989	National Food for Work Workshop (Office of the President and Cabinet/WFP: no report produced)
1989	Structural Adjustment Workshop (Centre for Social Research/UNICEF: no report produced)
1990	National Food Security Workshop (Food Security and Nutrition Unit 1990)

As shown by the following quote taken from the preamble of the 1990 National Food Security and Nutrition Policy Statement, household food security was finally officially recognized as a major underlying cause of malnutrition in Malawi:

**"In rural areas the problems of low production levels which result from small landholdings, declining soil fertility, and labour constraints in addition to low income levels place many families in a vulnerable state of food insecurity. At high risk are those families with less than one hectare who comprise over half the rural population. As a result the majority of rural farming households are net purchasers of maize ... Available evidence also shows that low income households in urban areas face food insecurity because of their low salaries and purchasing power"** (Malawi Government 1990b:2).

However, although by 1990 it was permissible to speak of household food insecurity, the topic of poverty was still considered to be politically taboo. A request from UNICEF to the Government in 1991 to explore the possibility of engaging in a joint analysis of poverty in the country was met with the Government's reply that officially the term 'poverty' was not used. Instead the term 'low income groups' was preferred<sup>40</sup>. However, this problem of semantics was soon overcome and the term 'poverty' also made its entrance into Malawi's development vocabulary.

In summary, the road to accepting that malnutrition, household food security and poverty were major problems in Malawi was a long and arduous journey covering nearly two and a half decades since independence. It took years for empirical data to be collected, analyzed and disseminated, for advocates to organize and campaign on behalf of these issues and for the Government to finally accept that such problems existed. The end result was that by 1990 the perception of nutrition in Malawi had expanded considerably from initially being seen only as a technical issue of health and education to finally including the structural aspects of household food security and poverty.

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<sup>40</sup> Personal communication with UNICEF staff December 1991.

#### **5.3.4 Actions taken on nutrition**

Six case studies are presented below to illustrate the status of nutrition planning in Malawi from 1980 to 1990. An example of an unsuccessful nutrition intervention is presented in Case Study 7 which describes the ill-conceived and poorly planned UNICEF supported Integrated Basic Services project of 1979-1984. Case Study 8 reviews the results of an evaluation conducted by the CSR of the country's nutrition education programme (discussed above in Case Study 3) which was planned in 1964 by FAO, UNICEF and WHO. Case Study 9 describes the events that led to the discovery of Malawi's malnutrition problem which relate to the country's nutritional surveillance system. In particular the important role that scientific data had in changing the perception of nutrition and in triggering action is highlighted. Case Study 10 describes the role of UNICEF in advocating the malnutrition issue as well as in helping to establish a consensus within Malawi's planning circles as to the true nature of the problem. Case Study 11 reviews the performance of the World Bank in nutrition planning especially their changing views on malnutrition and food security and the eventual turnaround in their thinking on Malawi's pattern of development.

#### **CASE STUDY 7: Integrated Basic Services Project - 1979 to 1984**

In 1978 UNICEF and the Government of Malawi reached an agreement on an Integrated Basic Services (IBS) Project which would provide a package of basic services including health, water and sanitation, primary education as well as food storage and nutrition to underserved communities in the country. The basic goal of the IBS was:

**"... aimed at introducing a model of delivering a package of services to the rural population as a compliment to the services delivered through other major projects. It is a pilot project which, over its three-year period, should indicate whether it is appropriate in Malawi or whether the delivery of services should be through the tradition methods or through a modified version of the project" (Msukwa 1985:5).**

The IBS project was to be launched in ten underserved areas located in three districts of the country (Dowa, Mwanza and Mzimba) and was originally to be implemented for three years on a pilot basis. UNICEF's contribution over the three years was US \$300,000. The Government was expected to contribute roughly twice this amount for the project (McLoughney 1984).

Apart from the interest to help villagers, the intent of the IBS project was also to test the procedural theory that an integrated approach to basic services was viable and effective:

**"to demonstrate the increased effectiveness of the delivery of basic services for children when they are provided in an integrated fashion in specific geographical areas with the active participation of the community concerned" (Msukwa 1985:5).**

The project component which is relevant to this thesis is that concerning food storage and nutrition. The specific food storage and nutrition objectives of the IBS project included:

- a.) Reducing the incidence of malnutrition through intensified nutrition education, introduction of more nutritious food crops and demonstration of effective measures to combat incipient malnutrition;
- b.) Increasing the availability of food and decrease crop loss through the introduction of improved storage and preservation techniques;
- c.) Providing curative measures by establishing nutritional rehabilitation centres at one site in each selected district.

The planned activities included nutrition education by female extension workers, the introduction of high protein maize strains, the formation of 'nutrition scouts' to detect malnutrition in children, as well as improved maize storage structures, poultry keeping units and in some areas fish ponds (Msukwa 1985).

In regard to the theoretical basis of the IBS, most of the initial ideas arose from a 1977 joint evaluation by UNICEF and the Government on the Needs of Children and Women which had been conducted in Mulanje and Dowa districts (UNICEF 1977). In regard to nutrition the findings of the 1977 evaluation stated:

**"Relative to neighbouring countries, Malawi has made demonstrable progress in the sector of nutrition and food. The evaluation found that a wide range of crops are grown and consumed ... The statistics available indicate that most of the children register normal weight at clinics. However, nutritional deficiency exists in varying degrees among many children and some expectant women. Some studies also point to the existence of malnutrition in some areas of the country" (UNICEF 1977:8).**

It appears that the UNICEF consultants involved in the 1977 evaluation had only conducted a superficial review of the food and nutrition situation in the country and relied on the success story image of Malawi as being food prosperous. By the time this evaluation was being carried out the reports from the 1969 and 1970 Ministry of Health nutrition surveys as well as the 1974 UK FFHC mission were available. These earlier reports would have provided ample evidence that in fact Malawi faced a serious food and nutrition situation. In addition, an earlier study by UNICEF in 1970 had quoted the Ministry of Health findings that the level of child malnutrition in Malawi was **"one of the highest, if not the highest in Africa"** (UNICEF 1970:9). It appears as if the 1977 UNICEF evaluation team never saw this earlier report by their UNICEF colleagues.

In 1984, some five years after the IBS was first implemented on a pilot basis, UNICEF contracted the CRS to conduct an evaluation of its effectiveness since many problems had surfaced in the implementation of the project (Msukwa 1985). The CRS had also been involved in the IBS baseline survey undertaken in projects areas in 1979 after the interventions had already be designed but before they had been implemented. In addition, a second evaluation of the IBS was carried out as a thesis dissertation by the UNICEF liaison officer in charge of the project (McLoughney 1984).

In their evaluation the CSR concluded that on the whole the food and nutrition interventions of the IBS were inappropriate and ineffective in improving nutrition levels in the project areas:

**"We do not think the project has made any significant effect on the nutritional status of the population ... It is even worse ... However, the data has confirmed what we have been saying in other reports ... that not all households have enough food all the time ... The project has done little to ensure that households have enough food all the year round" (Msukwa 1985:52).**

The CSR identified the major problem to be a lack of understanding of the local food and nutrition situation. In other words, the substantive nutrition planning theories which had been used as the basis of the IBS's food storage and nutrition components were inappropriate for the local circumstances:

**"The analysis of the needs of the communities appears to have been superficial. How else can one explain the introduction of a demonstration *nkhokwe*<sup>41</sup> in an area which does not have any maize to store ... For a project which was heavily to rely on people's cooperation and participation, it was a great mistake not to allow time to consult with the communities concerned" (Msukwa 1985:78).**

McLoughney also commented on these same issues. For example, the project component on the construction of model maize storage structures in each village, including persuading the villagers to build their own, was based on a completely erroneous assumption that post-harvest maize storage loss was a significant problem in Malawi. According to McLoughney's review of the IBS, the assumption was that:

**"... farm families in Malawi experienced an average of 30% post-harvest grain loss. Later research showed that post-harvest storage was not really a problem after all, so for a farmer to build the so-called**

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<sup>41</sup> *Nkhokwe* is the local language for a family's maize storage structure.

**"improved" storage bin would have been a waste of time, effort and resources. As it happened none did, but a significant slice of project funds were spent in training extension workers in how to construct the models and in how best to persuade the farmer to adopt them" (McLoughney 1984:40-41).**

It appears that the objectives of the IBS were pre-determined by UNICEF and based on the current international development fashions, not on what Malawian villagers really needed.

A key element of the procedural approach taken in the IBS in addition to its integrated nature was that it was supposed to be participatory and include the involvement of the villagers at all planning stages. However, the CSR's evaluation showed that the villagers as well as some of the Government staff who were supposed to be involved knew very little about the IBS even after it had been implemented for a number of years. The evaluation showed that the role of the communities as seen by Government staff was restricted to the provision of labour and money, not of ideas. Rather the project was conceived and planned for them:

**"Throughout the planning period there was an assumption that community participation (in whatever form) was a foregone conclusion; as a result, nobody in the communities were asked about it. Neither were they asked about their priorities, problems or aspirations. In fact, none of the communities even knew that anything was being planned for them! Yet, in the official plan which was eventually drawn up, a community was typically expected to mould and burn bricks for a 4-classroom school block, 4 teacher's houses, a clinic, 2 houses for clinic staff, a nutrition worker's house, and dig 10 wells and 10 "demonstration" latrines. In addition, they were expected to provide water, sand and labour during the actual construction - all within the 3 year lifespan of the project (i.e. mid 1979 - mid 1982) (McLoughney 1984:32).**

In addition, UNICEF and the Government had never seen eye-to-eye in regard to the overall purpose and objective of what the IBS was all about:

**"This gap in understanding was never bridged and what eventually emerged when the project was finalized at the end of the year reflected a compromise between government's (and indeed local communities) tendency to favor physical structures and UNICEF's insistence on a problem solving approach. The government started with structures; UNICEF with problems. This led to different views on community participation also. To the government it meant voluntary labour and brick making by the community; to UNICEF it meant activating village health committees, training primary health care workers and traditional birth attendants and the like" (McLoughney 1984:30).**

Apart from these conceptual problems, there were also management problems with the IBS project with frequent delays as well as budgetary problems. Although the IBS project was initially launched in 1979 as a three year pilot, by 1982 the pilot phase was so far behind schedule that the time-frame had to be extended up until 1984. Even before the CSR evaluation report was complete, UNICEF had decided to terminate its support and shortly thereafter the IBS ceased to exist.

In summary, the theoretical basis of the IBS was extremely weak since no adequate assessment and analysis of the situation had been undertaken by either UNICEF or its Government partners. This meant that the understanding of the food and nutrition problems facing rural Malawian villagers was superficial and biased towards the planning theories (both substantive and procedural) which were popular with the donors at that point in time. As a result the objectives of the IBS project did not reflect the real problems facing the Malawian villagers but rather reflected the pre-determined interests of the donor involved, in this case UNICEF.

Insights into the political economy of the internal workings of the IBS project are provided in McLoughney's evaluation of the role of personal incentives in motivating the different actors in the planning process (McLoughney 1984). A major problem identified by McLoughney was the lack of motivation on the part of senior government staff to move ahead with implementing the project's activities. McLoughney argued that senior

bureaucrats in Malawi did not see any personal gain from their participation in the IBS project, hence, they had neither the motivation nor the will to ensure that activities would be carried out as originally planned. As a result the IBS was fraught with management problems and a general lack of interest on the part of staff at all levels, from senior management down to the field workers.

McLoughney also concluded that even the knowledge that malnutrition and poverty were serious in the areas where the IBS project was operating did not motivate bureaucrats to address these problems either through the IBS or by any other means (McLoughney 1984). The appearance of commitment was made by these same bureaucrats for the sake of maintaining the right outside image for the donor community.

This case study on the IBS project illustrates several points regarding nutrition planning, both in terms of theoretical issues as well as managerial issues. Regarding planning theories, the substantive and procedural theories used to design the IBS project were not based on an analysis of the food and nutrition situation found in the country nor on an understanding of how community based development could work in Malawi's village societies. Therefore, the IBS project could not have been expected to have worked since it was addressing the wrong issues and in the wrong manner. Second, issues of management pertaining to the implementation of projects, such as the IBS project, are often overlooked by nutrition planners particularly the relationships found in the local political economy which might affect the motivation of different groups of actors involved. As John Field (1993) pointed out in his review of the political economy of food and nutrition policies, the 'politics of action' mostly go unrecognized in nutrition planning, however, quite often they are frequently the underlying cause of the poor performance seen.

### **CASE STUDY 8: Evaluation of the National Nutrition Education Programme - 1982**

As already described in the second section of this chapter on the 1960s and 1970s, nutrition education has been the longest running nutrition intervention programme in Malawi (see Case Study 3). However, as was discussed earlier the original conceptual basis of Malawi's nutrition education strategy was extremely weak and not derived from an assessment and analysis of the local situation. Instead the preconceived notions of foreign donor advisors as to what the nutrition problems were in Malawi dominated the substantive theories which were used to formulate the nutrition education strategy. These substantive theories were biased towards the belief that the problem was the quality of the diet, especially in terms of whether it was well balanced and included high quality animal protein as well as the belief that Malawian mothers were in large part to blame for their children's malnutrition. The mistaken view of the donor experts from FAO, UNICEF and WHO involved in the planning of the Applied Nutrition and Training Programme was that food availability was not the problem in Malawi. The belief held by these United Nations planners that the quality of the diet was the problem not its quantity fit not only the biases of the United Nations donors involved with the planning of the project but also concurred perfectly with the political image just beginning to be created in the 1960s by the country's leadership that the country was able to feed itself.

After the results of the 1979 pilot NSSA nutrition survey were available which showed that inadequate calorie not protein intake was the major limiting factor in the Malawian diet, the Food and Nutrition Unit (FNU) in the Ministry of Agriculture decided that the existing nutrition education programme needed to be evaluated to determine the relevance of the existing strategy for the problems facing Malawian families. By that time the institutional infrastructure for dealing with nutrition planning issues had been strengthened with the formation of an Inter-ministerial Food and Nutrition Committee (IMFNC) in the Ministry of Agriculture. Membership consisted of all Government offices active in nutrition work, for example, from the ministries of agriculture, health and community services, as well as

national university research groups. By late 1981 the CSR had been approached by the IMFNC to undertake an evaluation of the nutrition education programme.

The CSR's evaluation involved a field survey of 965 households conducted in six districts. By 1983 a preliminary evaluation report had been prepared (Msukwa 1983). The final results were published later in 1985 (Ettema and Msukwa 1985). The CSR's evaluation showed that about 70 percent of households surveyed had received some type of nutrition education. Of these close to 77 percent of the families had been reached through under-fives clinics, with only 23 percent reached through visits made by agriculture and community development field workers. A major finding was that most mothers interviewed admitted that the nutrition education they received on preparing balanced diets was not useful to them. A common answer given by rural mothers to the question by the evaluation supervisor as to why they did not prepare balanced meals was:

**"We eat what we have and we have no money to buy additional foods"**  
(Msukwa 1983:43).

The evaluation report stated that:

**"nutritional problems in a number of areas are not just due to lack of knowledge on the part of the mothers but to other factors that cannot be solved by teaching mothers to eat balanced meals"** (Msukwa 1983:31).

The CSR put their finger on the issue of access to food when they concluded that **"nutrition education is meaningless if the people have no food"** and **"people can only have balanced meals only if they have access to food either through their own gardens or they are able to purchase"** (Msukwa 1983:35).

In essence the evaluation showed that the substantive planning theories used to underpin the nutrition education strategy for nearly twenty years were wholly inappropriate for Malawi's nutrition problems. Again, as with the IBS, the donors had used the substantive planning theories which were popular with the international agencies working in nutrition. In essence the overall objective of the FAO/UNICEF/WHO Applied Nutrition and Training Programme to increase the production and consumption of high quality protein reflected the predilections of the donor agencies involved not the nutrition issues facing the country. Part of the problem was that inadequate data existed on food and nutrition in Malawi at that point in time, hence the tendency was to import solutions before the problems were known.

In their evaluation the CSR was able to prove that the underlying assumption used by the FAO nutrition education experts in the 1960s that food availability in Malawi was not the problem was in fact incorrect. As shown in Table 5.9, which had been included in the CSR's 1985 report of the evaluation, close to 36 percent of families surveyed reported that their previous year's harvest (1981/82) of the staple food crop had been insufficient to feed their families. Even more, 47 percent, reported that the current harvest was insufficient.

**Table 5.9: Percent of households with insufficient harvest to feed their families**

Area:	1981/82	1982/83
Mkhumba	46	71
Mbiza	74	74
Kalumo	42	55
Kaluluma	28	55
Mwamlowe	7	9
Wasombe	17	14
All areas	36	47

Source: Adapted from Ettema and Msukwa 1985

The situation was worse in the four maize growing areas (*i.e.* Mkhumba, Mbiza, Kalumo and Kalumua) as compared to the other areas which depended on cassava as the staple food crops. The CSR concluded:

**"... it has been shown without a doubt that the basic assumption made by some nutrition educationists, that food availability is not a problem but the problem is lack of knowledge on the part of the mothers is not true everywhere, for every household and all the time. In good years, certainly this might be true for most of the areas if not all areas and most of the households" (Msukwa 1983:42).**

In regard to household food security as a potential underlying cause the CSR stated:

**"Insufficiency of main food crops does not necessarily mean the household is going to have a food shortage as this will depend on availability of alternative food crops and the purchasing power of the household... " (Msukwa 1983:36).**

The CSR also investigated the availability of other subsidiary food crops, however, these were found to be insufficient to cover the shortfalls in household maize production. The CSR also concluded that the purchasing power of the families surveyed was not very high. About 39 percent of the households had no source of income apart from the sales of their own food crops. Therefore, families were often forced to sell their crops to obtain money for other basic needs which further depleted their families' food supplies. The evidence garnered by the CSR and presented in their 1983 preliminary report strongly suggested that food availability was a serious problem. However, the issue of household food security was never mentioned outright no doubt because in 1983 it was still considered to be politically too sensitive to discuss.

The CSR concluded that the nutrition education strategy had no relevance for Malawian circumstances. About one year later in 1984, the report from the WHO/UNICEF/Malawi Government evaluation of the MCH programme came to a similar conclusion that the

nutrition education activities were not useful for the problems facing Malawian families since as they suggested access to food was the major part of the problem. In their report the CSR recommended that in the future **"greater attention should be paid in helping households have more food"** (Msukwa 1983:44).

In addition, the findings of the CSR's evaluation also showed how the Government staff involved in nutrition education activities had little idea about the exact nature of the food and nutrition problems found in their areas:

**"Nutritional problems do differ from area to area but looking at the work and lesson plans collected from the different areas, they do not show much difference. We therefore doubt whether the homecraft workers or FHIs (*Farm Home Instructoress*) know the particular problems of their areas of operation and therefore doubt the effectiveness of their programmes on the improvement of nutritional standards"** (Msukwa 1983:43).

Although the CSR carried out this evaluation in 1983, it would not be until 1988 that any action was taken by the IMFNC to re-formulate the nutrition education strategy. Why there was such a long delay is difficult to determine apart from the typical delays found in Government bureaucracies where wheels turn slowly. In 1990 a booklet entitled *Nutrition Facts for Malawian Families* was finally produced by the IMFNC to serve as the basis of the country's new nutrition education programme (Malawi Government 1990a). The nutrition education messages contained in the *Nutrition Facts for Malawian Families* were formulated on the basis of the empirical findings from the numerous studies conducted on food and nutrition in recent years (see Tables 5.6 and 5.7). As a result today's nutrition education strategy is much better suited to meeting the needs of Malawian families, but still will be limited in its impact on improving nutritional levels in the country until improvements are made in the area of household food security.

### CASE STUDY 9: The Evolution of Nutritional Surveillance in Malawi - 1980s<sup>42</sup>

The term nutritional surveillance encompasses those activities which involve the collection of data related to nutritional status at regular intervals for purposes of decision-making to improve the nutritional status of populations. There are four main uses of the information generated by nutritional surveillance, namely for 1.) advocacy, 2.) policy formulation and planning purposes, 3.) project monitoring and evaluation, and 4.) timely warning of impending food emergencies (Mason *et al.* 1984; Tucker *et al.* 1988; Habicht and Pinstrup-Andersen 1990). Thus, nutritional surveillance should have an important role to play in nutrition planning.

The intent of this case study is to illustrate the impact that empirical data had in triggering the recognition in Malawi that the problem of child malnutrition was severe and widespread. National level data on child malnutrition levels provided the indisputable evidence that serious problems existed with the population's nutritional wellbeing. The advocacy campaign to disseminate this information is also discussed in addition to the important role of key allies located in the senior echelon of Government, the donor community as well as in the Malawian research community. These individuals are important actors in Malawi's nutrition planning process since they were key in activating the issue of malnutrition, and later also the issues of household food security and poverty, in the country's national development debate.

Over the years a number of nutritional surveillance activities have been undertaken in Malawi, many of them with outside technical and financial assistance (Cole-King 1975; Jere 1984; Pelletier and Msukwa 1990; Quinn 1994; Babu and Mthindi 1994). The activity of interest in this present case study is the national nutritional surveillance system based on the country's sample survey programme which included the first ever child nutrition module

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<sup>42</sup> Part of this text is based on the paper "A History of the Politics of Food and Nutrition in Malawi: The context for Food and Nutrition Surveillance" by V.J. Quinn, *Food Policy* 19(3):255-271 1994.

as part of the 1980/81 National Sample Survey of Agriculture (NSSA). In the late 1970s interest in establishing this type of national surveillance system arose in the country within the Ministry of Agriculture and the CSR (Chiligo and Msukwa 1982; Malawi Government 1984). At this point in time UNICEF's Regional Office in Nairobi was assisting Governments in the eastern and southern African region to establish surveillance systems (Quinn and Kennedy 1994). In Malawi this resulted in UNICEF providing technical and financial assistance to the Government to include a child nutrition module in the 1980/81 NSSA, which was carried out by the Ministry of Agriculture and the National Statistics Office. It was envisaged that, as in other countries such as Kenya, future nutrition modules would be included in national surveys so that trends in child nutritional levels could be monitored over time.

By early 1983 the preliminary results of the nutrition module had been analyzed by UNICEF staff assisting the National Statistics Office. The data showed that an extremely high proportion, 56 percent, of underfive children were nutritionally stunted (below -2 S.D. height for age). This level was substantially more than 37 percent found at that point in time in Kenya, 35 percent in Lesotho and 30 percent in Swaziland. A preliminary report of the NSSA nutrition data was prepared in January 1983 by a UNICEF/Cornell University team involved in the background preparation of internal reviews for UNICEF's upcoming country programme process<sup>43</sup>. This report also included some of the preliminary infant and child mortality data just released from the 1977 Population Census which showed that close to 40 percent of children in Malawi died before reaching the age of five years<sup>44</sup>. Because of the serious picture of child malnutrition and mortality described in this report and considering the Government's sensitivities UNICEF kept it confidential and under restricted circulation.

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<sup>43</sup> While working for Cornell University's nutritional surveillance programme, I co-authored this report with K. Williams of UNICEF which was entitled "Preliminary Analysis of Situation of Children Women in Malawi" dated January 1983. Part of the nutrition data analysis contained in it had been prepared by D. Atwick, also of UNICEF.

<sup>44</sup> This figure was later refined to the level of just over 30 percent mortality before the age of five years (Malawi Government/UNICEF 1987)

Later in 1984 the final results of the nutrition data analysis were published by the National Statistics Office as part of a three volume statistical report on the 1980/81 National Sample Survey of Agriculture (Malawi Government 1984). Within this report the nutrition data were buried deep amongst a long series of computerized data tables which were difficult to interpret without a technical background in nutritional anthropometry. In this format, as could be expected, no one really noticed the child malnutrition data.

On the basis of their preliminary analysis of the child nutrition and mortality data in early 1983, it was clear to UNICEF staff that the high levels of child malnutrition coupled with the high child mortality rate meant that the issue of too little food had to figure as a major underlying cause (Williams and Quinn 1983). Since UNICEF was the lead United Nations agency in Malawi dealing with the welfare of children and mothers, it was imperative that they brought the nutrition situation out into the open despite the recognized political sensitivities on the side of the Government. At that point in time the local WHO office had also begun to show interest in nutrition and was also advocating these issues within the Ministry of Health. A field survey conducted as part of the joint WHO/UNICEF/Malawi Government evaluation of the MCH programme in 1984 had shown high levels of malnutrition in the children sampled. The report of this joint mission recommended that **"active steps be taken to resolve the paradox of malnutrition in a country which produces more than enough food to feed the people"** (WHO/UNICEF/Malawi Government 1984:3).

The CSR had also emerged as a strong advocate for nutrition issues early on in the 1980s. As discussed above in Case Studies 7 and 8, the CSR had been hired to conduct evaluations on the IBS project and the country's nutrition education programme. As shown in the numerous studies which they conducted (see Table 5.6) and from the titles of the many papers which they authored (see Table 5.7), the staff of the CSR had good first hand field knowledge of the food and nutrition situation in the country. In addition, the CSR had also

been working closely with the Ministry of Agriculture to implement a pilot nutritional surveillance project in the Northern region of the country<sup>45</sup>.

The nutrition offices in the Ministries of Agriculture and Health were also advocates for food and nutrition issues during the early to mid 1980s, but because of their Government affiliation the work conducted by these two offices tended to stay well away from the political side of malnutrition. As discussed earlier in the section pertaining to the perception of nutrition, in the early 1980s the view of the FNU in the Ministry of Agriculture was that although calorie intake was low, food availability in Malawi was not a problem (see Table 5.5). Rather in their view the child nutrition problem was thought to be related to inappropriate child feeding practices, especially too low a meal frequency in combination with a low energy and bulky diet (Ministry of Agriculture and Natural Resources 1982). The question of household food security was simply too political for the Government's nutrition offices to contemplate let alone investigate.

The NSSA nutrition data made little impact in its original form as part of the overall 1980/81 NSSA survey report. Realizing the opportunity the NSSA nutrition data provided, UNICEF and the CSR joined forces to use this information to raise the general level of awareness that serious malnutrition existed in the country. Together they produced a series of country wall maps which graphically displayed not only the data on child stunting (see Figure 5.2) but other socio-economic data as well<sup>46</sup>. This approach of raising awareness by the graphical display of social statistics in the form of wall maps had already been tried in the early 1980s in Kenya by UNICEF with positive results<sup>47</sup>.

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<sup>45</sup> The CSR established a pilot food and nutrition information system in one agricultural division in the north of the country with assistance from UNICEF and Cornell University's Nutritional Surveillance Program. This was the culmination of many discussions and workshops on nutritional surveillance held by regionally as well as nationally. Valuable experiences were learned from this pilot initiative in the use of surveillance information for decision-making during a nutritional emergency and for post-emergency recovery and development (Pelletier and Msukwa 1990).

<sup>46</sup> Wall maps were also produced on the number of malnourished children, infant mortality, female literacy and population density, all by geographical area.

<sup>47</sup> Personal communications April 1994 with K. Williams, past Regional Advisor for UNICEF's Social Statistics Programme in eastern and southern Africa.

### Prevalence of nutritional stunting by ADD

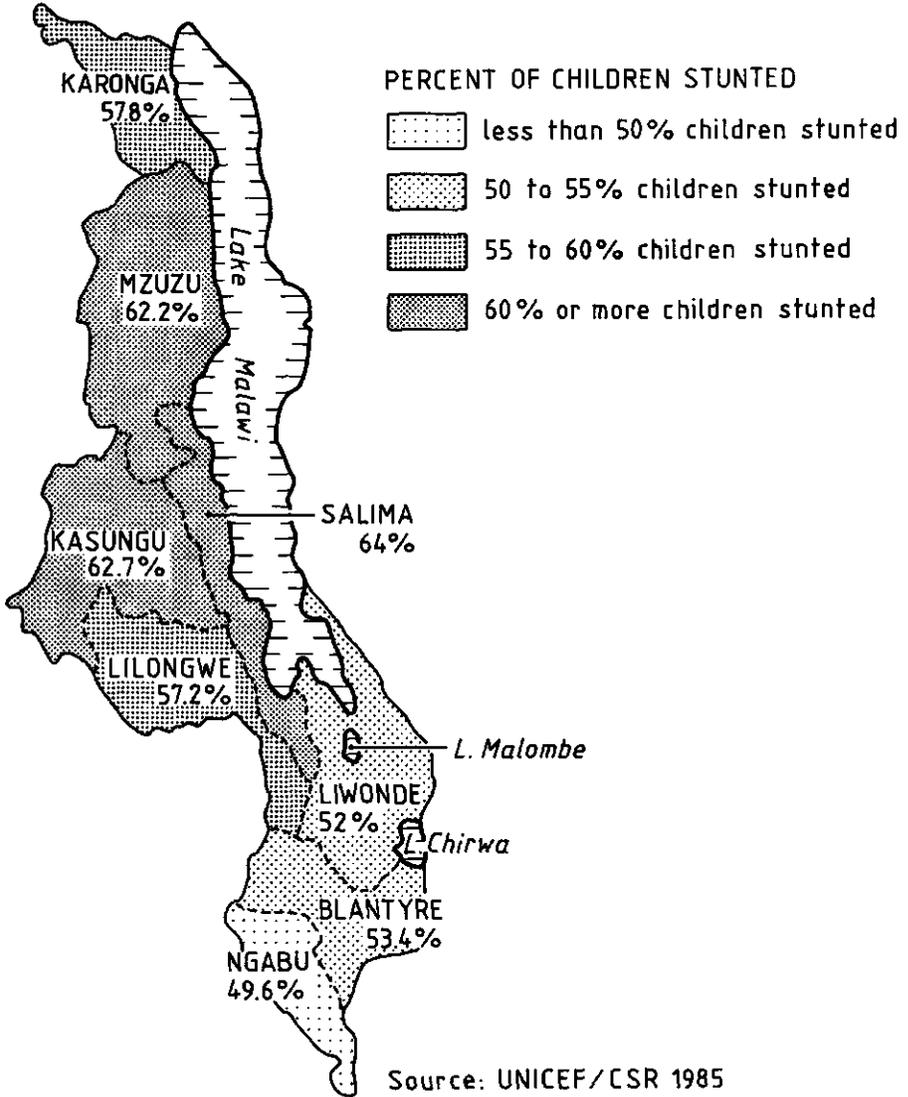


Figure 5.2: Malawi wall map on prevalence of child nutritional stunting by Agricultural Development Division: 1981/82

The wall maps were designed and printed by the UNICEF Regional Office in Nairobi since the art and printing facilities were not available at that time in Malawi. By September 1985 several hundred sets of the wall maps were sent to the UNICEF office in Malawi. Shortly thereafter the CSR and UNICEF proceeded to distribute sets of the wall maps to Government and university offices as well as to other donors agencies in the country. UNICEF's Regional Office in Nairobi distributed sets of the wall maps to donors outside of Malawi, for example, to the World Bank office in Washington.

In Malawi the reaction to the maps was immediate. The Vice-Chancellor of the University of Malawi, then an ex-patriate, ordered the CSR to halt their distribution and banned them from being displayed in university offices<sup>48</sup>. Not only did the maps contradict the food prosperous image of the country but, in the opinion of the Vice-Chancellor, the data had to be incorrect since he had seen plenty of food for sale in the local markets. However, because of the autonomy inherent in their donor status, UNICEF was able to carry on with distributing the wall maps and soon saturated the local donor community with them.

Although the nutrition data had been officially cleared by the Government one year earlier in 1984 through the publication of the 1980/81 NSSA survey report, officials in the Ministry of Agriculture reacted negatively to the nutrition wall maps since they showed in graphically dramatic terms the massive malnutrition found in such areas as Lilongwe ADD in which millions of dollars had been invested by the World Bank under the IRDP and NRDP.

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<sup>48</sup> This episode was recounted by interviews undertaken by myself and the Director of the Centre for Social Research, Mr L.A.H. Msukwa, with Government and University officials in late 1991.

The immediate response of agriculture officials was an attempt to discredit the data on statistical grounds:

**"it is the feeling of a number of statisticians that the information has been misrepresented (*sic*), maps at the R.D.P<sup>49</sup>. level would potray (*sic*) a much better and more acurate (*sic*) picture because the ADDs are rather big and one average is exagerating (*sic*) the whole picture ... May I also point out that protraying (*sic*) a very negative picture without a note of whether there has been improvement ... may result in fightening (*sic*) policy makers instead of making them think constructively"<sup>50</sup>.**

However, the argument provided in response by the CSR made clear that the accusations were ill-founded since the survey techniques used were sound and the data robust<sup>51</sup>. No doubt agriculture officials viewed the nutrition data as a threat since the maps could have been interpreted that the Ministry had not done its job properly. In light of the political sensitivities surrounding food issues, and the fact that Dr Banda was also the Minister of Agriculture, it is little wonder that this information made agricultural staff nervous.

At the other extreme, Ministry of Health officials immediately embraced the maps since the data provided evidence for their sector's strategy to move ahead with primary health care in order to combat the country's high infant mortality rate which they realized was closely linked to malnutrition. Also, as quoted earlier, the 1984 report on the joint WHO/UNICEF/Malawi Government review of the MCH programme had contained the recommendation that the country's serious malnutrition problem be brought to the immediate attention of high levels of Government. To health officials the wall maps represented a step in the right direction.

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<sup>49</sup> R.D.P. denotes Rural Development Project, a sub-division of an Agricultural Development Division.

<sup>50</sup> Letter from Ministry of Agriculture to the Centre for Social Research dated 7th April 1986, Ministry File No. 1/3/20. obtained from the Centre for Social Research.

<sup>51</sup> Letter from the CSR to the Ministry of Agriculture (copied to UNICEF office) dated 9 April 1986. Ministry of Agriculture File No. 1/3/20.

Since the NSSA nutrition data contradicted Malawi's international image as a food surplus nation, there were political hurdles to overcome. Without overcoming these there would be little hope in getting issues of malnutrition, food insecurity and poverty into an open policy debate. The breakthrough came in early 1986 when the wall maps were seen by the SPC while being displayed by health officials at the National Symposium for Principal Secretaries on Primary Health Care. This meeting was one of the high level symposiums discussed earlier which were being held at that point in time by the SPC.

The severity and widespread nature of the malnutrition situation had a great impact on the SPC who immediately sought the advice of senior health officials and the WHO representative<sup>52</sup>. In addition, by the time the SPC saw the wall maps hundreds of copies had already been distributed within the country. In essence, Malawi's massive child nutrition problem had been widely publicized not only throughout the Government but more importantly throughout the donor community. The SPC must have realized that sooner or later the Government would eventually be asked by the donors to explain the paradoxical situation of malnutrition in face of food self-sufficiency.

The local WHO office was instrumental in guiding the actions subsequently taken by the SPC. The country representative for WHO had already been very active at that point in time in pushing nutrition issues within the Ministry of Health as well as with the SPC. Being a medical doctor from nearby Zambia, as well as having good political connections, it could be argued that this WHO official had the politically correct credentials to persuade Malawi Government officials that they needed to address the nutrition problem without delay. This intense background lobbying resulted in the agreement from the SPC that a high level Symposium for Principal Secretaries should be held on Nutrition and Development (Ministry of Health 1986a).

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<sup>52</sup> This recounting of events was obtained from interviews conducted by myself and the Director of the Centre for Social Research, Mr L.A.H. Msukwa, had with Government and University officials during late 1991.

The floodgate opened for malnutrition issues in 1986 when the SPC received clearance that this meeting could go ahead. To prevent any political barricades from going up during the preparations for the Symposium the issue of malnutrition was framed only as a health and education problem and the issue of household food security was avoided.

The Principal Secretaries' Symposium on Nutrition and Development was held in July/August 1986 and marked the beginning of the most recent phase of nutrition planning in Malawi. The keynote paper entitled *Nutritional Problems in Malawi: Situation Analysis* was prepared and presented by the CSR (Centre for Social Research 1986). A number of papers were also presented by different Government offices, which similar to the CSR's paper, clearly pointed to food availability at the household level as a major contributing factor to malnutrition (Ministry of Health 1986a). One exceptional paper was that written by a multi-sectoral team entitled *Food Production and the Nutrition Status in Malawi* which stated:

**"The irony ... is that whilst the current statistics show that the per capita availability of maize has been declining, the economy had managed to maintain large stocks of maize and even exported some especially between 1983 and 1985. This, if the statistics are correct, implies that a certain proportion of the population does not have enough food for consumption and that there might as well be some nutritional problems in the country" (Ministry of Health 1986a:122).**

For a Government team to have made this strong statement in 1986 which directly questioned the country's food self-sufficiency achievements was indeed remarkable and signified that a small crack had finally emerged in the Government's wall of denial that any food problems existed in the country.

In a review of the political economy of food and nutrition policies, John Field eloquently describes the role of such senior allies like the SPC as vital since they are able to **"bestow grace on an issue, heighten its salience in both policy space and the public mind, adorn**

**it with urgency, compassion as well as realpolitik, and send signals to relevant government institutions that this is an issue whose time had come"** (Field 1993:176). This was certainly true in regard to the role played by the SPC in launching nutrition issues into the policy dialogue during the mid-1980s. Apart from the positive effect this had on nutrition planning, the SPC's management style had also helped to open up and stimulate the wider policy debate taking place in the country to finally include issues of human welfare and equity. It was under this SPC that DEVPOL II had been formulated which marked the beginning of a more human face to Malawi's development policies.

During the proceedings of the Principal Secretaries Symposium on Nutrition and Development issues were discussed which had never before been considered in relation to nutrition, for example the linkages between national food security and household food security as in the quote given above. Table 5.10 illustrates the broad range of the issues discussed during the symposium which were contained in the final report.

One recommendation from the Symposium was that the country needed to strengthen its policy and planning capacity to deal with nutrition issues across all sectors. This eventually led to the establishment in 1987 of a Food Security and Nutrition Unit in the Department of Economic Planning and Development under the Office of the President and Cabinet. By the end of the 1980s, the Food Security and Nutrition Unit (FSNU) became the Government's institutional focal point for nutrition planning and took the lead role in the formulation of the country's National Food Security and Nutrition Policy Statement released in 1990.

**Table 5.10: Summary of major factors contributing to malnutrition identified during the 1986 Symposium on Nutrition and Development**

**1. Agricultural Factors**

- a. insufficient food supplies
  - low output due to small landholdings and low productivity
  - cropping patterns
  - overselling of food to meet cash needs
  - lack of irrigation technology
  - inadequacy of and inaccessibility to farm inputs
  - inadequate food for estate workers
  - storage problem of hybrid maize

**2. Economic Factors**

- a. low/lack of purchasing power
  - high consumer food prices
  - low consumer income
- b. pricing of farm inputs and outputs
- c. unequal distribution of income
- d. unpaid maternity leave problems for women

**3. Environmental Factors**

- a. lack of safe and sufficient water and health education
- b. poor sanitation infrastructure
- c. high cost of water in peri-urban and urban areas
- d. iodine deficiency in some areas of country
- e. poor housing in rural and urban areas
- f. inadequate vector control

**4. Health Factors**

- a. high incidence and prevalence of infections and diseases
- b. poor maternal health
- c. closely spaced pregnancies
- d. low coverage of health facilities
- e. lack of appropriate and locally available weaning foods
- f. lack of early detection of malnutrition
- g. vitamin A deficiency
- h. excessive food intake

**5. Socio-cultural Factors**

- a. lack of nutrition knowledge
- b. inappropriate malnutrition control programme (3 Food Groups)
- c. beliefs and taboos
- d. household size and intra-family distribution
- e. socio-economic status of women

**6. Other Factors**

- a. habitual attitudes such as alcoholism and prostitution
- b. no or poor planning due to data deficiency

Since the 1981/82 NSSA Nutrition Survey Module, much progress has been made in Malawi in developing nutritional surveillance. Today a number of surveillance systems are feeding information into Government decision-making at several levels in a variety of sectors. The Food Security and Nutrition Monitoring Survey system within the Ministry of Agriculture has been useful in providing data for local level planning as well as for national policy formulation in the agricultural sector (Babu and Mthindi 1994). A particularly important area for nutritional surveillance is providing data to maintain an on-going advocacy campaign to keep nutrition and household food security issues at the forefront of policy discussions and decision-making. To do this the FSNU developed a National Food Security and Nutritional Surveillance System to generate the information advocacy as well as for medium and longer term planning (Quinn 1994).

A major lesson learned in Malawi during the first half of the 1980s was the importance of having empirical data on which a scientific assessment and analysis of the food and nutrition situation could be made. Another lesson learned was how information should be presented to capture the attention of the intended audience. In the case of Malawi this was done with the use of wall maps to graphically display the data to maximize its impact. However, central to the process of discovering the country's nutrition problem was having outspoken advocates for nutrition, such as the CSR, UNICEF and the WHO, who could elicit the response and commitment from senior offices in Government, such as the SPC, that nutrition mattered and something needed to be done.

### CASE STUDY 10: The Role of UNICEF in Nutrition Planning - 1980 to 1990

From independence up until 1977 UNICEF operated its programme of assistance to the Malawi Government from a sub-regional office in Lusaka as well as the regional office in Nairobi<sup>55</sup>. In 1977 a full-time liaison officer was stationed in Lilongwe. Later in 1983 the UNICEF Malawi office was expanded with a Senior Programme officer assigned to it in addition to other international staff. By 1987 it was up-graded to a full office with Representative status.

As described in the preceding case study on nutritional surveillance, during the 1980s UNICEF was an active advocate of malnutrition and household food security issues within Malawi's donor community. From the mid-1960s through the late 1970s and early 1980s much of UNICEF's support to nutrition programmes in Malawi, however, had been limited to health and education activities and malnutrition was seen only as a technical issue resulting from low protein intake, ignorance of good eating habits as well as disease. UNICEF's support to the multi-donor Applied Nutrition and Training Programme (Case Study 3) and the Integrated Basic Services Project (Case Study 7) illustrate the traditional approach taken by the United Nations. However, with the events of the early 1980s, described in the previous case study UNICEF took on an expanded view of the country's nutrition situation which recognized malnutrition as a structural problem related not only to disease and inadequate child feeding practices but also to the access of families to food which in turn was a function of the overall impoverishment found within the country.

As discussed earlier in this section the analytical basis of UNICEF's global approach to development planning had also improved substantially in the 1980s with the introduction of the Situation Analysis. The 1983 Situation Analysis represented the first in-depth assessment and analysis in Malawi of the development issues affecting children and women in the country. Part of this process was the review of the preliminary NSSA nutrition data

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<sup>55</sup> Until the late 1970s UNICEF's regional office for eastern Africa had been located in Kampala, Uganda.

as well as the child mortality data from the 1977 Population Census. On the basis of the alarming results found which showed very high rates of child malnutrition and mortality, the internal UNICEF report stated:

**"The high mortality levels ... have definite programming implications for the Malawian situation. The impact of nutrition programmes in situations of lower mortality ... are low. However in the situation with which Malawi is confronted an intensive nutrition programme apart from improving the quality of life of the children could dramatically reduce mortality levels. As shown in the analysis of the available nutrition data ... the nutritional status of Malawian children shows alarmingly high rates of malnutrition particularly chronic malnutrition ... both in absolute terms and in comparison with other African countries ... It is an inescapable conclusion that the whole or at least the major thrust of our future programme should be directed to the area of nutrition" (Williams and Quinn 1983:2-3).**

This report was kept under restricted circulation because UNICEF realized that these conclusions would be considered highly sensitive by the Government. For example, only one year before another document on social statistics which had been prepared by the UNICEF Regional Office in Nairobi had been sent back by the Government with all reference to nutrition and migration completely removed<sup>54</sup>. Although UNICEF's internal report on the nutrition and child mortality data was never circulated outside the office, it did form the basis on which the 1984-87 programme of assistance was planned and also set the tone for future UNICEF assistance in the country in the decade to come.

As described in the preceding case study, by late 1985 UNICEF had formed an informal advocacy coalition on food and nutrition issues with the CSR. A major joint achievement of this alliance was the production of the Malawi wall maps. The next significant nutrition related work conducted by UNICEF was the preparation of the 1987 Situation Analysis of Children and Women in Malawi undertaken jointly with the Government and the CSR

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<sup>54</sup> I was personally involved with the final editing of this document.

(Malawi Government/UNICEF 1987). At that point in time a large number of research studies on issues related to nutrition, food security, women's issues and income distribution had been undertaken and reports published, many of them by the CSR (see Tables 5.6 and 5.7). This rich array of data formed the empirical basis of the 1987 Situation Analysis. Based on the picture which emerged from the analysis and review of all of this information, a Conceptual Framework of the factors affecting young child nutrition in Malawi was developed (see Figure 5.3).

The 1987 Situation Analysis begins with the following statement which clearly identifies the severity and extent of Malawi's child malnutrition and mortality problems:

**"Malawi has one of the highest child mortality figures in Africa. Infant mortality rates range from 137 to 233 across different districts in the country with a national average now estimated at 151 infants deaths per 1000 live births ... One child in three dies before the age of five. ..Malawi's high infant and child mortality reflect endemic malnutrition and widespread morbidity. Only Ethiopia, a land of ecological depletion and frequent drought, has levels of child malnutrition comparable to those in Malawi where soil and rainfall make possible food self-sufficiency at the national level"** (Malawi Government/UNICEF 1987:1).

An underlying issue of central importance in the processes resulting in child malnutrition and mortality was identified to be household food security:

**"The overall limiting factor of the amount of food a child is able to eat, however, is the availability of food in the household. The accessibility of rural households to food is determined by either home food production or cash income, or a combination of the two. Families who are unable to produce enough food because of a lack of resources, most notably land, or who are without sufficient income to purchase food to bridge the deficit of home food production, inevitably face a greater risk of malnutrition, with the youngest household members, the children, being most vulnerable"** (Malawi Government/UNICEF 1987:6).

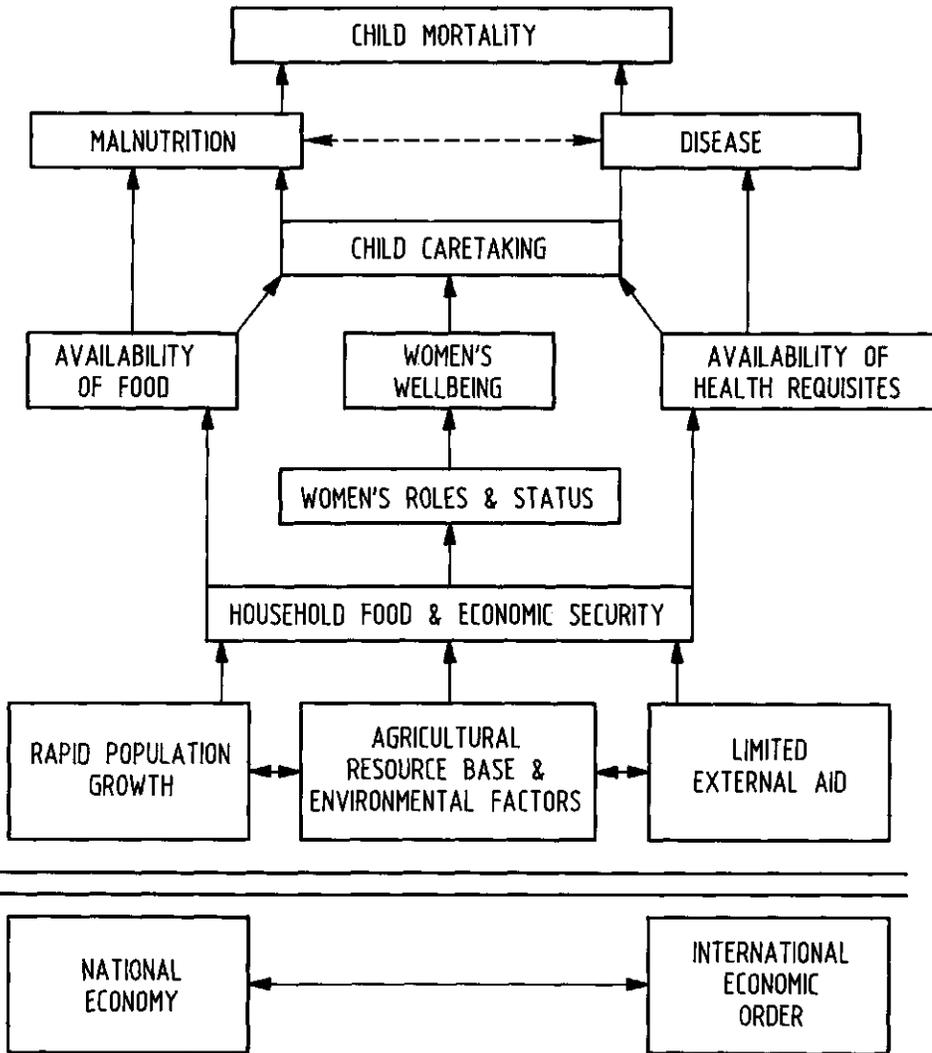


Figure 5.3: Conceptual framework of the determinants of child malnutrition and mortality - 1987

(Source: Malawi Government/UNICEF 1987a)

In addition the situation of Malawian woman was also recognized to be of central importance and the overall structure of the 1987 Situation Analysis was based on the multiple roles of women as mothers, farmers and homemakers and how these affected the nutritional wellbeing of their children.

It could be said that the 1987 Situation Analysis represented the most complete review of information on the wellbeing of children and women in Malawi which had ever been undertaken. It entailed a wide literature review of the country's university libraries, research institutions and donor offices to locate potentially useful reports and data. Today this collection of documents represents the bulk of UNICEF's documentation unit, as well as can be found in the CSR's documentation unit. Both have been widely used by donor agencies as well as researchers. Prior to the collection of these materials it had been difficult to locate relevant papers and reports on food security, nutrition and women's issues. In this respect the Situation Analysis has served as a useful reference document for those interested in these issues.

Beginning in 1991 UNICEF embarked on its most recent situation analysis as part of the 1993-1996 country programming process with the Government. However, this time the analysis had a much broader focus and looked at the overall issue of poverty in Malawi. In addition, both the Government as well as all other United Nations donor agencies were involved (Malawi Government/United Nations 1993). Over fifty professionals from Government, the University and the United Nations agencies produced the final document after two years of work which involved many meetings and working sessions. The Conceptual Framework developed by this joint Government/United Nations working group (see Figure 5.4) reflects the significant strides made in the late 1980s in the conceptual understanding of poverty in the country. Whereas only a few years before it had been unthinkable to discuss poverty since officially it did not exist in the country, by the 1990s it was possible to undertake a poverty analysis with the Government.

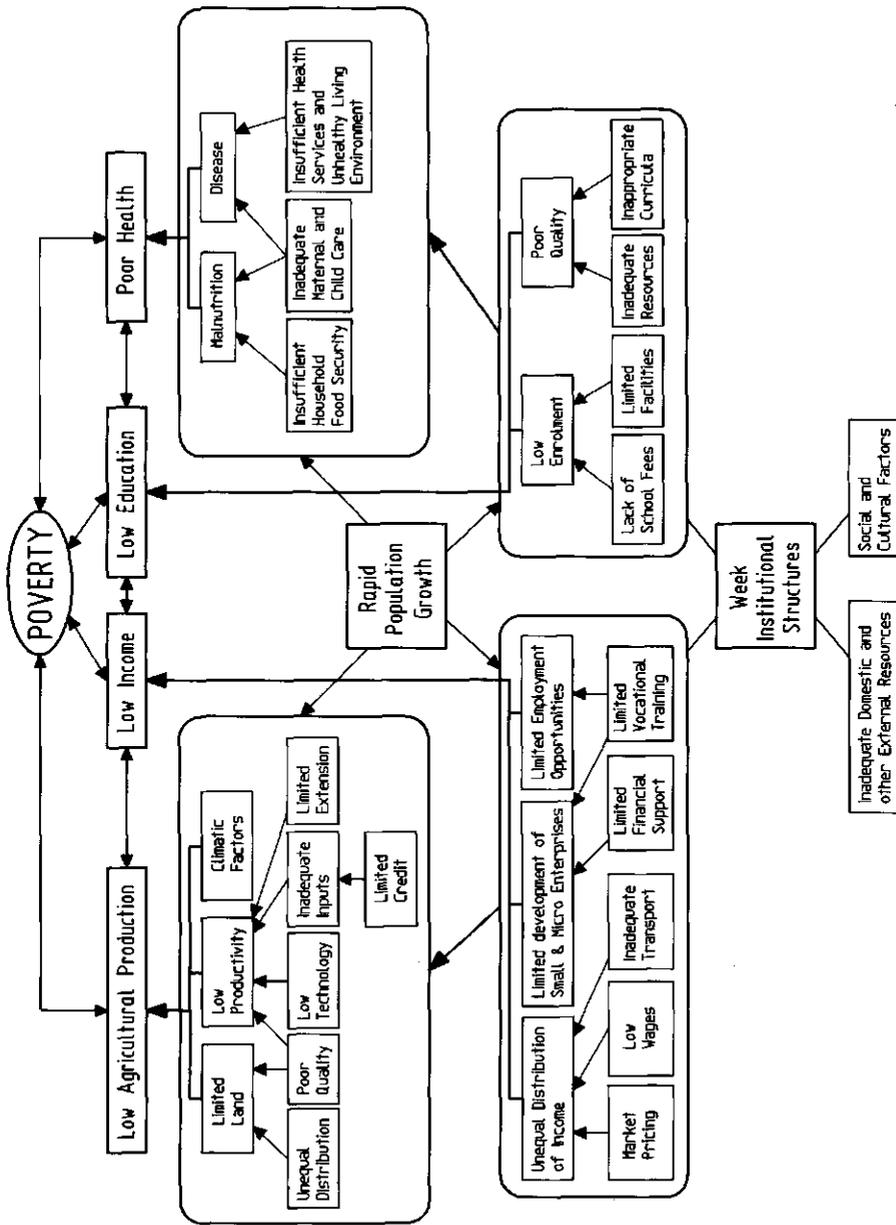


Figure 5.4: Conceptual framework of poverty in Malawi: 1993

(Source: Malawi Government/United Nations 1993)

UNICEF's growing commitment to nutrition in Malawi is illustrated in the budget figures presented in Table 5.11 below. Not only has UNICEF's total budget ceiling for all sectors more than quadrupled from an annual average of US \$780,000 between 1978-82 to US \$3,300,000 between 1993-96, but the percentage share going to nutrition has increased from less than 1 percent up to 11-12 percent from 1988 onwards.

**Table 5.11: UNICEF/Malawi annual average budget (general resources) over the period 1978 to 1996 ('000 US \$)**

	1978-1982	1983	1984-87	1988-92	1993-96
Total budget	780	1,043	1,707	1,830	3,300
Nutrition	10	1	58	200	390
(nutrition as percent of total)	(1%)	(< 1%)	(3%)	(11%)	(12%)

Sources: UNICEF 1984a, 1984b; Malawi Government/UNICEF 1987b, 1991)

The role that UNICEF played during the 1980s, along with its co-advocates the CSR and WHO, was important in focusing the attention of the Government as well as other donors on issues of malnutrition, food insecurity and poverty. In addition, the new planning strategy adopted by UNICEF in the 1980s which involved a Situation Analysis helped to institutionalize a process of assessment and analysis into their overall planning process with the Government. In time this has resulted in not only an improvement in the understanding of the nature of these issues but also has helped to create a common consensus within planning circles as to what the key development issues are in the country.

### **CASE STUDY 11: Role of the World Bank in Nutrition Planning 1980 to 1990**

From the time of independence until the present the World Bank has been one of the most influential donors in Malawi. Up to 1990 an estimated 53 projects were initiated with World Bank assistance totalling close to US \$863 million (World Bank 1990e). The percentage breakdown of this assistance includes 30 percent for structural adjustment, 20 percent for agriculture, 15 percent for transport, 14 percent for education, 10 percent for energy, 5 percent for development finance, technical assistance, industry urban housing and institutional development, 4 percent for water and 2 percent for health. As can be seen in Malawi historically the priority of the World Bank has been on macroeconomic issues, agriculture and infrastructure development. Although the support for the education sector ranked the fourth highest, the other major social sector, health, was at the very bottom and only received US \$17.6 million over this same period.

As already discussed earlier in this thesis, during the 1960s and 1970s the World Bank's planning approach in Malawi has been described by critics as weak and superficial with little attempt made to understand the country's sectoral and structural issues (Kydd and Spooner 1986; Harrigan 1991). However, this changed in the late 1970s with the start of the macroeconomic reform programme which meant that World Bank staff had to develop a much better understanding of Malawi's pattern of development. As will be seen in this case study, in the 1980s the World Bank was to become a key actor in the national policy arena and eventually assumed a leading role in the donor community in advocating that fundamental changes be made in the Government's development priorities. In particular the World Bank's view of nutrition and food issues in Malawi changed dramatically over the 1980s, however, this change would come about over a number of years. Although as early as 1983 the CSR, UNICEF and WHO had realized that Malawi was facing a serious child malnutrition problem and that household food security was a major underlying cause, it would not be until 1986 that the World Bank would finally acknowledge this.

After the start of the macroeconomic reform programme, one of the first attempts made by the World Bank to look at structural and sectoral issues in the country was the Basic Economic Mission which visited the country in 1979. A total of six World Bank reports were produced from this work<sup>55</sup>. A review of these reports shows that while the analytical basis of the work was somewhat better than before, the overall analysis was still weak and superficial. This was particularly true in regard to food and nutrition issues which were addressed in the *Basic Needs* report produced by the Basic Economic Mission (World Bank 1981b). Much of the food consumption data quoted in the *Basic Needs* report came from the UK FFHC mission's 1974 final report. However, unlike the UK FFHC's report which emphasized the issue of household food security as a major underlying cause of malnutrition, the World Bank concluded the opposite that food availability in Malawi was not a problem:

**"Average annual calorie and protein availabilities appear to be adequate, including a variety of vegetable protein sources such as (whole grain) maize, beans and groundnuts. 'Lean season' shortages, lack of adequate breast feeding supplements and weaning food, and poor food distribution within the family, appear to be major contributory causes to observed cases of malnutrition" (World Bank 1981b:33).**

It will be recalled from Case Study 5 presented earlier on the UK FFHC mission that the analysis of food consumption levels based on the 1968/69 NSSA data was somewhat problematic and produced questionable results. In their 1974 report the UK FFHC team concluded that their estimations for food consumption were probably too high to be realistic and in addition did not correspond to the poor nutritional levels found in children and adults from the same localities that the consumption data had originated. In addition, cautions had also been given by the Government Statistician in the original 1968/69 NSSA Report that

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<sup>55</sup> These six reports include: 1. The Development of the Agricultural Sector, 2. The Development of Manufacturing, 3. The Fiscal Performance of the Public Sector, 4. Employment Aspects of Economic Development, 5. The Development of Human Capital and 6. Basic Needs.

measurements of food consumption in that survey had also probably been overestimated especially for maize.

However, the World Bank staff preparing the *Basic Needs* report disregarded these warnings and used the results of the UK FFHC mission at face value to conclude that food availability was not a problem. Other food availability data from a concurrent World Bank review of the agricultural sector were also quoted in the *Basic Needs* report. These results indicated that 2,463 calories were available on a per capita basis in 1975, however, the reference for the original work of this analysis was not given (World Bank 1981b). On the basis of these per capita food availability figures and the results presented in the UK FFHC report, the conclusions presented in the *Basic Needs* report were that:

**"measures of per capita food production suggest ample availabilities"  
(World Bank 1981b:33).**

The 1981 *Basic Needs* report also cited some of the results from the Ministry of Health nutrition surveys conducted in the late 1960s and early 1970s. Although one of the Ministry of Health reports had distinctly stated that the levels of malnutrition found in Malawian children were **"amongst the highest found in similar surveys on this side of Africa"** (Ministry of Health 1969:5), this emphasis on the severity of the child nutrition problem was not included in the World Bank's *Basic Needs* report. Instead the World Bank gave more attention to the nutritional evils of soft drinks on Malawian children:

**"Workers at nutrition rehabilitation units also stressed the damage done by consumption of soft drinks by small children. Workers constantly tell of mothers bringing in small children suffering from either marasmas (*sic*) ... or kwashiorkor ... and the mother feeding the child a soft drink. The mothers feel they are doing something nice for their children, but the nutrition unit workers point out that one bottle costs as much as two to three eggs in the cities, and perhaps five eggs in rural areas"** (World Bank 1981b:35).

The 1974 UK FFHC report had presented a clear conceptualization of the multiple determinants of malnutrition including its agricultural, economic, social and health linkages. However, instead of drawing from the UK FFHC's analysis the World Bank staff who prepared the *Basic Needs* report simplified the causes of malnutrition down to soft drinks and the ignorance of mothers. In addition, based on the subjective impressions of health workers, the *Basic Needs* report concluded that nutrition may have even been improving in recent years:

**"talking to medical personnel, it would appear that there are fewer cases of malnutrition now" (World Bank 1981b:35).**

Reflecting the technical nutrition planning school and its magic bullet approach to curing malnutrition, the authors of the *Basic Needs* report concluded that Malawi's malnutrition problem could probably be solved through routine health and nutrition programmes:

**"Much of Malawi's malnutrition problem appears amenable to relief through education and government preventative health programs" (World Bank 1981b:ix).**

The next World Bank mission to look at nutrition issues was conducted one year later in mid-1982 when a staff appraisal mission visited the country to prepare Malawi's first Health Project (World Bank 1983). The report from the health appraisal mission noted the very high level of underfive mortality which was higher than other eastern and southern African countries. They also explicitly recognized the link between malnutrition and mortality. However, similar to the 1981 *Basic Needs* report, the nutrition analysis contained in the report of the 1982 health appraisal mission was superficial. In fact the final comments given on nutrition had been essentially copied from the *Basic Needs* report:

**"Nutritional information is sparse and generally out-dated; data from a national agricultural survey should be available for analysis early in 1983. It would appear, however, that 'lean season' shortages, lack of**

**adequate breast-feeding supplements and poor intra-familial distribution, rather than inadequate food availability, are the major causes of malnutrition" (World Bank 1983:4).**

However, had the health appraisal mission investigated more fully they would have discovered that more data were available than they indicated. For example, at that point in time the results of the 1979 pilot NSSA nutrition survey were available which showed the major problem to be inadequate calorie intake, with levels being 64 to 72 percent of nutritional requirements, as well as high rates of malnutrition with 32 percent of children being underweight. In the 1979 pilot survey the protein content of the maize based staple diet had also been found to be adequate. Also, at that point in time clinic-based nutrition data on the levels of underweight children were available from the Ministry of Health as part of their health facility based nutritional surveillance system. However, although data were available, albeit on a limited basis, none of this information was sought out by this World Bank mission.

In regard to nutrition interventions the 1982 health appraisal mission recommended that oral rehydration, growth monitoring and nutrition education **"would probably contribute significantly towards alleviating nutrition-associated problems"** (World Bank 1983:4). Again the substantive view of malnutrition held by the World Bank was that it was a technical problem which could be solved, in this case by a package of interventions along the lines of the then popular UNICEF GOBI-FFF strategy. The 1983 Health Project had a two-year budget of US \$8.7 million, however, there was no line item for nutrition in the overall budget presented.

The next World Bank team to look at nutrition issues was the Agricultural Marketing and Food Security mission which visited the country in October/November 1985. By this time much data existed on food security and nutrition issues as shown in Table 5.7. The 1981/82 NSSA nutrition data had already been released for close to a year in the NSSA

statistical report. In addition, the Malawi wall maps had been distributed just one month before the arrival of this World Bank mission. Copies of the wall maps had also been sent to the Population, Health and Nutrition section of the World Bank's headquarters in Washington D.C.. Also a number of the CSR's reports linking malnutrition and household food production had been released by late 1985. Although not yet published some further analyses were being undertaken at that point in time of the 1981/82 NSSA nutrition data by the CSR and Cornell University which had begun to shed more light on the socio-economic characteristics of nutritionally vulnerable groups within the smallholder agricultural sector (Centre for Social Research 1988a).

During their visit the Agricultural Marketing and Food Security Reform Mission was able to meet staff from the CSR, Cornell and UNICEF to discuss nutrition and food security issues as well as obtain relevant research reports. As a result of these consultations as well as the many studies now available at that point in time this World Bank team was much better informed on food and nutrition issues than earlier missions, as reflected in the following quote taken from their final report:

**"Having demonstrated the ability to grow enough maize to feed itself, Malawi needs to next address the problem of ensuring that everyone receives at least the minimum food requirements. Presently there is a serious nutrition problem, particularly as manifested by the health status of children. Although the country has been self-sufficient in food crops since about 1975, even exporting some maize, rice and groundnuts, over 30 percent of children die before they reach the age of five and 50 percent are stunted by malnutrition and disease. There is evidence that national efforts in securing adequate food supplies on an aggregate basis have not resulted in adequate diets for all. A food security plan could address the problems associated with inadequate access to food" (World Bank 1986a:51).**

In addition, it also needs to be noted that a member of this mission, Dr S. Reutlinger, was one of the main authors of a World Bank Food Security Policy Study entitled *Poverty and Hunger: Issues and Options for Food Security in Developing Countries* which was

published that same year in 1985 (World Bank 1986b). Including this individual in the 1985 Agricultural Marketing and Food Security mission tends to suggest that the World Bank had begun to realize that a closer look was needed of the country's food situation since evidence was mounting which indicated that Malawi was not the food abundant and prosperous country its international reputation had led the world to believe. Also, it was the past praise from donors such as the World Bank on Malawi's development performance which had helped to prop up this image of the country as an African success story.

For seventeen years the World Bank had been supporting rural development in Malawi mainly in the form of agricultural projects (see Case Study 6). However, this was the first time that the World Bank made the connection between the country's malnutrition problem and the issue of inadequate access to food. In order to redress the World Bank's previous misdiagnosis of Malawi's nutrition situation as solely a health and education problem, the report from the Agricultural Marketing and Food Security mission contained the following statement:

**"A clear distinction needs to be drawn between problems arising from lack of nutrition education and health services and problems associated with low family income and scarcity of or high prices for essential basic foods" (World Bank 1986a:52).**

This quote marked the beginning of the change in the World Bank's view of malnutrition in Malawi from being seen as a technical problem of health and education to being seen as a structural problem related to the access of households to basic resources such as food as well as to the issue of poverty. Apart from the improvements in the data base available on food and nutrition issues at that point in time in Malawi which helped to stimulate this change of opinion and in addition to the advocacy of other United Nations donors such as UNICEF, at the global level the World Bank was also paying more attention to the issues of food security, hunger and poverty, as evidenced by their international policy publications (World Bank 1986b).

The next World Bank team that looked into nutrition issues was the appraisal mission for the second Family Health project. This mission visited the country in late 1985 only one month after the Agricultural Marketing and Food Security mission. Compared to the high quality of the analysis presented in the Agricultural Marketing and Food Security mission, the Family Health project mission's report was noteworthy for its lack of analysis as well as for the totally inappropriate nutrition interventions which were recommended.

In their final report published in early 1987, the second Family Health appraisal team remarked that the level of child malnutrition in Malawi was the highest in eastern and southern Africa. They also explicitly recognized that the nutrition problem in Malawi was one of too little food which probably reflected the findings of the Agricultural Marketing and Food Security mission conducted just one month earlier:

**"Since the nutrition problem in Malawi is primarily one of shortage of food, changes in agricultural policy are likely to have a greater impact on nutrition than specific nutrition program interventions. Nevertheless, other necessary nutrition activities are included in the proposed project"**  
(World Bank 1987b:6).

Despite making the important association between malnutrition and access to food, the Family Health appraisal mission made no further effort to investigate the nutrition issue in Malawi, especially what interventions could be tried in the health sector. It was as if the final recognition of the food security determinants of malnutrition had absolved the Family Health mission of any responsibility to deal with nutrition matters. Although it is true that changes in agricultural policy would be necessary to improve household food security, on their own agricultural interventions would not be sufficient for improvements in nutrition to take place. This is because other mediating factors apart from food availability within the household, for example intrafamilial food distribution, child caretaking and feeding practices and health levels, all combine to determine the nutritional status of an individual. However, the mistaken view of this Health Project mission was that in light of the large

food shortage dimension of the problem not much could be done within the health sector to combat malnutrition.

The Family Health project mission report began the section on nutrition with the statement that "**nutritional information is sparse and generally outdated**" (World Bank 1987b:6). In fact these were the exact words used by the appraisal mission for the first Health Project in 1982. However, as shown by the number of surveys conducted and the reports which existed by the end of 1985 (see Tables 5.6 and 5.7) this statement was simply not true. In addition, by the time their final report was released in early 1987 even more information on food and nutrition was available in Malawi. It appears that the members of the second Family Health project were not sufficiently interested in nutrition to dig into the available literature on this issue.

Had they taken the time and made the effort to investigate it would have been obvious to them that a substantial amount of information existed on nutrition and household food security. For example, the NSSA nutrition data, which the Family Health Project mission did quote, were still relatively recent since the nutrition module had been carried out in 1981/82. In addition, a substantial amount of field data on nutrition and household food security conditions in different localities in the country had been collected as part of the CSR's evaluations of the nutrition education and IBS programmes (Msukwa 1983, 1985). The CSR had also released a major report entitled *Food Production and Malnutrition in Malawi* in April 1985 (Ettema and Msukwa 1985). In this report the CSR illustrated the problem of household food security by quoting data collected in 1983 in Liwonde ADD on household food production, income and landholding characteristics. These data are shown below in Table 5.12.

**Table 5.12: Some agro-economic data on food production, income and farm size in Liwonde ADD in 1983**

	Farm size category (hectares)						All
	< 0.5	0.5 - 1.0	1.0 - 1.5	1.5 - 2.0	2.0 - 2.5	> 2.5	
agricultural income (MK)	36	84	148	213	272	397	107
% food balance covered	37	75	116	139	174	254	92
% of households	29	38	19	8	3	3	100

Definitions: Income is the total value of agricultural production less production costs. Food balance compares food requirements with own-farm food production, with both seen in terms of calories.

Source: Obtained from Ettema and Msukwa 1985 as quoted from LWADD 1983.

The point made by the CSR in their report was that at least in Liwonde ADD farmers with less than 0.5 of a hectare and between 0.5 to 1.0 of a hectare were only able to produce enough food to cover 37 and 75 percent of their families' food requirements, respectively. Close to one third of all farm families fell into the first landholding group, with close to 40 percent falling into the second category. The low income levels shown, between MK 36 to 84 per year also suggested that purchasing power for these smaller smallholders was also limited. The picture presented by the CSR in their report showed a serious problem of household food security in Liwonde ADD. However, as the CSR also noted "**small holdings producing insufficient food are, of course, not a phenomenon restricted to Liwonde ADD**" since over 55 percent of all holdings in the country were smaller than one hectare, therefore, the problem was not only serious but also widespread (Ettema and Msukwa 1985:48). This information could have been used by the second Family Health mission to illustrate the extent of the food security dimension of Malawi's child malnutrition problem, especially in describing those socio-economic groups who appeared to be most vulnerable.

Findings from other nutrition related studies were also available at the end of 1985 which could have also been used by the 1985 Family Health mission. One study was that conducted by staff at the Bunda College of Agriculture's Human Nutrition Department (Chimwaza 1982). This study showed that calorie intakes were extremely low in relation to recommended requirements, ranging from 46 percent for children 1-4 years, 74 percent for pregnant and lactating women and 84 percent in men. The protein content of the diet, however, was found to be adequate if enough food was eaten to satisfy energy requirements. Levels of child stunting were also found to be high at 64 percent. This information could have been used to emphasize that calorie intake not protein was the most limiting factor in Malawian diets. However, neither this nor any of the other numerous studies which existed appeared to have been used by the second Family Health project appraisal mission despite the fact that these reports were available from the CSR, UNICEF and WHO.

The second Family Health Project had a total budget of US \$25 million over a six year period. Out of this US \$57,000 per year, or about 1 percent of the total, was allocated to nutrition interventions. The types of nutrition interventions recommended by the 1985 appraisal mission included nutrition education and the building of fish ponds to provide dietary protein to rural villages:

**"training women's groups to undertake nutrition surveillance and related nutrition education and introduction of fish ponds to provide protein for mothers and children at the village level. The project would finance the development and production of IEC materials, training CDAs and the construction of fish ponds in 150 village communities. Fish from the ponds would provide much needed protein for mothers and children" (World Bank 1987b:31).**

Whereas the protein deficiency theory had been rejected at the global level in 1974, this World Bank mission had identified combatting protein deficiency as their main nutrition

intervention in Malawi. This was incongruous considering that ample evidence existed in the country to show that calories not protein was the major limiting factor in the diet.

A strong argument could be made that this World Bank mission simply did not consider nutrition to be important enough to warrant more careful analysis and treatment. Rather the problem of malnutrition was dealt with in a superficial manner which reflected the low priority being given to this issue. As mentioned earlier the recognition that food availability was a major problem and that changes in agricultural policies would be required seemed to serve as a cue for the Family Health appraisal mission to absolve themselves of the responsibility to substantively address the issue of malnutrition in their health programme. A holistic view of malnutrition recognizing that interventions are required on many fronts (*e.g.* household food security, child care and feeding as well as health and sanitation) and at several levels (*e.g.* the child, family, community and upwards to the national policy arena) was beyond the thinking of this World Bank appraisal mission.

Fortunately this superficial treatment of nutrition was not continued in subsequent World Bank work in Malawi. From 1987 onwards the quality of the analysis undertaken by World Bank staff steadily improved in regard to the conceptualization of the malnutrition problem and its determinants. In addition the World Bank's overall view of development and poverty had also significantly improved at this point in time. The poor performance of the smallholder sector had led to greater introspection on the part of the World Bank in the second half of the 1980s. This led to a major review of the NRDP which included examining the data which had been collected by the monitoring and evaluation units of the country's eight ADDS. In addition at this same point in time a major research study was undertaken by World Bank staff in Washington D.C. on 'Managing Agricultural Development in Africa' (MADIA) in which Malawi had been selected as a study country (Lele 1991)<sup>56</sup>. The MADIA study looked at agricultural development issues such as

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<sup>56</sup> The MADIA project was started in 1984 to look at the World Bank and other donor's performance in agricultural development after two decades of experience (Lele 1991).

domestic policies, the external economic environment and the impact of donor assistance, in addition to the effect of growth on incomes, employment and consumption. A number of reports on Malawi and agricultural development were published which added to the growing knowledge base on the constraints in agricultural development especially in terms of the poor performance of the smallholder sector (Lele 1989a, 1989b; Lele and Meyers 1989). Several other MADIA research papers on Malawi were produced which dealt with the political economy of agriculture policy formulation (Christiansen and Kydd 1990) as well as the performance of the World Bank in agricultural development (Kydd and Spooner 1986). Both of these research studies have been extensively used in this present thesis (See Case Study 6).

Interest in nutrition and food security issues continued to gain momentum in the latter half of the 1980s. In addition, attention to these issues escalated sharply in 1987 and 1988 due to the national food crises encountered at that time. In early 1988 a decision was made to hold a National Symposium on Agricultural Policies for Development, similar to the other high level meetings of this type organized through the office of the SPC. Jointly sponsored by the Malawi Government and the US Agency for International Development, a number of key papers addressing the issues of food security and nutrition were presented including some by World Bank staff as well as other donors such as UNICEF (Carr 1988; Quinn, Chiligo and Gittinger 1990).

From early 1988 and until mid 1989 a flurry of Bank missions visited Malawi to undertake in-depth policy studies on nutrition, human development, food security and poverty issues. The reports produced from these missions were of a much higher calibre than the previous generation of World Bank analyses. In addition, there was much more cohesiveness in the analyses being undertaken by the World Bank even across different sectors. A review of the following reports released from 1989 to 1991 shows that a common consensus had emerged within the World Bank that Malawi was facing serious problems specifically in terms of malnutrition and food insecurity as well as more generally in regard to the

underdeveloped human resource base and the serious poverty found throughout in the country:

- \* NRDP: Technical Issues Review (World Bank 1989a)
- \* Human Resource Development (World Bank 1990a)
- \* Food Security (World Bank 1990b)
- \* Growth Through Poverty Reduction (World Bank 1990c)
- \* Women in Development (World Bank 1990d)
- \* Agricultural Sector Adjustment Programme (World Bank 1990e)
- \* Population Sector Study (World Bank 1990f)
- \* Population, Health and Nutrition Credit (World Bank 1991)

Of these many different World Bank missions perhaps the most significant in terms of improving the Bank's understanding of the substantive issues related to nutrition, household food security and agricultural development was the technical issues review of the NRDP which was undertaken in 1988 (World Bank 1989a). Upon arriving in Malawi the author of this review undertook an informal field survey which included many interviews with smallholder farmers. Following this field orientation, an in-depth review was conducted of data from the monitoring and evaluation units of each of the eight ADDs to determine smallholder resource characteristics especially the constraints to smallholder production and the poor performance of the NRDP. The final report on the NRDP Technical Issues Review mission concluded:

**"The result of the combination of small farm size, shortage of plant nutrients and low cash incomes, is seasonal under-nutrition of many poorer adults and chronic malnutrition of half of Malawi's rural children. This in turn contributes to the exceptionally high child mortality rates in Malawi. (The Situation of Children and Women in Malawi G.O.M. and UNICEF 1987)" (World Bank 1989a:6).**

As is evident good consultation had taken place during this mission with the UNICEF office and much use was made of the 1987 Situation Analysis of Children and Women in Malawi. The NRDP Technical Issues Review identified a major problem to be that the

majority of the country's rural population had been overlooked in the agricultural development strategy:

**"Past agricultural initiatives have, often inadvertently, favoured those with above average assets, and had little or no impact on the majority of resource poor farmers. Government policy is to expand the benefits of agricultural research, extension and credit to all smallholders. In order to do this there will have to be substantial changes in strategy from previous initiatives and some quite fresh interventions targeted especially at those families with less than 1 ha. of land who are most in danger of being caught in a poverty trap" (World Bank 1989a:28).**

Table 5.13, shown below, was presented in the report on the NRDP Technical Issues Review to illustrate the food insecurity faced by the majority of the country's farm families, especially those with less than one hectare.

**Table 5.13: Percentage of households in three holding size categories and percentage of calorie requirements being satisfied from own-farm production after the 1985/86 harvest<sup>a</sup>**

ADD	Percent of households:			Percent of calorie requirement:		
	< 0.5 ha	0.5 - 1.0 ha	1.0 - 1.5 ha	< 0.5 ha	0.5 - 1.0 ha	1.0 - 1.5 ha
Karonga	35	37	14	31	71	110
Mzuzu	14	29	29	40	86	153
Kasungu	12	20	21	39	104	142
Lilongwe	20	8	23	25	61	105
Salima	26	34	19	31	59	84
Liwonde	32	34	21	20	51	86
Blantyre	47	32	12	35	74	107
Ngabu	40	32	17	19	37	55

<sup>a</sup> Lilongwe ADD data from 1984/85 harvest

Source: World Bank 1989a

Since household food production is only one aspect of food security, the NRDP review also investigated income levels. The final report concluded that despite some problems with the quality of the available data on income levels, **"they do indicate the low levels of earnings of families which suffer from a land shortage and produce no crops for the market, and which consequently have inadequate resources to meet their basic food requirements."** (World Bank 1989a:6).

Apart from illustrating the problem of household food security in rural areas, the information contained in Table 5.13 also illustrates the type of data which had been collected over the years by the monitoring and evaluation units in each of the ADDs. The CSR had made use of similar data from Liwonde ADD in their 1985 report on food production and malnutrition (see Table 5.12 above) (Ettema and Msukwa 1985). During the 1970s and the early 1980s the sole focus of data collection and use in the ADDs had been on monitoring aggregate production levels with little concern given to describing the socio-economic and resource characteristics of different groups of farmers within the smallholder sub-sector (see Case Study 6). In the late 1980s the value of these data in describing the heterogeneous nature of the smallholder sector and the constraints faced by these different types of farmers was finally appreciated. Subsequently much use was made of these data for future policy analysis especially that concerning agricultural development and poverty (World Bank 1990c; 1990e).

When the first draft of the NRDP Technical Issues Review report was presented in the World Bank's Washington office at the back from mission briefing close to 65 persons were present, which was far more than the small numbers who usually attended these routine de-briefings<sup>57</sup>. Senior staff were at first skeptical of the findings which contradicted Malawi's success story image in food production and suggested that the statistics might be inaccurate and misleading. A recommendation was made that a statistician should conduct further work on the data sets in Malawi. However, after the

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<sup>57</sup> Personal communication with S. Carr on 6 October 1991. Mr. Carr was the author of the NRDP Technical Review.

subsequent analyses were completed the findings provided an even stronger case of the chronic poverty found in rural areas and how past World Bank supported agricultural development efforts had only benefitted a relatively small number of better-off farmers.

Reports from other World Bank missions which visited the country in 1988 and 1989 also contributed to the picture which began to unfold of the true nature of poverty in Malawi which was marked by very low levels of human resource development (World Bank 1990a, 1990b, 1990c, 1990d, 1990e, 1991). Also by that point in time the same World Bank teams were working on the Malawi programme. This resulted in more consistency in both the analysis undertaken as well as the recommendations made.

In late 1989 a World Bank mission visited Malawi to prepare a Population, Health and Nutrition Health (PHN) Sector Credit to cover the period 1990-95. The Aide-Memoire prepared after the first visit of this team noted in no uncertain terms the structural nature of the malnutrition problem:

**"Malnutrition in Malawi is first and foremost a problem of household food insecurity; little progress can be expected in reducing malnutrition and associated diseases through traditional nutrition interventions unless food insecurity at the household level is reduced" (World Bank 1989d:9).**

This view of malnutrition was vastly different to that held by the earlier two World Bank health missions conducted in 1982 and 1985. The budget for the PHN Credit totalled close to US \$74 million over five years. Nutrition accounted for 5 percent of the total budget with an average annual expenditure of close to US \$750,000. This is nearly 13 times greater than the budget line allocated for nutrition by the 1985 second Family Health project (World Bank 1987b). The major nutrition activities within the PHN credit included support to community-based nutrition and household food security programmes and assistance to strengthen local institutional capacity, for example Bunda College of Agriculture's nutrition programme to carry out evaluations of these community-based programmes. In addition,

substantial financial support was also earmarked for combatting micronutrient deficiencies especially iodine and iron.

In March 1990 a credit for an Agricultural Sector Adjustment Program (ASAP) was prepared by the World Bank which totalled US \$70 million (World Bank 1990e). The substantive basis of the agricultural policy reforms and conditionalities of the ASAP came from the work and recommendations of the 1989 NRDP Technical Issues Review. Emphasis was given to improving the situation of the smaller smallholders, especially those with less than one hectare of land. Whereas the IRDP and NRDP project documents prepared by the World Bank in the 1960s, 1970s and early 1980s had never paid much attention to malnutrition, household food insecurity and poverty, the ASAP report, which was signed by the President of the World Bank, stated in its introduction:

**"Malawi is one of the poorest countries in the world, with a per capita income of about US \$160. As a result of these circumstances, about half of the population lives below the level of absolute poverty, with a per capita income of less than K100 (US\$36) annually, which is insufficient to ensure the minimum nutritional requirements and other basic household needs. About 85% of the population living below absolute-poverty levels consists of smallholder farmers with less than one hectare of land (some 55% of all smallholders). Chronic food shortages and serious malnutrition are widespread, exacerbated by poor health services" (World Bank 1990e:2).**

By the end of the 1980s a common understanding had evolved among the donors in Malawi, especially within the United Nations agencies, of the nature of the development issues facing the country, namely nutrition, household food security, human resource development and poverty. In recent years the actions taken by the World Bank in Malawi have provided evidence of their strong commitment to address issues of poverty and inequity. Whereas during the 1960s and 1970s poverty alleviation received only lip service from the World Bank, by 1990 it had become the core theme of the Bank's assistance to the Government. In March 1990 the World Bank released a policy framework paper

entitled *Growth Through Poverty Reduction* which outlined a comprehensive strategy to address the underlying causes of poverty, namely: limited employment opportunities, complicated by labour constraints for female headed households, low agricultural yields, limited human resources, rapid population growth and minimal income transfers (World Bank 1990c). By May 1990 the Government had agreed to accept this poverty reduction framework as the basis of their future development policies and strategies.

As a result of the conditionalities attached to policy based loans, the influence of the World Bank in national policy formulation also increased considerably during the 1980s as compared to the 1960s and 1970s. The financial leverage provided by these conditionalities has meant that the World Bank, along with the other large financial donors, has taken on the role of watchdog in the country's policy arena and is in the position to exert pressure that certain reforms be taken which might not otherwise be pursued on a voluntary basis by the Malawi Government. One example of this influence in the Government's policy arena was the adoption of the growth through poverty reduction development strategy discussed above. Only a few years before this poverty alleviation strategy would have been unthinkable in Malawi since officially poverty did not exist and was not allowed to be discussed.

In addition, not only has increasing attention been given by the World Bank to nutrition issues in Malawi, but this interest has also been apparent at the global level during the late 1980s and early 1990s as evidenced by the increasing trend in the World Bank's overall lending to nutrition activities. For example, while in 1988 and 1989 the World Bank was only supporting one significant nutrition operation, in 1993 and 1994 there were 18 such nutrition operations around the world<sup>58</sup> (Berg 1993; ACC/SCN 1991a). Therefore, it would appear that part of the increased attention being given to nutrition issues in Malawi was also related to the World Bank's increasing commitment to nutrition globally.

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<sup>58</sup> Significant nutrition operations are those which are free standing lending programmes only for nutrition or programmes in which nutrition is the major theme.

### **5.3.5 Fulfillment of the four prerequisites**

In order to test the hypothesis of this thesis that nutrition planning has not been successful in Malawi the fulfillment of each of the four prerequisites identified as being essential for planned development will be reviewed below for the period from 1980 to 1990. These four prerequisites include: 1.) whether mutually agreed objectives existed, 2.) whether the political will existed, 3.) whether the planning theories used were appropriate and 4.) whether the means and capacity to take action existed.

#### ***Objectives***

Up until 1988 the national policy framework in Malawi was still guided by the NRDP approach which was solely concerned with increased agricultural production and omitted any reference to nutritional or human welfare objectives. By the mid-1980s the understanding of the country's development problems had begun to improve as the result of the closer look being taken of structural and sectoral issues under the macroeconomic reform programme which now existed. In addition, more empirical data also became available to describe the serious state of human underdevelopment including foremost the high levels of child malnutrition and mortality. The improved analysis and expanded data base eventually led to a reformulation of the Government's development strategy to include human welfare objectives. The release of DEVPOL II in 1988 signified the start of a new era of attention being given by the Government to social conditions and human welfare issues. However, even in DEVPOL II the issue of malnutrition received scant attention and continued to be viewed solely within the context of health and education. In addition, no where in DEVPOL II was mention made of the severity of the malnutrition problem and in addition the issues of household food security and poverty were also bypassed. The policy environment was still not ripe to directly confront these issues because of political sensitivities.

However, in 1990 two significant policy events occurred in regard to nutrition, household food security and poverty which placed these issues as central objectives on the country's

future development agenda. The first was the Government's acceptance of a growth through poverty reduction development strategy which had been recommended by the World Bank in early 1990 (World Bank 1990c). The second major event was the release in late 1990 of the National Food Security and Nutrition Policy Statement by the FSNU in the Office of the President and Cabinet (Malawi Government 1990b). Whereas from 1964 until the late 1980s the problems of food insecurity and poverty officially did not exist in the eyes of the Malawi Government, by 1990 these issues were finally recognized as among the most important development issues facing the country. However, without the strong encouragement of certain donors, it is unlikely that such major changes would have occurred since, as will be discussed below, the political sensitivities surrounding these topics still existed up to the end of the 1980s.

### *Political Will*

Political sensitivities regarding malnutrition, food insecurity and poverty continued in Malawi throughout the 1980s. Laslett (1984) has documented certain events which reflect the high degree of political sensitivity regarding food self-sufficiency issues within the Government's policy environment during the early 1980s. According to Laslett as a result of the poor harvest of 1981 a group of civil servants had anticipated the potential severity of the maize shortfall and had gone ahead on their own accord and ordered food imports. Not long afterwards Dr Banda gave a speech at the official opening of Lilongwe's modern new supermarket which had been abundantly stocked with plenty of food and drink. At the opening Dr Banda proclaimed Malawi's achievements in feeding herself even though all the audience realized that the country was in the grips of a severe food emergency:

**"Evidently he (*Dr Banda*) did not know that those shelves had been filled by special deliveries from distant surplus areas, normal movements from which had been embargoed, for fear of the shortage spreading. Nor did he seem to anticipate that the members of the crowd would empty the shop of maize in minutes after he had opened it. Finally he reiterated a phrase which had become a keynote of his speeches, and one which would weigh heavy on the next few months. "Malawi is self-sufficient**

**in food, and we do not depend on gifts from the United States of America" (Laslett 1984:385).**

Once they heard these statements by the Life President, the civil servants canceled the food aid imports they had ordered. Food shortages subsequently occurred and famine hit some areas of the country. The situation intensified in urban areas where food riots took place at the maize depots by hungry customers unable to find any food to buy. When Dr Banda heard of the food riots, it appears that he immediately authorized the importation of maize, however, in many areas this relief came too late to avert hunger. The bottom line was that civil servants were afraid to contradict the Life President and reversed their decision to import food even though the price paid would be high in terms of human suffering.

However, from the mid 1980s onwards in the bureaucratic ranks of the civil service a more realistic and honest view of the country's development situation began to slowly emerge. In time this led to a greater willingness on the part of Government civil servants to address certain development issues previously considered taboo. This more open view was the result of several factors. First sensitive issues such as malnutrition and food security had begun to be desensitized by the SPC through the national symposiums he organized on such topics from 1986 to 1988. In addition, around this time a better understanding of sectoral and structural issues had also begun to develop within both the donor community and the Government. This was partially the result of the policy analysis being conducted to prepare certain aspects of the macroeconomic reform programme and partially the result of the expanding data base arising from research studies as well as such initiatives as nutritional surveillance. In addition, the donors also began to play a more active role in the Government's planning arena because of the advent of policy-based loans and attached conditionalities. Under the guidance of the SPC the technocratic element within the civil service became more aware of the issues. The release of DEVPOL II and the subsequent release of the National Food Security and Nutrition Policy Statement as well as the acceptance by the Government of the growth through poverty reduction strategy signified firstly the growing acceptance within the civil service that the country was facing serious

problems of food security, low levels of human development and endemic poverty and secondly the willingness that something needed to be done.

However, unlike the more honest bureaucratic view, up until the very end of the 1980s the country's politicians continued to espouse the political rhetoric that Malawi was thriving and food self-sufficient even despite the accumulating empirical evidence which strongly showed otherwise. For example, a major propaganda campaign was launched in 1993 by the Malawi Investment Promotion Agency of the Office of the President and Cabinet in the international magazine *Newsweek* in order to attract potential investors to the country. This glossy eleven page advertisement included a letter from the Life President which repeatedly stated that the country was food self-sufficient. The following picture of Malawi was presented in this advert to the outside world:

**"Everywhere the traveller passes through pleasant rural villages, full of healthy-looking, cheerful people. It is difficult to recall that this was once "Nyasaland", one of the most backward regions in all Africa" (*Newsweek* Malawi Insert 1993:3).**

This advertisement also cited United Nations data on Malawi's low levels of development. However, the following response was given by the Office of the President and Cabinet to explain that these statistics misrepresented the successes achieved by the country's leadership:

**"While Malawi ranks 13 out of 50 African nations in food self-sufficiency, its low GDP per capita ranking (as one of the 'least developed nations' according to the UN development index) fails to adequately convey the extent to which Malawi's people are self-sufficient, living on and feeding themselves from their own land. This self-sufficiency is a recent development. Before independence, agriculture in the country was in a very primitive state" (*Newsweek* Malawi Insert 1993:4).**

It is difficult to know whether the Life President was actually aware of the malnutrition, food insecurity and poverty situation in the country. This no doubt will probably always remain a mystery, however, some speculation can be made. Although it is not known whether Dr Banda actually ever saw the 1980/81 NSSA malnutrition data or the wall maps which were produced in 1985, it is known that a copy of the Report of the 1986 Principal Secretaries Symposium on Nutrition and Development was provided to him by the WHO office<sup>59</sup>. A review of the files in the Government Records Office shows that in the early 1980s much of the crop situation data was provided to him at regular intervals either verbally through meetings with senior agriculture officials or through written loose minutes. For example, during the poor harvests of 1980/81 and 1981/82 the fortnightly Crop Reports compiled by the Ministry of Agriculture were sent to the Life President on a regular basis<sup>60</sup>. Copies of the reports on the severe localized famine which resulted in 600 deaths in early 1970 in Mchinji and Lilongwe districts had also been sent to Dr Banda. However, others have argued that only good news was reported to the Life President by his ministers (Giles 1979; Laslett 1984; Gulhati 1989). In addition, according to Pryor (1990) in an interview he had with Dr Banda in 1987, the Life President did not appear worried about the issue of poverty and quickly dismissed the suggestion that it was increasing<sup>61</sup>.

In regard to measuring the level of political will, the actions taken by the Government provide an indication of commitment. For example, despite the continued sensitivities on malnutrition, food insecurity and poverty at the political level and the perpetuation of the facade that Malawi's people were prosperous and thriving, a number of actions were taken by the Government civil servants during the 1980s which reflected their growing acceptance that these were issues which needed to be addressed. The fact that the Government agreed to carry out the 1981/82 NSSA Nutrition Module Survey and proceed with the development of nutritional surveillance activities provides an example of this willingness early in the

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<sup>59</sup> Personal communication with the WHO representative in 1989.

<sup>60</sup> Government Record Office File No. 9-6-2F/39479 on 1980/81 Food Situation, Zomba.

<sup>61</sup> This was the impression given to Pryor during his 1987 interview with Dr Banda (Pryor 1990).

1980s. However, on the other hand most of the nutritional surveillance work undertaken was heavily donor supported, both from a technical and financial standpoint, so the actual cost to Government was in fact small. The fact that the Government established the Food and Nutrition Unit in the Ministry of Agriculture in the late 1970s and more recently the FSNU in the Office of the President and Cabinet in 1987 provide additional examples of the Government's support for nutrition issues. The actions taken by the SPC in the mid 1980s to organize high level symposiums to discuss malnutrition and other development issues also reflects the commitment which existed in that senior Government office at that point in time. The agreement of the Government at the May 1990 Consultative Group Meeting in Paris to adopt the World Bank's proposed growth through poverty reduction strategy and the release of the National Food Security and Nutrition Policy Statement provide more recent evidence of the Government's commitment, at least on paper, to address malnutrition, food insecurity and poverty.

A good measure of the true extent of the Government's commitment to poverty alleviation and human resource development is whether or not more resources have been allocated to nutrition, food security and poverty programmes. The evidence on hand, discussed earlier in Chapter 3 (see Figure 3.1), suggests that the Government has in fact followed the recommendations proposed by the World Bank in their growth through poverty reduction strategy and have allocated a greater share of the budget to the social sectors (World Bank 1990c). This increased budgetary allocation has been achieved at even higher levels than originally planned (World Bank 1989d).

In terms of the donors the 1960s and 1970s were characterized by not only a misdiagnosis of the country's development achievements but also by a general lack of political will to address poverty related issues which perhaps can best be described as benign neglect. However by 1990 the political will definitely existed in the donor community to address the problems of malnutrition, hunger and poverty. As described above some donors, for example UNICEF and the World Bank, have allocated a greater amount of their resources

to nutrition programmes. Another major donor for nutrition, the World Food Programme, has also increased its overall budget for the non-emergency Vulnerable Group Feeding Project from US \$1.6 million per year between 1984-88 to US \$5.2 million per year between 1989-91 (WFP 1991:Annex VI). Support to household food security has also been substantially increased by such big donors as the World Bank, USAID and the European Economic Commission. Reflecting this greater commitment to poverty reduction these agencies have re-focused their assistance to place much more emphasis on reaching the smaller smallholders in an indirect effort to improve nutritional levels through improved household food security (World Bank 1990e; USAID 1991).

However, as already indicated above the heavy involvement of donors in funding most of the country's nutrition programmes also makes it difficult to judge the true level of the Government's commitment. For example, although the establishment of the FSNU in the Office of the President and Cabinet is an indication of Government's commitment, this office has received much financial and technical support from the donor community, namely the World Bank, UNICEF and USAID. In order to create staff positions for the FSNU, the Government transferred one previously existing post from the FNU in the Ministry of Agriculture. For a number of years the post of the head of the FSNU was filled only on a half-time basis. Similarly out of the newly created posts, several have remained vacant up until 1993. Whether this mediocre performance on staffing reflects a lack of qualified Malawians to fill these posts, a lack of funds to cover their salaries or rather a lack of true commitment on the part of the Government is difficult to determine.

The reorientation of Malawi's policy framework towards poverty alleviation will entail the refocusing of many existing programmes as well as the launching of new programmes. The level of political commitment needed both on the side of the Malawi Government as well as from the country's private sector to accomplish these changes will be immense. The following quote from the World Bank refers to the liberalization of burley tobacco, a high value cash crop, previously grown only by estates through the issuance of licenses.

Allowing smallholder farmers to grow burley tobacco would greatly increase their income earning opportunities. The problems expected by the World Bank illustrate in real terms the anticipated resistance to change from the owners of estates who represent the Malawian elite:

**"Strong opposition may be encountered from estates, many of which are owned by politically influential farmers, against adjustment of estate land rents and allowing smallholders to produce burley tobacco. Concern with the poverty issue among Malawian authorities is relatively recent and inadequate appreciation of the poverty situation in the country may dilute efforts to implement reforms designed to benefit mainly the poor" (World Bank 1990e:iii).**

The overall resources available in Malawi are limited and this means that the competition will be intense between the many groups representing different sectors and vested interests. It is still too early to tell how successful some of the poverty reforms will be in face of the realities found in the political economy of the country which will prevent decisions from being made on purely an altruistic basis.

### *Planning Theories*

Similar to the 1960s and 1970s a major problem in nutrition planning in Malawi was that the conceptualization of the food and nutrition issues in the country was not based on a scientific assessment and analysis of the situation but rather on the preconceived notions of the donor community as to what the problems were. The predilections of the donors depended to a great degree on what substantive nutrition planning theories were popular in international nutrition planning circles at certain points in time, for example, such as integrated basic services, GOBI-FFF and nutritional surveillance among others. Consequently the objectives of some of the programmes put into place in Malawi were derived from the substantive theories used and not from the problems confronting Malawian families. A case in point was that of the IBS project which had the objective to improve on-farm food storage, not because it was a problem in Malawi but because this was a

popular thing to do in international rural development planning circles at that point in time. The nutrition education programme provides another example since the objective to increase the production and consumption of animal protein stemmed from the international protein planning school and not from the dietary problems found in Malawi. Even after empirical data became available to show that calories were the most limiting factor in the local maize-based diet, it would not be until the late 1980s that the nutrition education strategy would be reformulated to better match the true problems facing the population. In addition, as discussed above political pressures also distorted the view held of the food and nutrition situation in the country. Up until 1986 the causes of the malnutrition problem were still limited to disease and ignorance. It would not be until several years later that the issue of household food security would officially be recognized and even some time later for poverty to be recognized.

However, what is clear from examining the events of the 1980s is that the understanding of Malawi's malnutrition problem did improve significantly during the decade despite the political environment. The role of data was important to document in statistical terms the extent and severity of the problems of malnutrition, household food security and poverty. Studies conducted by University researchers added further data and insights to expand the understanding of the underlying determinants of these problems. The role of evaluation was important, especially the work undertaken by the CSR, to show that some of the substantive planning theories used by the donors were inappropriate for Malawi's nutrition situation.

In addition, the approach to development planning, particularly that promoted by UNICEF which involves a Situation Analysis, has helped to establish a tradition in Malawi of undertaking an assessment and analysis of the situation on which programmes can later be formulated. One beneficial outcome of the Situation Analysis to nutrition planning in Malawi was the emergence of a common conceptual understanding of the problem, particularly from the mid-1980s onwards. Evidence for this common understanding can be found in the policy and programme documents of both the Government and the donor

community, all of which view malnutrition in the context of chronic household food insecurity, inadequate child caretaking practices, poor maternal health and nutrition and high disease levels (Malawi Government 1990b; Malawi Government/UNICEF 1987; World Bank 1990a, 1990b, 1990c; USAID 1991). Specific points regarding the substantive and procedural planning theories are discussed below.

***Substantive Theories.*** Overall during the 1980s the substantive nutrition planning theories used in Malawi changed from the technical view of malnutrition as solely a health and education problem to a structural view of malnutrition as an outcome of poverty similar to the Conceptual Framework of young child nutrition shown in Chapter 2 (Figure 2.2). Within this expanded view malnutrition is now not seen as an 'either or' issue, rather it is generally accepted that a variety of underlying causes exist which include household food insecurity in addition to poor health, child caretaking as well as other related issues (Malawi Government/UNICEF 1987; Malawi Government 1990b; World Bank 1990a, 1990b). In addition, it is also appreciated that certain nutritional problems, for instance, those related to micronutrient deficiencies do require in some instances technical interventions (Gibson 1989; Escoute 1990; Jere 1990; World Bank 1991; Malawi Government/United Nations 1993).

As a result of this broad view of malnutrition the strategy to address the problem is no longer limited to the traditional applied nutrition interventions, for example supplementary feeding, nutrition education, growth monitoring or horticulture to name but a few. Other indirect ways of addressing the problem of malnutrition have also been contemplated by the Government and donors which include rural and agricultural development programmes aimed at improving household food security, water and sanitation as well as food policy initiatives, such as targeting nutrition and income subsidies to poorer segments of the population in order to enhance food consumption levels (Malawi Government 1990b; World Bank 1990c; Chiligo-Mpoma and Matola 1992).

Although today in Malawi there is a much better understanding of the nature of the malnutrition problem, there are still certain nutrition myths which are difficult to dispel. One common myth which persists even despite the empirical evidence which shows otherwise is that protein deficiency is an important cause of the problem. It is not uncommon to find this view held by non-technical bureaucrats in the Government as well as the donor community. Medical personnel, including doctors, also often have this opinion no doubt since a severe form of malnutrition, kwashiorkor, which requires medical attention has historically been linked to a dietary deficiency in protein<sup>62</sup>. Another myth which surfaces, especially in Government circles, is that Malawians are naturally short people, hence, the high levels of stunting are due to genetic not nutritional factors. Government nutrition planners had to conduct a special study on the growth potential of Malawian children which showed that well nourished and healthy Malawian children grow as well as the international child growth standards (see Chapter 4).

Apart from the changes seen during the 1980s in the substantive nutrition planning theories used, there has also been a significant turnabout in the overall view held of national development in Malawi. Whereas for many years the substantive development planning theory subscribed to was a neo-classical trickle-down model, this was finally replaced at the end of the 1980s with the emergence of a new strategy of growth through poverty reduction which gives priority to developing the country's human resource base as the precursor to national growth. The reasons for this turnaround are several. First, the issue of malnutrition helped to focus the attention of the donors and the Government on other closely related issues of human welfare, for example hunger and poverty. Along with the analytical work related to the macroeconomic reform programme, the uncovering of the extent of the malnutrition problem further emphasized the need to take a careful examination of what had gone wrong in Malawi. Eventually this led to the reformulation of the country's national development strategy to include human welfare concerns. Second,

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<sup>62</sup> This is my general observation which is based on discussions I have had with health personnel during the time I worked and lived in Malawi.

at the same time the malnutrition debate was coming alive in Malawi during the late 1980s, at the global level the trend was also towards more concern being given to human resource development and the empowerment of poorer segments of society (UNDP 1993; World Bank 1993; Jonsson 1993c). Hence, the philosophy of growth through poverty reduction is certainly not unique to Malawi and instead reflects the growing interest in poverty alleviation and human resource development which was also occurring at the same point in time in international planning circles.

*Procedural Theories.* Over the 1980s there have also been some fundamental changes in the procedural theories of planning which have been used to address the problem of malnutrition. At the beginning of the 1980s the approach still tended to be highly centralized and top-down similar to that found in Malawi during the 1960s and 1970s. This was true even for the intervention programmes which were supposed to be based on community participation in a bottom-up planning process, for example the IBS. Today in Malawi there are nutrition programmes underway in which community involvement is actively being encouraged by national level planners, both in the Government as well as the donor community. Although the designs of some of these community based programmes have been decided in the offices of the country's capital city, more effort is being made within the existing operational capacity of the Government to ensure that key decisions on critical aspects of the programmes are made jointly with the communities involved. However, the reality in Malawi is that the implementation capacity to adapt to decentralized decision-making and planning is still weak and in need of strengthening.

Another major change in the procedural planning theories used during the 1980s was that the multi-sectoral approach to malnutrition was re-born nearly after 50 years since it was first popular with Nyasaland's colonial nutrition planners in the late 1930s. This renewed interest in multi-sectoralism was a result of the broadening view of malnutrition in the country from the mid- 1980s onwards as reflected in the proceedings of the 1986 Symposium on Nutrition and Development (see Table 5.10) (Ministry of Health 1986a).

The FSNU in the Office of the President and Cabinet in fact was established as a recommendation put forth at the nutrition symposium. Therefore, unlike the 1960s and 1970s when there was no entry point in Government for multi-sectoral nutrition planning to take place during the 1980s the institutional structure gradually took form.

*Means and Capacity to Act*

As discussed above the 1980s was a period in Malawi when the planning infrastructure to deal with nutrition issues grew substantially within the Government, but also in the University and donor community. By 1987 nutrition planning units existed in the ministries of agriculture, health, community services and the Office of the President and Cabinet. In addition a special unit in the Ministry of Local Government was established in the late 1980s, with donor support, to plan area-based child survival and development programmes based on community participation.

By 1990 the research groups at the Bunda College of Agriculture and Chancellor College were providing much of the scientific data on which the understanding of Malawi's malnutrition problem was based (see Tables 5.6 and 5.7). Increasing expertise to undertake food security and nutrition related research, especially in the case of the CSR, also came about through joint studies undertaken with outside university groups<sup>63</sup>. Since its formation in the late 1978 the CSR has also received much of its funding from United Nations agencies. Mention also needs to be made that in order to channel the latest information from research studies into the Government's policy making process, the CSR as well as the Human Nutrition Department at Bunda College were invited to join as permanent members some of the inter-ministerial planning committees organized by the FSNU in the Office of the President and Cabinet. This has ensured a close working relationship between national researchers and Government policy-makers (Quinn 1994).

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<sup>63</sup> These include Cornell University, Harvard University, Michigan State University, the Oxford Food Studies Groups, the International Food Policy Research Institute and Wageningen Agricultural University in the Netherlands.

By 1990, however, there were still only a few nutritionists working in the Government, less than ten for a population of over ten million. However, despite the lack of trained nutritionists, over the 1980s a group of Malawian professionals from Government and the research community was gradually formed who represent a critical mass of individuals sharing more or less a common understanding of the malnutrition problem, especially its household food security, child caretaking and health determinants. In essence, these individuals serve as advocates for the problem of child malnutrition in the country. Some have attended training courses on food security and nutrition issues both inside as well as outside of the country<sup>64</sup>. Many have attended the national workshops and seminars, shown earlier in Table 5.8, during which research findings on food and nutrition were disseminated and possible solutions to the problems debated (Msukwa 1990). In Malawi having these professional gatherings and forums at which nutrition and food security issues can be discussed as well as new research findings presented, has been useful in creating a common understanding of the food and nutrition problems facing the country especially in regard to what needs to be done.

The role of donors in providing technical assistance to the Government's food and nutrition planning initiatives has been substantial throughout the 1980s especially in the areas of policy analysis, data collection, analysis and intervention design. The reasons for this include foremost that Malawi suffers from a severe dearth of trained manpower especially in the area of food and nutrition. Similar situations are found in many of the other countries of sub-Saharan Africa and this perpetuates the continued reliance on outside technical assistance to undertake food and nutrition policy and planning (Quinn and Kennedy 1994).

It should also be noted that the donor's in-country planning capacity also improved substantively during the 1980s. Full country offices were established in the second half of

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<sup>64</sup> Training courses have been held by the Cornell University's Nutritional Surveillance Programme and Food and Nutrition Policy Programme, UNICEF, Harvard Institute of International Development and the Oxford Food Studies Group.

the 1980s for UNICEF, FAO and the World Bank. In addition, because of the small size of the international community in Malawi, coordination and communication amongst donors has been fairly good. This aspect of donor communication and coordination has also allowed the donors to complement their inputs by balancing the comparative advantages of each agency in particular sectors and areas. The current collaboration between UNICEF, the World Bank and the World Food Programme on area-based household food security and nutrition is one example of this collaboration (World Bank 1991; WFP 1991). Another example is the coordination between the World Bank and the US Agency for International Development on smallholder agricultural reforms (World Bank 1990e; USAID 1991). The Consultative Group Meeting held by the World Bank to coordinate funding and collaboration between large financial donors and the Government has also proved to be an effective mechanism to strengthen the planning process especially in regard to donor pledges. More recently, the Situation Analysis of Poverty in Malawi undertaken jointly by the Government with all the United Nations family has also strengthened the overall planning process of this cluster of sister agencies (Malawi Government/United Nations 1993).

In regard to the financial means with which to address food and nutrition problems in the country, as mentioned earlier the overall trend in Malawi has been towards greater attention, including resource allocation, being given to the social sectors (see Chapter 3). How much money will finally be allocated to interventions aimed at improving nutrition, however, is impossible to determine. However, since overall priority is to be given to primary services in health and education there should be some spill over effect for nutrition especially in regard to primary health care.

On the donor side, there has also been a substantial increase in their overall level of funding to support nutrition activities. By 1993 this amounted to about US \$390,000 per year from UNICEF, US \$750,000 per year from the World Bank's new Population, Health and Nutrition credit, as well as US \$5 million per year from the World Food Programme.

However, a significant portion of this total annual amount of US \$6.1 million from these three donors will not be spent directly on improving nutrition since a large portion of these funds also cover indirect operating costs. For example, technical assistance may amount to anywhere between US \$100-200,000 for one advisor's salary, airfares and fringe benefits alone. In the case of food aid, the costs of international transport can equal the costs of the food commodities themselves (WFP 1991).

Apart from direct nutrition interventions more resources are also going to support other programmes which indirectly may improve nutrition. These include a number of area-based Child Survival and Development projects supported by UNICEF that encompass a variety of interventions in household food security, health, environmental sanitation and child care, all of which are ultimately aimed at improving nutrition. In addition, the World Bank and USAID have placed a greater share of their resources on assisting smaller smallholders in order to improve household food security which it is hoped will indirectly lead to improvements in nutritional levels (World Bank 1990e; USAID 1991).

In summary, during the 1980s a significant improvement has occurred in Malawi regarding the means and capacity of the Government and the donor agencies to undertake nutrition planning. While in the 1970s the entry point for nutrition planning simply did not exist within the Government, during the 1980s the capacity had been development through the creation of food and nutrition planning offices. In addition, the capacity of national researchers to undertake food and nutrition research also increased substantially during the 1980s. Equally as important was the improved capacity on the side of the donor community which was evident by their improved analysis of the country's situation. In time this has enabled the donors to provide more relevant support to the Government to address the problems of malnutrition, household food insecurity and poverty.

### 5.3.6 Summary

During the 1980s many positive developments occurred in Malawi regarding the planning process in general and nutrition planning in particular. Overall there was a dramatic improvement in the nutrition planning approach taken which now includes a much better assessment and analysis of the situation prior to the design of interventions. The arrival of the donors into the policy circle has helped to make some of these positive changes. Whereas at the beginning of the 1980s the problems of household food insecurity and poverty did not officially exist, by the end of the decade the Government's national development strategy had been re-formulated to focus on the eradication of these problems as major development objectives.

In regard to the hypothesis of this thesis that nutrition planning in Malawi has not been very successful, by 1990 all the four prerequisites required for planned development were, to varying degrees, more fulfilled than they had ever been before. In regard to objectives a general agreement has been reached that malnutrition and household food insecurity are major development problems which need to be addressed without delay. The political will to address these problems is present within the donor community, as well as to a large degree within the Government bearing in mind the caveats mentioned earlier regarding potential conflicts of interest in political circles. The substantive planning theories being used by 1990 were more relevant and stem from an scientific analysis of the nutrition and food security situation found in Malawi. In addition, although more experience is needed, there is a definite move in the donor community as well as in the Government to involve the communities in the planning of intervention programmes. In regard to the means and capacity to act, the institutional structure to undertake nutrition planning has also been established within the Government. Although there remains heavy reliance on outside technical assistance, the basic expertise required for nutrition planning can be found within the country. Whether the managerial capacity exists in the Government to implement nutrition programmes and projects, however, is another question. This deals with the issue of translating paper plans into real programmes on the ground. According to some

international nutrition planners, the question of programme implementation and management is an issue frequently overlooked and as a result is the source of many of the problems encountered in practice with nutrition interventions (Berg 1991; Field 1993). The poor performance of the IBS is a clear example of this. In regard to financial resources, by 1990 there was much more money for nutrition and poverty alleviation than ever before. However, whether this money will be enough is debatable since the poverty problem from which malnutrition arises is immense and will require enormous investments of money, manpower and time to make any positive impact on human development.

Essentially for the twenty five years after independence, never before have all four prerequisites required for nutrition planning been as fulfilled as they were in 1990. Certainly in recent years, nutrition planning in Malawi has been successful in regard to the formulation of national policies aimed at enhancing the nutritional status of the population in addition to improving overall human welfare. However, it is too early to judge whether the programmes which eventually arise from these new policies will have a positive impact on reducing the malnutrition, food insecurity and poverty presently found in the country.

At the beginning of the 1990s the Malawi Government and the donor community are poised to embark on a wide ranging policy agenda aimed at growth through poverty alleviation which includes as central elements improvements in nutrition and household food security. Although it is impossible to predict how successful these ambitious plans will be, it can be said with certainty that the challenges ahead will be immense. At the same time it can also be said that never before has the policy climate in Malawi been so hospitable for addressing the problem of child malnutrition.



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## CHAPTER 6

### CONCLUSIONS AND RECOMMENDATIONS

#### 6.1 The hypothesis

The problem of child malnutrition in Malawi, as manifested by stunted height, is serious and endemic with nearly half of the country's children affected. In the early 1990s compared to other countries of eastern and central Africa Malawi is among the worse for child stunting. Considering the severe consequences of malnutrition for the individual as well as for society as a whole, the cost to Malawi is high in human, social and economic terms.

The first nutrition planners arrived in Nyasaland in the late 1930s and over the following 50 years a number of activities were undertaken to address the problem of malnutrition. Based on the eleven case studies presented in Chapter 5 a critical analysis was undertaken of the nutrition planning attempts undertaken over the past five decades. The results of this analysis support the hypothesis of this thesis that in Malawi nutrition planning has not been successful. The ultimate objective of nutrition planning is to reduce malnutrition and clearly in Malawi this has remained far from being achieved, since as shown in Chapter 4, the malnutrition problem remains as serious today as 50 years ago.

A major problem has been that the nutrition planning process has been inadequate because of the lack of fulfillment of four prerequisites which are necessary for planned development to be successful - namely that there exist 1.) mutually agreed objectives, 2.) the political will to achieve those objectives, 3.) appropriate planning theories as well as 4.) the means and capacity to take the required actions. The nutrition planning attempts made in Malawi have often not resembled the model of the planned development (see Figure 2.1). For example, as a number of the case studies have shown certain key planning steps, such as

research and inventory have been bypassed and intervention programmes designed and implemented without an empirical basis. The FAO/WHO/UNICEF supported Applied Nutrition and Training Programme (Case Study 3), which served as the foundation for the country's nutrition education strategy, and the IBS project (Case Study 7) provide examples of this detrimental short-circuiting of the nutrition planning process. In some of the other nutrition planning attempts made, for example, the work of the Ministry of Health (Case Study 4) and that of the UK FFHC mission (Case Study 5), the planning endeavors never progressed beyond the initial planning stage (steps 1 to 3 in Figure 2.1) to reach the implementation stage (steps 4 onwards) because of the basic lack of political will on the part of the Government to push ahead in this area.

Although Malawi's past record in nutrition planning has been bleak by 1990 the overall policy environment within the country had become much more conducive for addressing malnutrition, food security and poverty issues. In recent years a number of new policy initiatives have been taken by the Government with support from the donor community which place greater emphasis on growth with equity and human resource development. Within this new view of development in Malawi improvements in malnutrition and household food insecurity are considered to be central objectives. The recent formulation of the country's National Food Security and Nutrition Policy Statement is a positive step towards more effective planning to improve the nutritional wellbeing of the population. However, it is still too early to tell how successful the country's new policy environment ultimately will be in generating effective programmes and actions which improve the child malnutrition situation. It will take some years before this is known. As discussed in Chapter 4, under the most optimal conditions of socio-economic development a minimum of at least 50 years would be needed for the last physical remnants of child stunting to be completely washed out.

## 6.2 Lessons learned

A number of lessons and insights were learned from the eleven case studies presented in Chapter 5 in regard to the strengths and weaknesses of the nutrition planning attempts made in Malawi over the past five decades which may be potentially useful to future development planners working in Malawi as well as to those working elsewhere under similar circumstances. These lessons and insights are summarized below in regard to each of the four prerequisites.

### 6.2.1 Objectives

In Malawi the recognition given to nutrition as an objective in development planning has depended to a great degree on the overall treatment of human development issues within the country's national development policy. The crucial issue has been whether the development of the country's human resource base has been viewed as an **input** to national development (e.g. improved health, nutrition and education as prerequisites for growth) or alternatively as an **outcome** of national development (e.g. improved health, nutrition and education as a result of trickle-down from growth). Under the former situation when human resource development has been viewed as an input into the development process nutrition has been recognized as an important development objective. In the latter when human resource development has been viewed as an outcome of the development process nutrition has been viewed as a small issue of little consequence.

The importance attached to nutrition in Malawi's national development policies has changed dramatically over the past five decades and has come full circle in recent years. In Nyasaland during the colonial period improvements in human welfare were considered to be important precursors to economic growth since it was believed that healthier and better nourished people would lead to greater productivity. However, this was all to change after independence. From 1964 to the late 1980s the development priorities of the Government were solely concerned with achieving growth as rapidly as possible and at all costs. Within

this single minded focus on the macroeconomy human welfare issues were dropped from the policy agenda altogether. The assumption was that the benefits from macroeconomic growth would eventually trickle down to improve the conditions of the population as a whole. This blanket assumption obviated the need for Government to deal specifically with human welfare issues and it was assumed that problems such as malnutrition would in time eventually disappear. However, later it would be shown that the benefits of the country's spectacular macroeconomic growth years in the 1970s never reached the poor and only benefitted a small segment of the population who were better off. Instead the macroeconomic growth policies of the Government resulted in more income inequity and increasing impoverishment (Kydd and Christiansen 1981, 1982; Ghai and Radwan 1983; Kydd 1984). It was only when the national development policy became people-focused in 1990 with the adoption of the strategy of growth through poverty reduction that human welfare issues including malnutrition were elevated once again as important development objectives after an absence of over 50 years.

### **6.2.2 Political will**

This review of nutrition planning in Malawi has illustrated the importance of having the political will, both of the Government as well as the donor community, to address the issue of malnutrition. Without the political will of the Government few concrete results can hope to be achieved in the long run. The political will of the donors is needed to ensure that resources are forthcoming to support the policies and programmes which are necessary to improve nutrition.

During the colonial era the willingness to address malnutrition did exist. However, from the time of independence in 1964 to the late 1980s the political will to address the issues of food insecurity, hunger and poverty was completely absent on the side of the country's political leadership. Under the rule of Dr Banda officially none of these problems existed, hence, they could not be discussed or addressed in the planning arena. In addition, on the side of the United Nations agencies, including the World Bank, up until the early 1980s the

political will to pursue the food insecurity and poverty dimensions of the country's child malnutrition was missing despite the international pledges made by these same donors at global meetings in the 1970s to eradicate these scourges. In Malawi the attitude of these donors on such issues up until the early 1980s could perhaps be best described as benign neglect since these agencies were content to believe without question the Government's political propaganda that since independence the country was thriving and food prosperous.

By the mid 1980s after much advocacy on the part of national researchers and certain donor agencies to advance malnutrition issues a willingness began to emerge from within the top ranks of the Government civil service to address malnutrition and eventually its household food security and poverty dimensions. By the end of the 1980s it had become possible to debate these issues in the national policy arena. It could be argued that in Malawi without the strong political backing of a senior Government official such as the SPC it would have been much more difficult, if not impossible, to push forward the issue of malnutrition in development planning especially in addressing its underlying and basic causes. Therefore, a major lesson learned in Malawi has been that the good will of senior Government officials who hold some vestige of power and authority is important to activate these issues in the national policy arena. Others have also identified the importance of having this type of senior patron in the Government hierarchy to advocate the cause of malnutrition and issue directives that action must be taken (Field 1993). Without this high level support the issue of malnutrition can easily fall between the cracks and be completely ignored, as was the case in Malawi for over 25 years.

Another important lesson learned in Malawi has been that despite the fact that for many years the political environment was not conducive to address the poverty and food security dimensions of malnutrition, it still paid off for certain donors and research groups to keep advocating these issues despite the risks in doing so. Without the advocacy of the CSR, UNICEF and WHO in the early 1980s, and later of the Government nutrition units and other donors such as the World Bank, the Government may have never felt the need or

pressure to address these issues. Related to this is the changing relationship between the Government and certain large financial donors, such as the World Bank, brought about by the macroeconomic reform programme which gave these donors more influence over Government development policy. The conditionalities attached to policy based loans provided a certain amount of leverage to such donors which no doubt played a part in convincing Government to take certain policy reforms which may not have otherwise been taken, for example such as the major policy shift towards a strategy of growth through poverty reduction.

### **6.2.3 Planning theories**

In Malawi not only have there been major changes over the past 50 years in the planning theories used specifically for nutrition, but also in the planning theories used for national development in general. As discussed above under objectives, the policy view of nutrition in Malawi has been closely related to the overall view held of national development. When the emphasis of national development planning was solely on achieving macroeconomic growth, issues such as poverty alleviation and nutritional improvement were relegated to positions of low priority. Under these circumstances the substantive nutrition planning theories used tended to view malnutrition as a small issue of a technical nature. However, when the emphasis of national development planning has been geared towards the development of people and growth with equity, as during the colonial era and more recently since 1990, the issues of poverty alleviation and nutritional improvement have figured as central tenets of the overall national development strategy. Under these circumstances the substantive nutrition planning theories used have framed nutrition more as a structural issue which needs to be addressed in the mainstream of development planning.

Over the past 50 years a number of different nutrition planning theories have been used in Malawi to address the problem of child malnutrition. Starting with the Nyasaland nutrition team, the substantive planning theory initially used viewed malnutrition as mostly a technical issue but its structural dimension was also recognized. The focus was on the

quality of the food eaten especially in regard to its mineral and vitamin content. However, household food security was recognized as an important factor in both the cause of the nutrition problem as well as in its potential solution. The procedural approach initially taken by the Nyasaland nutrition planners was classically top-down with the contribution of the villagers seen as the providers of bricks and labour. However, at that time the multi-disciplinary nature of malnutrition was appreciated and recognition was given to the need for a variety of professional expertise to address the problem. In time with the knowledge gained from their field investigations, the Nyasaland nutrition team eventually realized that their initial planning theories were inappropriate for the Malawian situation since the major nutrition problem was not related to the quality of the diet but rather its quantity. In addition, in light of the disappointing results from their rural development interventions and the lack of adoption of their ideas by the villagers, the Nyasaland nutrition planners also realized that their top-down procedural approach was ineffective and needed to be radically changed to transform the villagers from passive recipients to active participants in the planning process.

However, after independence in 1964 the substantive planning theories used to address malnutrition reverted back to the view of malnutrition as an issue related to the quality of the diet, especially its content of animal protein. For the next 20 years until the mid-1980s malnutrition was basically seen as a technical issue within the context of disease and ignorance. Issues which had been recognized as important by the Nyasaland nutrition planners concerning household food insecurity and poverty were never contemplated by nutrition planners after independence because of their political undertones. In addition, the procedural theories of planning also changed after independence from a multi- to a mono-sectoral approach. A multi-sectoral view of the problem was simply too liberal for the mentality of the Government during the 1960s and 1970s since it would have brought planners too close to the food insecurity and poverty dimensions of the nutrition problem. Up until very recently the procedural approach to nutrition planning has remained top-down

and highly centralized with little attention given to involving the intended clients into the planning process.

In the early 1980s the empirical evidence began to mount that Malawi was facing a serious child malnutrition problem and that household food security was a major underlying factor. In time this led to a change again in the substantive nutrition planning theories used which evolved towards a more structural view of the problem not unlike that held by the Nyasaland nutrition team at the end of their work in which malnutrition was seen as being the result of too little food and an empty belly rather than a poor quality diet. At first the explanations given by Government planners for this low food intake were limited only to the politically acceptable issues of child feeding practices, for example low meal frequency and dietary bulk, which today are still recognized as important factors in child nutrition in the country. It would not be until 1988 that the Government would officially acknowledge that access to food at the household level was a major underlying cause of the nutrition problem. It would take a few more years for poverty to finally be officially recognized in 1990 as a major problem in the country and a basic cause of child malnutrition. At the same time the procedural theories used in nutrition planning also began to widen to include a multi-sectoral outlook which better fit the newly emerging conceptualization of the problem. Although throughout the 1980s the procedural approach has remained top-down and highly centralized in recent years more attention has been given to community involvement in nutrition planning and a number of community-based pilot programmes have been initiated (Chiligo-Mpoma and Matola 1992; Malawi Government/UNICEF 1987b, 1991). As will be discussed later the recent changes in the political system found within Malawi may lead to more opportunities for community-based planning.

**Substantive.** Over the years a number of lessons have been learned in Malawi regarding the substantive nutrition planning theories to address child malnutrition. A major weakness of the nutrition planning theories used has been their inappropriateness in addressing the country's malnutrition problem. The lack of any attempt to scientifically assess and analyze

the true nutrition situation typified most of the nutrition activities undertaken during the 1960s and 1970s. As a result most of the past nutrition programmes have been irrelevant to the real needs of Malawian families. Instead the substantive planning theories used were those which were politically acceptable as well as those which happened to be the most popular with the United Nations donors at certain points in time. A major lesson learned from this review has been that an assessment and analysis of the actual nutrition situation in the country must be made if relevant actions are to be designed which have any prospect of improving nutrition. This may appear to be simplistic as well as stating the obvious but considering it has been a major failing of past nutrition planning attempts in Malawi it warrants much more attention in the future.

A related issue is that although nutrition planning theories which are popular at the international level do provide an useful starting point for planners, it is essential that the relevance of each is confirmed for the particular circumstances for which it is intended. In addition, having a conceptual framework (such as those shown in Figures 2.3, 5.3 and 5.4) has been useful in defining important relationships of causative factors and guiding planners during their research and inventory of the nutrition planning problem. However, since malnutrition is such a malleable phenomenon which changes both spatially and temporally, such an overall understanding of the major causes although essential is still on its own insufficient for planning specific intervention programmes in different areas of the country. For local-level interventions to be effective in improving nutrition it is important that an adequate assessment and analysis of the local context is undertaken before programmes are initiated. Therefore, in terms of the design of interventions there is no universal blueprint which can be dropped into place without first ensuring that it is indeed relevant to the conditions found in each particular situation.

Another lesson learned has been the importance of undertaking evaluations especially to improve the theoretical basis of nutrition planning. Up until the early 1980s few evaluations were carried out in Malawi on nutrition activities. Some programmes such as

nutrition education continued for nearly 20 years with no review of their performance. Two of the first evaluations which were carried out on nutrition programmes were those conducted by the CSR in the early 1980s on the IBS project and the nutrition education programme (Case Studies 7 and 8). Both of these pieces of work proved to be valuable in providing the empirical evidence that the substantive planning theories which had been used in nutrition planning for so many years were inappropriate for Malawi's nutrition situation. The fact that a non-governmental national research group assumed this evaluation role is noteworthy since such a group could provide an objective assessment of the situation as it was not affected by the political pressures which would have constrained Government offices nor subjected to the corporate imperatives of donor agencies.

*Procedural.* In regards to the procedural theories used, certainly the multisectoral view of malnutrition which returned to the planning scene in the mid-1980s makes eminent sense for nutrition planning considering the broad range of underlying and basic causes of the problem. A few words are needed, however, on another procedural aspect of nutrition planning which pertain to community participation and the role of the end-clients in the planning process. Nearly all of the nutrition planning experience in Malawi has been heavily top-down as well as highly centralized. One of the few, if not the only, exceptions was the IBS project which was in theory supposed to be based on community participation, however, in reality what occurred was very different and the community was relegated to providing only labour and bricks and not ideas. The experiences of the Nyasaland nutrition team regarding the vital role of village participation in rural development planning were unfortunately never documented at the time and as a result were lost to subsequent generations of planners in Malawi.

*Social.* Under the political system found in Malawi from independence until the early 1990s community level planning based on a philosophy of empowering the poor was impossible to contemplate let alone implement. This closely relates to the social theory for planning regarding the role of the state in national development. As described in Chapter

3 up until 1990 in Malawi the role of the state in development planning could best be described as authoritarian, highly centralized and characterized by low priority accorded to human rights and individual freedom. It was only when the donors became centrally active in the country's policy circle and were able to exert financial leverage during the late 1980s that human rights issues, especially those related to poverty and later those related to personal liberty, would assume central importance in the Government's planning process.

Under the rigid political system found in Malawi up until the recent multi-party elections community development based on the philosophy of empowerment could not have existed since this requires strong political commitment, a sense of egalitarianism, as well as administrative flexibility including a certain amount of decentralization. Empowerment of the poor means that the poor are involved in a process which reduces their poverty (Jonsson 1993c). In many circumstances these conditions conducive to community level participation evolve as a natural by-product of a decentralized democratic political structure (ACC/SCN 1993a). The empowerment of people along these lines should in time lead to an increasing ability of communities to articulate their needs for extra resources and support from the central authorities. Certainly the political system found in Malawi up until the 1994 multi-party elections would not have allowed community development to have proceeded in this manner. In light of the new multi-party democratic political system which has recently be adopted in Malawi there now exists a real opportunity for community-based planning to take place. However, as will be discussed below in the next section this grass roots approach will need to match the available means and capacity of the Government to support decentralized planning efforts at the local level.

#### **6.2.4 Means and capacity to act**

For a long time in Malawi a major weakness in nutrition planning was the lack of the means and capacity to undertake this type of work. This was a problem beginning in the days of the Nyasaland nutrition team in the late 1930s and lasting until the late 1970s when at last the situation began to improve somewhat with the emergence of a nascent nutrition

planning and research infrastructure in the country. Once these groups began to be operational in the early 1980s more attention could be given to nutrition planning. As more data were collected to describe the country's malnutrition problem this in turn triggered more support being given by donors to developing the country's nutrition planning and research infrastructure.

Therefore, a key lesson learned in Malawi has been that having the national infrastructure and manpower to undertake nutrition planning as well as related research were important in advancing nutrition concerns in the Government's policy arena. Since nutrition is not a single sector in and of itself and arises from a variety of underlying and basic causes stemming from health, agriculture, education, environmental conditions among others, it has been useful to have an institutional focal point in Government such as the Food Security and Nutrition Unit (FSNU). From a planning perspective without this multi-sectoral office the problem of malnutrition would probably get compartmentalized into single-sector direct nutrition interventions which would be ineffective in addressing the structural causes of the problem.

*Much of the work of the FSNU since its establishment in 1987 has been to develop a common conceptual understanding of the problem of malnutrition as well as to establish the manpower capacity by building up a coalition of Government planners in a number of relevant sectors who can serve as advocates for child nutrition issues in their own ministries (Quinn 1994). In Malawi having this critical mass of professionals in Government as well as the University has been instrumental in guiding the development of the recent food security and nutrition policy framework. A working group of planners from different sectors developed the policy statement through a series of meeting and retreats conducted over many months. The final product which was released in 1990 represents a consensus within the Government on the nature of the food and nutrition issues, how they should be addressed and what types of complementary actions are needed to be taken in different sectors. Although the end result of this labour is a policy publication on food security and*

nutrition, which in itself is important, it could be argued the process of debate and consensus seeking through which the statement was moulded by the Malawian planners involved was more important since it elicited a high level of both personal and professional commitment.

Additional comments can be made in regard to the future manpower requirements to deal with Malawi's malnutrition problem. In the future what is most needed is not more nutritionists *per se* but rather more *nutritionally aware* development planners in all sectors at all levels who not only understand the malnutrition problem and its importance for national development but also understand what they can do within their own professional sphere to improve the situation. Most policies and programmes have implications for nutrition, particularly for the poor especially if access to income, food, health care, water and sanitation is affected. Policies affecting wage levels, employment, agricultural production, rural infrastructure, health and education among others have important implications for nutrition, both positive and negative. Since malnutrition is a societal problem, it is essential that planners in all sectors realize the potential impact that their policies and programmes decisions may have on nutritional status. In many cases policy modifications can be made to enhance the positive nutritional impact of actions taken without compromising the original aims of the policy (Pinstrup-Andersen 1993a).

An essential step in addressing Malawi's malnutrition problem in the future will require raising the professional consciousness of all Government planners that *nutrition matters* in national development and that development within the country must proceed along a path of equitable growth and poverty reduction. This task of sensitizing development planners is not minor and will require a major effort not only in providing in-service training to those planners already in Government employment, but also incorporating these nutrition and equity concerns into the undergraduate curricula of the national university system from which the majority of Government planners are graduated with their first degree. Essentially the 'mind-set' of Government planners needs to be changed from the past

obsession with macroeconomic growth as both the means and ends of development towards focusing on the human face of development.

This is not to say that nutritionists do not have a role to play in addressing malnutrition since they do have an important contribution to make in planning direct nutrition programmes, for example, supplementary feeding schemes, micronutrient programmes and nutrition education. Nutritionists also have an important role to play in advocacy and promoting a common conceptualization of the problem. The crux of the argument being made here is that the job to address the structural basis of Malawi's malnutrition problem is simply beyond the scope of nutritionists since their sphere of influence in Government decision-making is much too narrow to make any impact in the other sectors which have greater potential in improving the present inadequacies in the underlying and basic causes of the problem.

Lessons have also been learned regarding the capacity within the country to undertake nutrition related research. As already mentioned earlier, the contribution made by university research groups has been great in Malawi especially in undertaking research which could never have been conducted by Government staff mainly because of political constraints. However, without the support from the donor community, both financially and politically, university research groups in Malawi probably would not have been able to have accomplished what they did during the 1980s. This relates not only to the quantity of the research undertaken but also to the quality of the work in terms of its objective and honest assessments of the development issues confronting the country.

Another lesson learned from Malawi's experience in nutrition planning is that in the past direct nutrition programmes have only received a small amount of financial support. This is not surprising since nutrition has been a low priority of the Government for so long. Although in recent years the trend has been towards increasing budgets for nutrition, in comparison to the investments made in other sectors, such as macroeconomic planning,

agriculture, health, education, transport among others, the amount of money for direct nutrition programmes is still minuscule. As argued above, the structural nature of the nutrition problem requires much more than direct nutrition programmes if the root causes are to be addressed. Thus support for nutritional improvement must be forthcoming from all sectors through the formulation of policies and programmes which enhance nutritional levels by addressing its root causes.

#### **6.2.5 Summary of the major lessons learned**

It is useful to summarize the major lessons learned from Malawi's fifty year experience in nutrition planning which have made a positive impact in advancing nutrition concerns in the national policy arena. The fundamental lesson learned has been that the political will must exist both on the side of the Government as well as on the side of the donors if something is to be done about malnutrition. The other key lessons include the importance of having:

- 1.) an overall national development strategy which is people-oriented and gives priority to human resource development and poverty reduction as prerequisites to the process of national development;
- 2.) strong allies in the Government to advance the cause of malnutrition in the national policy arena;
- 3.) strong allies in the donor community and university research community to advocate malnutrition issues;
- 4.) an empirically-based common consensus which exists within the Government, donor and university community on the nature of the country's nutrition problem especially its underlying and basic causes;
- 5.) the capacity to undertake research on food and nutrition issues, including evaluations;

- 6.) an institutional focal point within the Government which has the capacity to maintain a multi-sectoral overview of nutrition-related policies and programmes, advise on their content and facilitate coordination and communication among the different sectors involved in nutrition issues;
- 7.) planners in all Government sectors who are aware of the importance of nutrition and national development and understand their professional role in enhancing the nutritional effects of the policies and programme decisions which they make.

### 6.3 Recommendations

Based on the lessons learned from this review of nutrition planning in Malawi from the 1930s until the 1990s, a number of key issues will need to be addressed to enhance the impact of future attempts made to improve nutritional levels. These issues are presented below and are followed by a series of pragmatic recommendations. As can be seen some of the issues relate directly to the four prerequisites necessary for planned development to work.

1. For progress to be made in reducing malnutrition in Malawi, the attitude on the part of the Government, university and the donor community must be that *nutrition matters* in the nation's development. In order to establish this outlook in the country the following actions are recommended:
  - a. *Donors should commit themselves to a long-term planning horizon with the Government to address the problems of poverty, food security and malnutrition along the lines of the present policy of 'growth through poverty reduction'. This long term commitment would help provide assurance that the support needed to address poverty in the coming decades would be forthcoming as well as consistent. Having this long-term time frame may also serve to guard*

against today's poverty priorities being derailed in the future by changes in the corporate priorities of donor agencies.

- b. *High level national symposiums should be held every year to monitor the progress of the two national policies initiated in 1990 on 'growth through poverty reduction' and 'food security and nutrition' in meeting their objectives of reducing poverty and improving food security and nutrition.* These symposiums should be preceded by a detailed review of the planned versus actual actions taken by the offices designated as responsible as well as a review of the successes and failures encountered. Consideration should be given to how this national review process might also be used constructively as the basis of an incentive system through which senior officials in charge of different sectors could be held accountable for the progress or lack of progress made.
- c. *The role of nutrition in national development should be included as a theme in the undergraduate curricula of the University of Malawi in those departments from which future planners in Government graduate (e.g. economics, agriculture, sociology, biology).* At a minimum the aim would be to provide competency in 1.) understanding malnutrition in Malawi as a societal problem including its underlying and basic causes, 2.) understanding the role of malnutrition as both an objective in national development as well as an indicator of the progress of development and 3.) appreciating the importance of a 'growth through poverty reduction' development strategy for fostering human development in the country. The objective of reaching future Government planners while still university students would be to develop at an early stage in their

professional training a humanistic and egalitarian outlook on national development.

2. A strong institutional structure for nutrition planning has proven to be important in Malawi in raising the awareness of malnutrition issues and the importance of improving nutrition for national development. To keep malnutrition issues at the forefront of development discussions in the Government and donor community it is recommended that:
  - a. *The Government and donor community should continue to support the nutrition planning offices in the different ministries, particularly in regard to their staffing and training requirements as well as in their information dissemination and field work.* In particular, the Food Security and Nutrition Unit in the Office of the President and Cabinet should receive a full complement of experienced staff in macroeconomic, food policy and nutrition training as well as adequate resources to operate at full capacity.
  - b. *Support should be given to University of Malawi groups working in the area of food security and nutrition both in regard to academic training as well as research.* It is important that the present linkages between these University groups and Government planners in food security and nutrition planning are continued in order to exchange information relevant for policy and planning and to feed empirical research data into the planning process of the Government.
3. A common understanding of the malnutrition problem which is based on a scientific assessment and analysis is essential to plan relevant and effective policies, strategies and programmes. Some recommendations to achieve this include:

- a. *Donors should continue to support nutritional surveillance activities as well as research on food security, malnutrition and poverty issues.* This support should include strengthening the manpower and institutional capacity of Government planning offices and national research groups to undertake this type of work both in terms of data collection, analysis and presentation.
  
- b. *Advocacy of nutritional issues should be given top priority by the donors, Government planning offices and university researchers active in food and nutrition issues in order to advance these concerns in the national policy arena as well as promote a common understanding of the nature of the malnutrition problem.* This should include the dissemination of surveillance and research findings through different channels such as workshops, meetings, publications as well as exploring the possibilities of using the mass media.
  
- c. *Along the lines of the present programming approach taken by the United Nations donors and the Malawi Government, mechanisms should be explored on how the country's donor community (e.g. other multi-lateral and bi-lateral donor agencies as well as NGOs) can be brought together to develop a country focused approach to development assistance.* This should have as its basis a regular situation analysis to review the available data, including the results from studies and evaluations, in order to establish a general consensus on **what** the critical development issues are facing the country, **how** they should be addressed and **which** donors should assist in **what** areas.

4. An institutional memory for development planning needs to be established in Malawi in the areas of nutrition, rural development, food security and related topics to overcome the past deficiency related to the lack of learning from past experiences in nutrition planning. It is recommended that as a first step in this direction should include:
  - a. *Support to strengthen the food security and nutrition documentation centre within the Food Security and Nutrition Unit should be continued so that it becomes a resource base for Government planners, university researchers as well as visiting donor missions.*
  - b. *Support to strengthen the libraries of the University of Malawi, including the documentation centres of research groups, in regard to their capacity for information collection and dissemination. This would include support to produce annotated bibliographies on subjects relevant to nutrition, food security and rural development as well as on related sectors such as economic planning, agricultural development, women in development and so on.*
  - c. *The donor community, especially the United Nations and the World Bank, should establish a central documentation centre in one of the agencies to serve as an information clearing house for key papers and reports related to development issues in Malawi, including the reports from all past missions which have been prepared by staff from these agencies since independence. Access to this documentation centre should be open to planners from the Government, donors and NGO's as well as to university researchers.*

5. The role of evaluation needs to be elevated within the planning process:
  - a. *Provision should be made in food and nutrition policies and programmes to conduct monitoring and evaluation reviews on a regular basis.*
  - b. *National research groups should be supported to undertake evaluation work when the opportunities arise.*
  
6. New approaches to address the problem of malnutrition outside of direct nutrition interventions in the traditional areas of health and education need to be investigated. It is recommended that:
  - a. *Donor agencies should actively support the Government to explore the possibilities of community-based interventions to improve nutrition which are based on the philosophy of empowerment and the active participation of the end-clients.* Particular care will need to be given to assessing the capacity of the Government to implement and manage such programmes considering the existing constraints with shortages in manpower, equipment, funds and the limited capacity of Government at the local level. The potential role of non-governmental organizations in community development should also be included.
  - b. *Donor agencies should actively support the Government to explore the possibilities of improving nutritional levels indirectly through national policy instruments aimed at increasing the income and consumption of the poor which might include, for example, targeted income or food subsidies to such groups.*

#### 6.4 Concluding remarks

As discussed above a number of lessons have been learned from Malawi's experiences in nutrition planning over the past five decades. It is hoped that some of these lessons can be put to good use in future nutrition planning endeavors which are undertaken in Malawi as well as elsewhere. As mentioned already there may be some limitations in the analysis undertaken in this thesis since the focus has been only on one country, mainly at the national level and predominately on the role of United Nations agencies. The extreme nature of the political situation found in Malawi also makes it an unique case study in some respects.

It would also be useful to conduct similar reviews of nutrition and national development in neighboring African countries to study the problem of child malnutrition and how it relates to each country's natural resource endowment, political structure and development policies to investigate whether further lessons can be learned and patterns found. This would help to determine whether Malawi's situation is unique or similar to what has occurred in other countries. In addition, although the data are scarce and incomplete, it appears that, as in the case of Malawi, no nutritional improvements have taken place in Africa as a whole since the 1960s, unlike Asia and Latin America where nutritional status has improved (ACC/SCN 1992; UNICEF 1993b). It is imperative that a better understanding is developed of the factors within African countries that have prevented improvements in nutrition.

Some work has already been conducted along these lines which involved a review of nutrition-relevant actions taken in a number of developing countries, including Tanzania and Zimbabwe in Africa (ACC/SCN 1993a). A number of the findings from this cross-country review in fact reinforce the lessons learned from this present thesis on Malawi regarding the positive factors associated with advancing nutrition concerns in the policy and planning arena. These include the importance of having: 1.) poverty reduction oriented economic,

human resource and social welfare policies in providing a positive climate for nutritional improvement; 2.) a focal institution in the country for nutrition policy and planning; 3.) a strong research capacity with university linkages; 4.) high level political commitment and 5.) advocacy in elevating malnutrition issues into the consciousness of planners. A substantial amount of experience exists in these other countries, especially in Tanzania and Zimbabwe, with community level nutrition planning and intervention programmes from which Malawi could benefit considering that this is a potentially important area in which the country has had little past experience.

A major conclusion of this thesis is that the problem of malnutrition Malawi can not be viewed as a small issue. Instead because of its linkages with many aspects of development at the level of the individual and the nation, and the high costs of malnutrition in human, social and economic terms, the problem of malnutrition needs to be seen as a central development issue. High levels of child malnutrition provide an indication that something has gone wrong with the process of national development which has failed to produce a better quality of life for the people. Improvement in nutritional status must be viewed as an objective in a variety of sectors, for example, macroeconomic planning, agriculture, health, education, amongst others. However, as emphasized above the societal nature of malnutrition is such that its solution can not be solely limited to the work of nutritionists and direct nutrition programmes on their own, but rather has to involve development planners in all sectors. The time span to address the problem has to also be realistically framed in terms of decades.

Malawi's experience suggests that for nutritional improvements to have any hope of being achieved the national development policy needs to be based on a strategy of equitable growth and poverty alleviation. Since malnutrition is a societal problem inextricably linked to poverty, this type of people-first policy orientation is necessary to address the inadequacies in the underlying and basic causes of the problem, for example, in terms of household food security, health services, education levels, population, water and sanitation

as well as maternal and childcare conditions. In Malawi trickle-down development on its own did not work in raising the living standards of the population as a whole and probably will not work in the future unless resources are intentionally directed to the poorer segments of the population who comprise the majority.

To improve nutritional levels in Malawi it will be important that the newly adopted policy course taken by the Government and the donors, which is based on growth through poverty reduction, is seen within a long-term planning horizon. Growth strategies aimed at improving the situation of the poorer segments of the population, through expanded employment opportunities and increased agricultural productivity, will have the beneficial effect of increasing the income levels and consumption of these groups. Investing in direct nutrition programmes, for example supplementary feeding schemes, will also be important to protect the most vulnerable groups, for example young children and pregnant and lactating women. Other direct nutrition programmes such as nutrition education will be important to enhance the effects of increased income and production. Investing in primary services of health and education should also have a positive spill-over effect on nutrition. Providing social security programmes targeted at the poorest groups in society, for example through food and income subsidies as well as other resource transfers, would also help to provide the necessary safety nets for those most at-risk of malnutrition.

The recent developments in Malawi with the Government's adoption of a national development policy based on growth through poverty reduction is a positive step in this direction since its strategic components are aimed at the critical areas necessary to improve nutrition. In addition, the recent adoption of a multi-party democratic political system is another positive step in creating a national policy environment which is conducive to addressing human welfare concerns. Within this structure more emphasis can be given to developing community level planning which is based on the principal of empowerment. However, a challenge awaiting the Government and donors will be deciding on the most

practical decentralization strategy to enable communities to take a more active role in the development process.

It is hoped that the lessons learned and insights gained from this review of Malawi from the 1930s to 1990 will contribute to the structured documentation of nutrition planning in developing countries, especially to the newly emerging area of the political economy of food and nutrition policies which has begun to receive more attention in recent years and which is still in the process of developing a theoretical basis (Pinstrup-Andersen 1993b). The political dimension of nutrition planning in Malawi not only included the obvious sensitivities which surrounded the topics of food insecurity, hunger and poverty, but also the nature of the relationship between different groups within the national policy arena, for example the interaction between the Government and the donors and how this has changed over time.

With the new policy focus of the Malawi Government on growth through poverty reduction, the road ahead to implement this new strategy will not necessarily be smooth as a struggle for limited resources will occur. This surely will test the fortitude of the Government and the donors in enforcing these policy changes in face of the resistance which can be expected from certain stakeholders who have different vested interests to maintain the *status quo* in the country.

A final comment is needed on the move towards a multi-party democracy in Malawi and how this may affect the policy environment for food security and nutrition. It is hoped that these political changes will result in a more open society where Malawians will be able to debate all issues with no inhibitions. The topic of poverty for any government is sensitive and it is hoped that the country's new administration will give top priority to improving the welfare of the Malawian people and will also be determined to utilize efficiently the state's resources to this end through decisions that are based on a rational process of assessment and analysis which is free from the vestiges of past political inhibitions. What is known

is that the challenges which exist today for Malawi's leadership in developing the human resource capacity of the country and reducing poverty and malnutrition are immense and will continue to remain so for many years to come.

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## **APPENDIX 1**

### **SOURCES OF INFORMATION**

#### **League of Nations reports on nutrition and related development issues:**

The British Library, British Museum (U.K.)  
Mann Library, Cornell University (U.S.A.)

#### **United Nations reports on nutrition and related development issues:**

The British Library, British Museum (U.K.)  
Mann Library, Cornell University (U.S.A.)  
United Nations Children's Fund, New York (U.S.A.)  
Wageningen Agricultural University Library (The Netherlands)

#### **Donor reports on programmes in Malawi:**

The World Bank, Washington (U.S.A.)  
The Food and Agriculture Organization, Rome (Italy)  
United Nations Children's Fund Country Office (Malawi)  
U.S. Agency for International Development Country Office (Malawi)

#### **British Colonial Office reports on nutrition and social welfare:**

The British Library, British Museum (U.K.)

#### **Unpublished papers from the British Colonial Service History Project:**

Rhodes Library, Oxford University (U.K.)

**Nyasaland Government Reports on nutrition, social welfare, agriculture and other related development topics:**

Malawi National Archives (Malawi)

Bunda Library, University of Malawi (Malawi)

Chancellor Library, University of Malawi (Malawi)

Centre for Human Nutrition, London School of Hygiene and Tropical  
Medicine

**Malawi Government reports and papers:**

Malawi National Archives (Zomba)

Malawi Records Office (Zomba)

Bunda Library, University of Malawi (Malawi)

Chancellor Library, University of Malawi (Malawi)

Centre for Human Nutrition, London School of Hygiene and Tropical  
Medicine

**Raw anthropometric data from the 1938-1941 Nyasaland Nutrition Survey carried out in Nyasaland by Dr. B.S. Platt and his team:**

Centre for Human Nutrition, London School of Hygiene and Tropical  
Medicine

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## APPENDIX 2

### Comparative Data on Malawi and other eastern and central African Countries

Country	Percent of children (24-59 months) stunted 1987-1992	Under-five mortality rate per 1000 live births 1990	GNP per capita in US \$ 1989	Education as percent of total budget 1989	UNDP Human Development Index 1993
Malawi	61	253	180	9	.166
Burundi	60	192	220	17	.165
Tanzania	:	170	130	14	.268
Zambia	59	122	390	16	.315
Kenya	41	108	360	27	.366
Rwanda	34	198	360	25	.186
Zimbabwe	31	87	650	15	.397
<b>Average for sub-Saharan Africa</b>	46	175	475	18	:
<b>Average for all Less Developed Countries</b>	52	189	237	15	:

Source: UNDP 1993

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## SUMMARY

This thesis concerns the issue of national development planning and child malnutrition in the small central African country of Malawi. The main focus is on the link between knowledge and action, especially how the general perception of the malnutrition problem relates to the policies and programmes put into place to address it. An evaluation is carried out on the attempts made at national nutrition planning during three different periods of time over the past six decades: Period I: from 1936 to 1963 while the country was under British colonial rule, Period II: from independence in 1964 to 1979 and Period III: from 1980 to 1990. The hypothesis put forth is that: **nutrition planning, as defined by the model of planned development, has not been successful in Malawi and this has been due to the lack of fulfillment of four prerequisites which are necessary for planned development.** These four prerequisites include the existence of 1.) mutually agreed objectives, 2.) the political will to achieve those objectives, 3.) appropriate planning theories as well as 4.) the means and capacity to take the required actions.

**Chapter 1** introduces the structure of the thesis. **Chapter 2** presents the theoretical background to the concept of planned development and reviews the major issues facing development planners when trying to put theory into practice. The role of knowledge in planned development is reviewed as are the different types of planning theories used (*e.g.* substantive theories in planning, procedural theories of planning and social theories for planning). **Chapter 2** also covers the subject of nutrition planning in developing countries which apart from encompassing all the difficulties which face development planning in general also brings with it additional challenges. In order to provide the necessary context within which national nutrition planning efforts can be viewed a brief political and development profile of Malawi is given in **Chapter 3**. An analysis of trends in nutritional status in Malawi since the 1930s is undertaken in **Chapter 4**. The results of this analysis show that little change in the problem of child stunting is evident which remains as serious

today as it was sixty years ago and places the country among the worse for malnutrition in Africa.

In order to evaluate the attempts made in nutrition planning the status of fulfillment of each of the four prerequisites is evaluated in **Chapter 5** for the three time periods under review. This involves examining a number of related factors. **First**, the major development issues facing Malawi are examined in order to place nutrition within the overall context of development planning priorities. **Second**, the nutrition planning theories popular with international agencies at different points in time are also reviewed. **Third**, the general perception held of nutrition by the Malawi Government and the country's donor community is reconstructed at different points in time. **Fourth**, using a number of Case Studies the major actions taken to address malnutrition are examined in order to assess their appropriateness in addressing the country's malnutrition problem. **Fifth**, the capacity (*e.g.* institutional, human and financial) of both the Government and the donor community to undertake nutrition planning is also reviewed. **Sixth**, the policy climate surrounding the issues of hunger, food insecurity and poverty is examined over time to determine the influence of political factors on nutrition planning especially in regard to the existence of political will to take action.

The conclusions of the thesis are presented in **Chapter 6**. Overall the analysis support the hypothesis that nutrition planning has not been successful in Malawi since child malnutrition levels are much the same today as during colonial times. Problems have existed in regard to the lack of simultaneous fulfillment of the four prerequisites which are required for development planning to be successful. A major deficiency in Malawi throughout the past six decades has been the use of inappropriate nutrition planning theories to address the problem. A chronic weakness has been that planners have not undertaken an adequate assessment and analysis of the local nutrition situation. Instead of an empirically based understanding of the true nutrition situation, the preconceived notions of Western donors have dominated the perception of the problem. As a result most of the

nutrition programmes put into place have been irrelevant and inappropriate for addressing the food and nutrition problems found in the country. Since the time of independence another serious factor constraining nutrition planning has been the lack of political support on the side of the country's leadership to recognize or address the issues of hunger, food insecurity and poverty. This in turn has severely constrained the discussion of and research into malnutrition. As a result only politically acceptable nutrition interventions, such as those in health and education, were ever contemplated and implemented. However these actions only addressed a small part of the malnutrition problem and completely bypassed the significant issue of household food insecurity. Since the mid-1980s more support was forthcoming from the donors in the country to address the problems of poverty and food insecurity. As a result the empirical evidence began to mount to describe the severe state of malnutrition in the country especially its food security and poverty dimension. As national institutions gained more experience in nutrition planning and research by the late 1980s improvements began to be evident in the planning process. The political support of senior authorities in Government also began to slowly emerge in the mid 1980s which finally resulted in the previously taboo topics of hunger, food insecurity and poverty being transformed into central development issues. By 1990 these issues began to feature as priority objectives in the national policy documents of both the Government and the donor community.

A number of lessons can be distilled from Malawi's long history of nutrition planning. The fundamental lesson learned has been that the political will must exist both on the side of the Government as well as on the side of the donors if something is to be done about malnutrition.

Other key lessons include the importance of having:

- \* an overall national development strategy which is people-oriented;
- \* strong allies in the Government and donor community to advance the cause of malnutrition in the national policy arena;
- \* an empirically-based common consensus which exists within the Government, donor and university community on the nature of the country's nutrition problem especially its underlying and basic causes;
- \* the capacity to undertake research on food and nutrition issues, including evaluations;
- \* an institutional focal point within the Government which has the capacity to maintain a multi-sectoral overview of nutrition-related policies and programmes;
- \* planners in all Government sectors who are aware of the importance of nutrition and national development.

An important conclusion of this thesis is that the problem of malnutrition in Malawi can not be viewed as a small issue. Instead because of its linkages with many aspects of development at the level of the individual and the nation and its high costs in human, social and economic terms, the problem of malnutrition needs to be seen as a central development issue. Improvement in nutritional status should be viewed as an objective in a variety of sectors including macroeconomic planning, agriculture, health, education, amongst others. The societal nature of malnutrition is also such that its solution can not solely be limited to the work of nutritionists and direct nutrition programmes on their own, but rather has to involve planners in all sectors. Lastly, the time span in which improvements in the nutritional status of Malawi's population as a whole could be expected needs to be realistically framed in terms of decades in light of the seriousness of the present situation.

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## SAMENVATTING

Dit proefschrift behandelt de nationale ontwikkelingsplanning en ondervoeding bij kinderen in Malawi gelegen in zuidelijk Afrika. De relatie tussen kennis en actie vormt het hoofdonderwerp, speciaal met betrekking tot de vraag, hoe de algemene perceptie van ondervoeding samenhangt met beleid en programma's ter bestrijding van ondervoeding. Drie verschillende pogingen om te komen tot een nationale nutrition planning gedurende de laatste zestig jaar worden ge-evalueerd: Periode I: van 1936 tot 1963 toen het land onder Brits koloniaal bestuur stond, Periode II: vanaf de onafhankelijkheid in 1964 tot 1979 en Periode III: vanaf 1980 tot 1990. De volgende hypothese wordt geponeerd: Nutrition planning, zoals gedefinieerd door het model van geplande ontwikkeling, is in Malawi niet succesvol geweest en dit is te wijten geweest aan het ontbreken van vier vereisten noodzakelijk voor geplande ontwikkeling. Deze vier vereisten omvatten: 1) gezamenlijk overeengekomen doelstellingen, 2) de politieke wil om deze doelstellingen te bereiken, 3) de juiste planningstheorieën en 4) de middelen en het vermogen de noodzakelijke acties te ondernemen.

**Hoofdstuk 1** introduceert de structuur van het proefschrift. **Hoofdstuk 2** presenteert de theoretische achtergrond van het concept van geplande ontwikkeling en geeft een overzicht van de voornaamste problemen die ontwikkelingsplanners tegenkomen wanneer ze de theorie in praktijk willen brengen. De rol van kennis in geplande ontwikkeling en de verschillende theorieën wordt behandeld (bijvoorbeeld substantieve theorieën in planning, procedurele theorieën van en sociale theorieën voor planning). **Hoofdstuk 2** beschrijft nutrition planning in ontwikkelingslanden, welke naast alle moeilijkheden van ontwikkelingsplanning in het algemeen ook specifieke problemen met zich meebrengt. In **Hoofdstuk 3** wordt een kort politiek en ontwikkelingskundig overzicht van Malawi gegeven om zo het noodzakelijke kader te geven waarbinnen de nationale nutrition plannings activiteiten gezien moeten worden. Een analyse van trends in de voedingstoestand in Malawi sinds de jaren dertig wordt in **Hoofdstuk 4** beschreven. De

resultaten van deze analyse tonen aan dat weinig verandering is opgetreden in het probleem van chronische ondervoeding ('stunting') bij kinderen, een probleem dat nu net zo ernstig is als zestig jaar geleden en Malawi plaatst onder de meest ernstig getroffen landen in Afrika.

Ten einde de pogingen van nutrition planning nader te onderzoeken, wordt in **Hoofdstuk 5** elk van de vier vereisten voor de drie tijdsperioden ge-evalueerd. Dit omvat het onderzoek van een aantal met elkaar in verbinding staande factoren. Ten **eerste** worden de voornaamste ontwikkelingsparameters, waarmee Malawi wordt geconfronteerd, onderzocht teneinde de plaats te bepalen van voeding binnen de prioriteiten van ontwikkelingsplanning. Ten **tweede** worden de nutrition planning theorieën, gebruikt door internationale organisaties gedurende verschillende tijdsperioden onderzocht. In de **derde** plaats worden de percepties over voeding van de Malawiaanse overheid en de voornaamste donoren gereconstrueerd gedurende de verschillende tijdsperioden. Ten **vierde** wordt met gebruikmaking van een aantal case studies, de geschiktheid beoordeeld van de voornaamste acties om het probleem van ondervoeding op te lossen. In de **vijfde** plaats wordt de capaciteit (institutioneel, mankracht en financieel) van zowel overheid als donorgemeenschap om nutrition planning uit te voeren, onderzocht. Ten slotte wordt het politieke klimaat met betrekking tot honger, voedselonzekerheid en armoede onderzocht, teneinde de invloed te bepalen van politieke factoren op nutrition planning, speciaal met het oog op het bestaan van de politieke wil om te handelen.

De conclusies van dit proefschrift worden gepresenteerd in hoofdstuk 6. In het algemeen wordt de hypothese gesteund, dat nutrition planning in Malawi niet succesvol is geweest aangezien de tegenwoordige prevalentie van ondervoeding bij kinderen vergelijkbaar is met die in de koloniale tijd. Er waren met name problemen met betrekking tot het onvoldoende gelijktijdig tegemoetkomen aan de vier vereisten voor een geslaagde ontwikkelingsplanning. Een van de belangrijkste tekortkomingen in Malawi gedurende de afgelopen zestig jaar is het gebruik van inadequate nutrition planning theorieën

geweest. Een voortdurend probleem was dat planners geen adequate analyse uitvoerden van de lokale voedingssituatie. In plaats van een empirisch kennis van de werkelijke voedingssituatie, hebben voorveronderstellingen binnen de Westerse donorgemeenschap het begrip van de voedingssituatie in Malawi gedomineerd. Het resultaat was dat de meeste voedingsprogramma's irrelevant en ongeschikt bleken te zijn om de voedsel- en voedingsproblemen in het land op te lossen. Sedert de onafhankelijk vormde het gebrek aan politieke steun van 's lands leiders om honger, voedselonzekeerheid en armoede te erkennen en er wat aan te gaan doen, een belangrijke beperking voor voedingsplanning. Dit heeft het debat over en onderzoek naar ondervoeding in belangrijke mate vertraagd met als resultaat, dat alleen politiek acceptabele interventies, zoals binnen de gebieden van onderwijs en gezondheidszorg, konden worden overwogen en ingevoerd. Deze acties echter richtten zich slechts op een beperkt deel van het ondervoedingsprobleem en gingen volledig voorbij aan het belangrijke aspect van de voedselonzekeerheid van het huishouden. Sinds midden jaren tachtig werd meer donorsteun in het land verleend om de problemen van armoede en voedselonzekeerheid aan te pakken. Het resultaat was een groeiende hoeveelheid empirisch bewijsmateriaal van de ernstige ondervoeding in het land en met name van de invloed van voedselonzekeerheid en armoede. Eind de jaren tachtig kregen nationale instellingen meer ervaring in nutrition planning en onderzoek en werden verbeteringen zichtbaar in het planningsproces. Politieke steun van hooggeplaatste overheidsfunctionarissen kreeg langzaam vorm en resulteerde uiteindelijk in de transformatie van de voorheen onbespreekbare onderwerpen van honger, voedselonzekeerheid en armoede tot centrale ontwikkelingsonderwerpen. In 1990 begonnen deze onderwerpen als prioriteiten te verschijnen in nationale ontwikkelingsdocumenten van zowel de overheid als de donorgemeenschap.

Een aantal lessen kunnen worden getrokken uit de lange geschiedenis van nutrition planning in Malawi. De fundamentele les is dat de politieke wil om het probleem van ondervoeding aan te pakken aanwezig moet zijn zowel bij de overheid als de donoren.

Andere essentiële lessen zijn het inzien van het belang van de aanwezigheid van:

- \* een nationale ontwikkelingsstrategie die op mensen is gericht;
- \* sterke partners binnen de overheid en donorgemeenschap om ondervoeding binnen de nationale politieke arena aan de kaak te stellen;
- \* een empirische consensus binnen overheid, donorgemeenschap en universitaire wereld over de aard van de nationale voedingsproblematiek, speciaal met betrekking tot de onderliggende en basale oorzaken
- \* de capaciteit om onderzoek te verrichten naar voedsel en voedingsvraagstukken met inbegrip van evaluaties;
- \* een centraal overheidsorgaan met de capaciteit een multisector overzicht te ontwikkelen omtrent beleid en programma's met betrekking tot voeding;
- \* planners in alle overheids sectoren die zich bewust zijn van het belang van voeding en nationale ontwikkeling.

Een belangrijke conclusie van dit proefschrift is dat het probleem van de ondervoeding in Malawi niet als een kleinigheid gezien kan worden. Aangezien ondervoeding verband houdt met de vele aspecten van ontwikkeling op individueel en nationaal nivo en hoge kosten met zich meebrengt in menselijk, sociaal en economisch opzicht, dient ondervoeding centraal te worden gesteld in ontwikkeling. Verbetering van de voedingstoestand dient te worden gezien als een doelstelling van verschillende sectoren, onder andere macro-economische planning, landbouw, gezondheidszorg en onderwijs. Het maatschappelijke karakter van ondervoeding is dusdanig dat de oplossing daarvan niet beperkt kan zijn tot het werk van voedingskundigen en directe voedingsprogramma's, maar dat planners uit alle sectoren bij het zoeken naar oplossingen moeten worden betrokken. Tenslotte moet de tijdstermijn waarin verbeteringen in de algemene voedingstoestand in Malawi kunnen worden verwacht, realistisch worden gesteld in termen van decennia, gezien de ernst van de huidige situatie.

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## CURRICULUM VITAE

Victoria J. Quinn was born in Spain in 1957. In the early 1960s she moved with her family to the San Francisco Bay Area in California. She graduated Phi Beta Kappa from the University of California at Berkeley in 1979 with a BSc in nutritional sciences. In 1982 she received her MSc from Cornell University in New York State with a major in international nutrition and a minor in medical parasitology. During her stay at Cornell she spent four months in La Paz, Bolivia organizing and conducting a large scale iron deficiency anemia research project as part of her MSc thesis which was focused on determining the biochemical criteria for iron deficiency anaemia under high altitude conditions. In 1982 she joined the Cornell Nutritional Surveillance Program (later the Cornell Food and Nutrition Policy Program) and was based in Nairobi, Kenya until 1987 working jointly with UNICEF in developing nutritional surveillance systems in eastern and southern Africa. She was also involved in related research projects as well as organized regional training courses for Government and donor officials from the region. In 1987 she moved to Lilongwe, Malawi and served as the Regional Coordinator for the Joint UNICEF/Cornell programme. From 1988 to 1991 she worked under this project within the Malawi Government as a senior advisor to the Food Security and Nutrition Unit in the Office of the President and Cabinet. She has also been invited to speak at international symposiums and workshops on food and nutrition policy issues, nutritional surveillance and women in development in Brussels, Ethiopia, Kenya, Nepal, the Netherlands and the United States. In addition, she has worked for FAO and WFP as an evaluation consultant on supplementary feeding projects in Botswana and Malawi, as well as for the WHO as a survey consultant in Mauritius. She has also co-edited a special issue of the journal *Food Policy* in June 1994 (Volume 19, No. 3) on food security and nutrition monitoring systems in Africa. In April 1993 she moved to Accra, Ghana where she now resides with her husband Ken Williams and their young son Thomas D'Arcy.