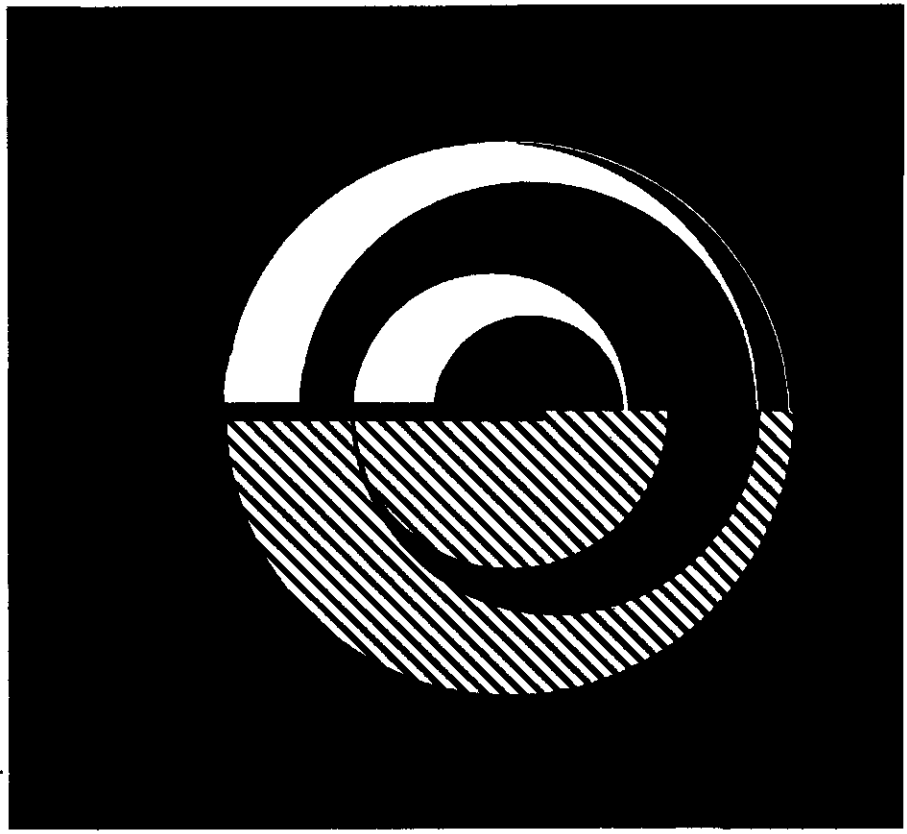
RURAL SOCIOLOGY IN ACTION



FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS

A. W. van den BAN

RURAL SOCIOLOGY IN ACTION

RURAL SOCIOLOGY IN ACTION

Prepared by
A. K. CONSTANDSE

in collaboration with
E. W. HOFSTEE

Department of Rural Sociology,
Agricultural University, Wageningen, the Netherlands

FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS
Rome 1964

Printed in Italy

CONTENTS

INTRODUCTION

Rapid change is one of the most striking characteristics of our times. The enormous and continuing technological developments of this era have brought about changes in all but the most remote areas, and all parts of the world have become interdependent. In the eighteenth and even the nineteenth century, the majority of people lived in their own region or country in accordance with a culture developed and maintained almost exclusively by themselves and but slight contact with the rest of the world. Today this is no longer possible. No group can remain uninfluenced by events occurring outside its own territory.

The effects of this process of change give rise to tensions in many fields of human activity, perhaps more so among the rural communities of the world, where frequently revolutionary advances in techniques, ways of farming and modern industrial methods must be accepted by people long accustomed to following a traditional way of life rooted in a remote past.

The problem is further complicated by the fact that the changes are not merely of a technological nature. Closer communication between differing cultures in the economic and technological fields has resulted in the continuous exchange of new ideas, new norms and new values, so that changes which occur in one sector of social life usually affect others. When the adjustment of a society to a new situation is incomplete, that is, when certain elements do not change at the same pace as others, friction develops, sometimes with chaotic results.

Such experiences have indicated that not all changes, no matter how advantageous they may seem to be to the well-being of a people, should be accepted uncritically. The need for guidance in all development is now recognized universally. We live in an age of planning.

Usually, the economic factor in the process of change is of utmost importance, but most people engaged in planning know that no matter

how important it is in itself, the study of economics alone will not necessarily ensure a predetermined course of events. Indeed, agriculture can be considered as an economic activity but it cannot be guided solely by the profit motive. The only way of assessing the results of a specific measure is by first acquiring a thorough knowledge of the rural society as an entity — its structure, functions and culture. To overlook some of the elements in such an entity may lead to complete failure in an effort to change others.

Many rural welfare workers are aware that a science does exist in the study of rural society — rural sociology. But unfortunately, all too often the purpose of rural sociology is not too clearly understood, nor is the manner in which it contributes to the practical application of other sciences.

The aim of this study is to encourage a better understanding of rural sociology and the role that it can play in the development of rural life. For those unable to make a thorough study of the fundamentals of the science, it offers a short introduction which, it is hoped, will enable all those engaged in rural welfare — administrators in government offices, workers in agricultural and home economics advisory services, teachers in agricultural colleges, etc. — to make increased use of the findings of rural sociology and to understand the work of the sociologist when meeting him in the common field of interest. For those who would like to know more about the history, development, theory and methods of rural sociology, suggestions have been included for further reading.

The first part of the study gives a brief survey of rural sociology as a science: its character and development, its place among the other behavioral sciences, and the nature and results of rural sociological research.

The second part describes some examples which illustrate the contribution that rural sociology can make to the improvement of the economic and social conditions of rural life. These examples have also been chosen to demonstrate the fields of interest, possible specializations, practical significance, and the working methods of rural sociology.

1. RURAL SOCIOLOGY AS A SCIENCE

Nature and development

Rural sociology is a special field of general sociology. The rural sociologist must be, primarily, a sociologist. He must be trained in the same way and work with the same methods as his colleagues who specialize in urban sociology, industrial sociology, the sociology of religion or of the family. For this reason, it is not possible to discuss the development of rural sociology without treating simultaneously the development of general sociology.

Sociology may be defined as a science dealing with the structure and changes of human groups in relation to their members and to other groups. Man is a social being and, consequently, each individual, even the most atypical, interacts with other people. This interaction is not merely a series of incidents with unpredictable results; usually it takes typical forms in repetitive situations and induces a patterned behavior. In his interaction with others, man weaves patterns of relationships which have a rather stable structure, and these characteristic mutual relationships give rise to, and distinguish, social groups. Such groups, which are often interrelated and overlap each other, since one person usually belongs to many groups, together constitute the complicated structure known as society.

HUMAN SOCIETY AND INDIVIDUAL BEHAVIOR

Human society is not merely the sum total of a number of individuals; it is far more complex. It is indeed composed of individuals and changed by the behavior of individuals, but it is also a reality in itself which influences the behavior of its members. People make society, but people are also made by society. An important part of a human personality is formed by the society in which one is educated.

To understand why people act as they do, it is necessary to know the nature of their interaction among the groups and the society to which they belong, because to a large extent, the characteristics of group life are responsible for human behavior.

In social group life, three basic aspects can be observed: structure, function and culture.

Structure is the word used to define the way in which a group is built up; the nature of the ties which knit people together as a social group; the way in which a group is organized; the type of leadership found in a group and how leadership comes into being. All these factors must be studied together to determine the structure of a group.

Function means the effects of the activities of the group on the group as a whole, on its individual members, and on society as a whole. Usually a group has several, possibly many, functions which may have little to do with the original, primary purposes for which it was created, yet they are of the greatest importance in explaining the behavior of the members of the group.

Culture is used here in a broad sense, to signify the total material and nonmaterial inheritance of a certain group: its beliefs, ideals, traditions, science, customs, folklore, mores, techniques; all that bears the stamp of the human mind. The behavior of each individual is strongly influenced by the culture of the group to which he belongs. Culture regulates function and structure; it must therefore be studied very carefully to arrive at understanding both individual and group behavior.

The study of sociology comprises these three basic and continually changing aspects.

Historical foundation

In this brief outline of the subject matter of sociology, some concepts have been introduced which will be used on a number of occasions in the present study. The following notes help to explain how they came into existence and how they assumed the forms as we know them today.

For as long as people have tried to gather systematic knowledge, in other words, for as long as they have thought along scientific lines, there have been scholars interested in the study of human society. In the west, a long succession of social thinkers can be cited, from Plato and Aristotle; but it was not until the nineteenth century that sociology could be spoken

of as a science. Until then, the study of human society was carried on simply as a branch of other subjects, such as social philosophy, ethics, theology, law and politics. In this respect, sociology can be compared with economics, which only developed as a science in the eighteenth century when, with the rise of modern capitalism, land, labor and capital became generally accepted as interchangeable values. The science developed only when there was a need for it.

The Industrial Revolution and the resulting confusion in western society brought sociology into being as a science apart. At this time, society was growing very rapidly with social change evolving radically. As a consequence, many problems were revealed that could not be solved, nor overlooked, as they had been, and everyday knowledge was no longer sufficient to account for what was occurring. For the first time, human society was seen as a phenomenon, a subject that could, and should, be studied and possibly regulated, in much the same way that it had been proved that man could control natural phenomena with the help of the natural sciences.

The inception of sociology as a science is to be found in the works of Saint Simon (1760-1825), and it was his secretary, Auguste Comte (1798-1857), the founder of positivistic philosophy, who used the term sociology for the first time. In his works, it is not yet identified as a separate science but as an element in a system of sciences. This marks the beginning of a very prolific and significant period in the development of sociological theory. Furthermore, although the great sociologists of the past have contributed enormously to the development of the theory which we still draw upon, their work is not particularly helpful for an understanding of present-day sociology, essentially because their concept of sociology was for the greater part not empirical.

With few exceptions, such as Le Play (1806-1882), who performed actual work in social research and could be considered as the first rural sociologist, and Max Weber (1864-1920), students of social life at the time evolved theoretical systems which were not based on systematic investigation. At most, they were merely illustrated by examples drawn rather haphazardly from life.

The New World - a practical approach

However, in the United States, where a wave of immigration and the stormy emergence of a new society confronted scientists with phenomena unknown to Europe, there was less interest in all-embracing theories.

The need was essentially for the understanding of practical social problems and a possible solution to them.

Evolving as it did without the philosophic background so characteristic of European science, and coupled with a reluctant attitude to theory, sociology in the United States was based on facts, observation, and on extensive social research.

Such concentration on practical problems led to specialization in different fields of research. Some workers studied the social phenomena occurring in towns and created "urban sociology"; others were interested specifically in social life in rural areas and developed " rural sociology." In a short time, sociology had become extremely important. It was taught in universities, and many research institutes were created. Rural sociology was first recognized as a separate discipline between 1920 and 1930, and it was soon included in the curricula of many state Land Grant colleges.

American enthusiasm for fact-finding did much for the development of sociology as an empirical science, and the research techniques developed in the country have been of significant importance for sociology in the world as a whole. However, there is limited value in either doing research which does not try to build its results into a theoretical framework, or in creating a theory which is not verifiable by known facts. Although much exaggerated, there is perhaps an element of truth in the statement that the first approach has been popular in the United States and the second in Europe. Nowadays, however, the differences between American and European sociology have become considerably fewer. In the United States, there is renewed interest in " European " theory and several outstanding scholars have made important contributions to the building up of a sociological theory based on research; in Europe today, empirical sociology has taken the lead.

RURAL SOCIOLOGY COMES OF AGE

Although rural sociology has been known as a separate branch of the science in the United States for about 40 years, it appeared in Europe only after the second world war. This does not mean that interest in the study of rural social life has been imported recently from the United States. On the contrary, social research in rural areas had been conducted for many years in several European countries in the course of work in other sciences, such as geography, economics, history, etc. Social scien-

tists in Europe were interested in aspects of human society somewhat different from those of major concern to the Americans; nevertheless, rural sociology in Europe today is based on quite a long tradition of research.

Although significant work was carried out in Europe, particularly in Germany, the United Kingdom, France, Romania and the U.S.S.R. between 1890 and 1925, it can generally be said that large-scale sociological research (both rural and nonrural) in Europe is of comparatively recent date. Of the sociological and research institutes at present established in universities, government offices, professional organizations, churches, political parties, etc., of several European countries, a considerable number have been founded since the second world war.

Sociology has developed in Europe in accordance with the strong need felt for it, much the same as in the United States. Population growth, postwar reconstruction, industrialization, increased migration, greater demand for social security, the changed political and economic patterns have all demanded that government and other institutions try to regulate social change. Thus the social sciences have become indispensable.

Sociology for developing countries

So far, only work in Europe and the United States has been discussed, because it was there that sociology was developed as a science. However, sociological science is now more widely known and taught in most universities of Latin America, Africa and Asia.

The particular problems of the developing countries have given rise to a new specialization in sociology, that of the developing tropical and subtropical areas. Once again, the realities of a rapidly changing world help to explain why such a discipline has come into being.

In the past, the fundamental differences between nonwestern and western cultures have always attracted the social scientists of the west. It was purely scientific interest rather than the need to solve practical social problems which inspired the research of ethnologists and anthropologists. The social sciences absorbed a great deal from this research but not what was needed to solve the problems that became apparent as soon as these areas began to develop. Very soon so-called "primitive societies" will no longer exist. Therefore, technological development and its impact on old cultures is now the most important phenomenon to be studied in the developing countries, with the techniques and knowledge of present-day sociology.

The place of rural sociology among the other behavioral sciences

In the preceding pages, sociology has been mentioned in connection with other sciences. There is often confusion about the position of sociology in relation to other sciences, and some clarification on this point will be helpful.

In the nineteenth century, sociology was seen by Comte as the pinnacle of the system of sciences, and for a long while it was regarded as the dominating behavioral science to which all others in this field were adjuncts. Nowadays, further removed from its philosophical origin, the claims made for sociology are more modest, and it is regarded as one among several approaches to the study of human behavior. It is acknowledged that close co-ordination between the various sciences is essential for the complete understanding of human behavior.

Economics is one of the " neighbors " of sociology, and it is important to understand the relationship of sociology to it, and hence of rural sociology to agricultural economics.

Economists have developed an adequate system of analysis regarding the manner in which people produce and consume, how they establish their income and how they spend it. Such analysis can indicate the way to improve an economic situation and points out the strong and weak factors in a production system. It also enables economists to predict what will happen when certain changes take place in a particular system. However, for these predictions to have any value, the basic assumption must be correct; namely, that the people in question are behaving rationally, in the economic sense, and are above all willing to improve their economic situation.

It is known that the *homo economicus* is a myth. In reality there are traditions, taboos, certain preferences, etc., which prevent people from behaving rationally, so to speak; and all the social aspects of group life must be known in order to understand economic behavior and its relevant changes. This fact will be dealt with in detail subsequently. It is mentioned here merely to indicate the place of sociology in the study of socio-economic problems. Sociology is the essential complement to economics where people do not respond to economic laws. This does not mean that sociology need always explain why a group of people is incapable of understanding what is so manifestly for its benefit. Sometimes the situation may be reversed, and the sociologist is required to explain that certain undoubted economic improvements are not at all furthering the well-being of the people.

Psychology is another behavioral science closely related to sociology. Sociology began with the study of mankind; in other words, society. But sociologists soon discovered that this was an unmanageable, abstract generalization and turned to the study of smaller groups: nations, ethnic groups, village communities, kinship groups and, finally, families. Psychology is primarily the study of the individual, but here again, finding that it is not possible to understand the individual without taking into consideration his environment, and in particular his relations to other people, psychologists were invariably drawn to the study of groups. The science which is known as social psychology arises at the point where sociology and psychology meet.

It is difficult to draw the line where sociology ends and psychology begins. In the United States, where contact between these two sciences was established at an early stage, sociology often covers fields which European scientists would classify under social psychology. However, borderlines are of little importance in practical research, and the main distinction to bear in mind is that sociology is primarily interested in group life as such, whereas social psychology is the study of the individual through his reactions to group life.

Other behavioral sciences are cultural and social anthropology. Here, particularly, confusion arises in respect of terminology. Ethnology is the study of the culture of "primitive" people, and it was especially well developed in Europe in the period of colonialism. In the United States, the term cultural anthropology was used to describe the same discipline which, in the course of time, was not restricted to the study of primitive cultures. Originally, the essential difference between cultural anthropology and sociology was that the former embraced total cultures, including economics, technology, law, religion, etc., while the latter restricted itself to the study of groups and group-phenomena in a culture. The rapid disappearance of primitive cultures and the growing complexity of societies in the developing countries have tended to draw cultural anthropology and sociology closer together, and both disciplines are often taught in the same university department. Nevertheless, there remains a difference in approach which is conducive to the development of sociological theory; the cultural anthropologist, with his broader view, contributing a better understanding of cultural entities to the more practical sociologist, who is principally interested in certain culture elements.

Finally, social anthropology should be mentioned. This science, especially well developed in the United Kingdom, emphasizes the struc-

ture and functions of groups in primitive societies and is closely related to sociology.

Sociology, which includes rural sociology, takes its place among the other behavioral sciences as the discipline of social group life in modern and developing societies.

Teamwork for total approach

Each behavioral science has its own "dominion," but all are directed toward the same subject, namely, human nature. They are neither opposed nor independent, and inevitably they sometimes overlap; because of changes in the societies under study, their boundaries are continually shifting. Differences of approach are of significance from the purely scientific, rather than from the practical, point of view, although the layman might well be confused by the variety of allied sciences confronting him when he wishes to study a particular social problem.

The most satisfactory results of scientific research will always be achieved in teamwork with sociologists, economists, psychologists and anthropologists. When the rural sociologist needs to work independently, he should bring to his task a basic knowledge of the methods and results of the other behavioral sciences.

Rural sociological research and its results

Sociology nowadays is primarily an empirical science. To define this term further: science means systematic knowledge, and its accompanying adjective empirical indicates that this knowledge is based on research, observation, and the collection of data.

These essentials concede to sociology its practical significance. Even an encyclopedic knowledge of facts has in itself no practical value, because observed phenomena can only be understood and explained through the perception of the relationships between them. Knowledge becomes science only when it is classified, when causal or functional relationships between phenomena are made clear, when observed regularities can be established in order to help explain other phenomena.

Even today, when the practical value of the science is most clearly demonstrated by the thousands of sociologists employed throughout the

world, the question can still be, and indeed often is asked by the "victim" of a field interviewer, "Why is it necessary to make knowledge of everyday life into a science? Everybody can see what happens in his environment and give his explanation for it. Why should people be bothered by sociologists with their seemingly absurd questions?"

The answer is that unsystematic knowledge of social phenomena and conclusions based on it are unreliable.

For example, an old farmer who has lived all his life in a small village acquires a fund of knowledge about his community. He can tell the story of each family living in the neighborhood. He knows entire life histories, people's virtues and vices, their very thoughts. Nothing is concealed from him. Nevertheless, his judgment is often faulty, and will certainly be biased: he feels an antipathy to some and affection for others. He has strong opinions about many events and developments with which he is not in agreement. Almost certainly he does not appreciate the quantitative significance of the phenomena he describes; his "many" may in reality be very few things, his "everybody" very few people.

Eventually, a young sociologist appears to study the farmer's community for a period of about three months. He interviews a number of people, selected to represent accurately the total population. He interviews systematically with the help of a prepared questionnaire designed to test certain hypotheses. He collects statistical data. At the end of his visit, he leaves with lengthy records from which he will make his report. Certainly he has not been there long enough to know the community as intimately as the old farmer; but what he does know is more reliable and reveals more about social reality than the farmer's stories. This has no bearing on youth or old age, wisdom or folly; it is simply a matter of training in unbiased systematic observation, in efficient fact-finding. A sound sociologist is dispassionate and does not allow his personal emotions to influence his work. His judgment is not affected by feelings of sympathy or antipathy for people, nor does he regret or welcome certain innovations. He simply observes and interprets objectively and unemotionally.

This obvious example illustrates the principal difference between science and the simple knowledge of facts. It is comparable to the well-known conviction of old people, that in their youth winters were colder and summers hotter, whereas a statistical analysis of weather reports proves that these memories are not quite accurate.

Objective approach to complex problems

Naturally, the science of sociology becomes still more useful when it is applied to the understanding of more complex organizations which function as one social system but which cannot be known and understood in their totality through the personal experience of an individual.

A professional organization, for example, can be so large that many of its members do not know each other personally. The leading group of such an organization formulates general opinions which it trusts will represent those of its members. But communication in a large organization does not always function very efficiently, and the leaders can never be certain that they have interpreted the ideas of their members correctly. However, the sociologist, who is not a member of such organization, nor personally interested in its aims, can check whether the assumptions have been correct. With his research techniques, a questionnaire, sample, correlation calculations, etc., he can reveal facts and interpret phenomena which cannot be discovered through everyday knowledge based on personal experience.

Planning and sociological approach

Such examples, and there are many similar situations where the person involved is unable to see facts which can be perceived objectively by the trained sociologist, help to explain why sociology has become so important. Since this is an age of planning, decisions have to be made by planning agencies, which exercise a strong influence on social life. Frequently, the changes introduced by planning affect social group life quite drastically; most often, once changes have been effected, they cannot be reversed.

Since society is scarcely a laboratory for indiscriminate experimentation, the decision maker must appreciate the full implications of what he is going to do before he begins. If the right measures are to be chosen from the beginning, a thorough knowledge of the social group for which an action program is to be carried out is essential. This is why planning authorities are calling increasingly on the help of social research.

Social research has been mentioned explicitly because misunderstanding is often caused by the fact that some people expect sociologists to know in advance what should be done to improve social life in a partic-

ular case. Naturally, the sociologist possesses knowledge based on general sociological theory which enables him to interpret readily the significance of certain phenomena, but to a certain extent he is engaging in speculation, unless he can corroborate his interpretation by research.

The sociologist is in the same position as a pedologist who knows many soils in general but can only make recommendations about a certain field after having analyzed a sample of its soil. He needs to investigate; his special ability is in knowing better than others how to organize research. He does not ask questions just for the sake of asking them or to collect as much general knowledge as possible. A good sociologist knows what to ask; he works from a hypothesis and tries to obtain a maximum of information with a minimum of questioning.

This subject has been discussed somewhat at length so that the objective nature of sociology as a science can be clearly understood. If, for example, an economist states that the construction of warships is a measure which will improve a country's economy, he is stating a fact; he expresses no opinion either for or against war. Whether he, personally, is a pacifist or a militarist, his conclusion as a scientist will be the same. The sound sociologist reasons in much the same way. No ideology or preconceived ideas influence his work; he simply tries to understand human behavior and to indicate the factors motivating human activity without judging them. This is the only possible approach to cultures at variance with one's own. Only in this way can it be understood that certain mores and customs, which may be emotionally disconcerting to the observer, are normal, correct and of the utmost importance to members of a specific group.

In the study of human nature, this objective attitude can lead to unpleasant results. Often the facts discovered by the sociologist are regarded by the people among whom he is working as unfavorable, or even as derogatory judgments. For example, let us assume that in a certain region there are two groups of members of two different churches, A and B. It is found that there is a correlation between farm yield and church membership, in that the farmers who belong to church A have significantly lower yields than those who belong to church B. There may be a causal relationship between these facts. Perhaps the creed of church B praises hard work as a virtue, whereas the liturgy of church A encourages many ceremonies and holidays. Even when the sociologist does no more than observe these facts and explain them, he may be considered by some people as a dangerous man who is opposed to church A. The

truth is, of course, that he has been objective; he has not advised that attendance at church A should be forbidden. He himself may even be a member of this church.

Of course, his conclusions are "dangerous" insofar as his report will be read by people who are free to use his conclusions as a basis for action and, theoretically, this could result in the suppression of church A. But it is also possible that his employer was church A itself, wishing to know what was wrong with its own members and using the conclusions of the report to take measures for its own benefit.

Critical importance of interpretation

The possibility that his report may influence a social change helps the sociologist to be extremely cautious in his interpretation of the facts observed. In drawing conclusions too easily, it is not that he himself may appear ludicrous, but that what he says may strongly influence action programs — in which case it could be disastrous.

The results of sociology, as of all the behavioral sciences, can never have the absolute precision of the natural sciences, since the laws of sociology are not physical laws. The number of variables used to produce a certain phenomenon are never exactly known, and it is possible for one to be overlooked. As evidenced from past experience in social research, there is always the chance of being wrong. The sociologist must constantly be aware of these limitations and accordingly exercise the utmost care in drawing conclusions. Sometimes this may even put him in the difficult position of having to refuse to answer the many questions posed by the practical policy makers. However, as time advances and the experience of social research accumulates, so will the chances of being wrong grow correspondingly less.

In this general survey, some references have been made to the working methods of rural sociology. It is not proposed to consider in detail such techniques as methods of sampling, interviewing, composition of questionnaires and schedules, case studies, tabulation, classification of data, etc., since this would lead the discussion too far from essential principles.

Sociology is a study about which everyone knows something. This gives many opportunities for excursions into the subject by amateurs and, unfortunately, the science has sometimes been discredited undeservedly by unreliable information appearing in print. Much more fre-

quently than in subjects such as medicine or physics, many well-meaning but unscientific studies are represented as sociology, and often the distinction between the journalist interested in social studies and the professional sociologist is not apparent to the layman. Nevertheless, the need for sociology and its practical value are being recognized increasingly, and the science continues to develop and progress throughout the world.

This short introduction has of necessity been rather general. The following pages give examples from the field to show what sociology can do for rural life from a practical point of view.

2. CONTRIBUTION OF RURAL SOCIOLOGY TO THE IMPROVEMENT OF ECONOMIC AND SOCIAL CONDITIONS

General considerations

The contribution of rural sociology to the improvement of rural life is based on the establishment of accurate facts about conditions in rural districts. These facts must be considered both in relation to each other and to the whole social structure before their significance can be properly understood.

Once the rural sociologist has revealed what lies behind the facts and exposed the factors contributing to the conditions considered unsatisfactory, those workers concerned with the welfare of the rural population can determine properly planned action for changing them. Here it must be stated explicitly that the responsibility for such policy making, which entails expressing preferences and making choices, does not rest with the sociologist. He can perhaps indicate certain lines of action and their possible consequences; when action programs have been formulated and implemented, he can evaluate them; but he must do all this completely objectively.

Scope

It is not simple to describe briefly the practical work of rural sociology today, which by definition can cover everything pertaining to the rural population in group relationships.

An idea of the work of rural sociologists in the United States, for example, can be given by reproducing a list which E. M. Rogers (1) has drawn up from an analysis of the contents of the American periodical *Rural Sociology* between 1952 and 1959. During this period, he found that the largest number of articles appearing on the same subject was

43, dealing with social change in underdeveloped foreign cultures, followed by 29 articles describing the results of research on the adoption of new farm practices. This clearly illustrates how important effective rural extension work is considered in the United States today. Twenty-eight articles dealt with the study of rural localities and communities, their changes in social structure, the decline of old communities and the emergence of new ones with different kinds of relationships. The rapidly changing social classes and high social mobility were discussed in 16 articles, and 15 were on the subject of rural migration. Like other sciences, rural sociology is constantly striving to improve its working techniques, and 13 papers discussed research methods, attitude scaling, etc. Twelve dealt with government agricultural agencies, 10 described research on rural families and family planning, and 9 were concerned with the rural school. Another 9 discussed various types of farmers, part-time, non-resident, commercial. Finally, a lesser number of studies were devoted to medical care, housing, the problems of the rural urban fringe, participation in formal groups, mental health, etc.

This list is, of course, only representative of the division of interest in the United States. In each country, different topics are of greater importance, and rural sociologists are principally engaged in those fields of study where the most urgent problems exist. A list of the major research projects carried out in a number of European countries, drawn up in 1960 by H. Mendras (2), shows very clearly that the choice of subjects is closely related to the national socio-economic situation. It reveals that the main concern in almost all European countries is the impact of urbanization and industrialization on rural areas.

Growth of towns increases migration from the country to the town, sometimes leading to rural depopulation. On the other hand, industry has penetrated into the rural areas, introducing new ways of life and changing the outlook of the farming population. If they are to survive in this new situation, farmers must adapt themselves to the changed circumstances. Sometimes the old environment cannot meet the new demands of its inhabitants.

Although all of the topics mentioned as being of interest in the United States are to be met in European studies, the emphasis on them is not similar. In many of the European countries, with a rural culture rooted strongly in the past, social change has a different point of departure. Complicated reallocation of land is often necessary before rural areas can be modernized; conditions of landownership need to be changed; market-

ing must be reorganized. Inevitably, all of these measures have a profound effect on the old culture and in many cases arouse a great deal of resistance among the local population. There are variations on this theme from country to country. In the United Kingdom, which has long been industrialized, problems are different from those in a country such as Italy, which has a relatively large rural population. The level of education of the farming population is higher in the United Kingdom than in Italy, and English rural sociologists are unlikely to encounter the problem of illiteracy, which is of primary importance for the sociologist working in the south of Italy, for example.

The situation is more diverse in the developing countries, where social change frequently results in the creation of a completely new society, with little relation to the past. To understand the shock of such a change, it is unnecessary to quote such an extreme example as that of the acceptance of modern technological culture by people who, until very recently, have lived in the conditions that prevailed during the Stone Age. Many more advanced cultures have been seen to encounter great difficulty when their traditional moral standards and religions are in conflict with what the modern world expects from them. The tribal systems which have disintegrated and not been replaced by new ways of social organization are a well-known example, and many others could be cited. In the developing countries, therefore, it is understandable that the greatest emphasis is on studies concerned with community development.

It is not only the frequency with which certain subjects are studied which varies from country to country but also the method of working, and the depth of penetration into the problems.

In countries with a high standard of living, primary human needs present no problems to the majority of the population. Consequently, there is more time and money available to study situations which scarcely exist in poorer countries. In addition, sociologists in such countries have many more opportunities for specialization, since there is already so much valuable information at their disposal. In the Netherlands, for example, statistics exist on almost every subject imaginable and there, obviously, research is much easier than it is in a country where not even the number of inhabitants is precisely known.

However, not all the differences in the orientation of rural sociology in various countries can be explained by the existence of certain problems and standards of economic development. As has been stated earlier, the historical background of the social sciences themselves is an

important factor. The attitudes of universities or sponsoring institutions within one country can vary, and the personal influence of leading scientists is sometimes responsible for the direction of development of rural sociology at a certain place and time. Finally, rural sociological research can be affected most significantly by the attitudes of provincial or national governments.

These factors, which have been responsible for the great diversity in organization, approach and concentration of research in rural sociology, are counterbalanced by the ever-increasing contact between sociologists of all countries. For example, many sociologists have had experience abroad, and this has sometimes enabled important work to be done even in countries where there are no qualified scientists.

The purpose of this brief, general summary of rural sociological research has been to give some idea of the vast extent of its field of work. Perhaps this can now best be summarized by the list of subjects which would need to be considered in detail in a systematic study.

1. *Human groups and institutions.* The agricultural and cultural region, community, neighborhood, family, farm, church, status groups, school, co-operatives, the government, etc.

2. *Processes of change.* Urbanization, industrialization, migration, social mobility, changes in values, in farm structure, in voluntary organizations, etc.

3. *Planned change.* Resettlement, land reform, community development, agricultural extension work, education.

4. *Evaluation.* Action programs.

Rural sociology in action

The examples that follow have been chosen to demonstrate the theory, methods of working, and possible applications of rural sociology. Although, of course, each problem that confronts the worker in rural welfare is unique with regard to time and place, it is hoped that these examples will indicate the many ways in which rural sociology can further the study of specific problems. Firstly, there are

three examples from the many fields of specialized sociological study, as follows:

(*a*) *Population studies.* An example will be taken from India to show how the careful study of statistics in combination with sociological theory can reveal facts of value to economists and planners.

(*b*) *Agricultural extension work.* A review of the research which has been carried out by sociologists.

(*c*) *Rural migration.* A discussion of some facts revealed by studies on rural migration which are of considerable significance for migration policy.

Secondly, three examples are cited which describe community development projects, each in an area of extreme social change:

(*d*) *Vicos,* a former Peruvian hacienda, where community development, guided by social scientists, has changed life completely.

(*e*) *Gezira.* The cotton-growing area in the Sudan, where foreign capital and the introduction of a new crop created a new society, but without the guidance of the social sciences.

(*f*) *The IJsselmeerpolders.* In the former Zuiderzee in the Netherlands, where, on the newly reclaimed land, another society is in the process of being built up and where, especially in the study of settlement patterns, the services of sociologists are being increasingly employed.

Examples of the contribution of rural sociology to the improvement of rural life

Population studies

The study of the quantitative aspect of population — demography — is of the utmost importance to social and economic planning. No modern government can work without population statistics, and almost every country today has a periodic census, which in some cases has been introduced recently and in others dates back to the eighteenth or nineteenth century.

A periodic census and permanent records of birth, death, marriage

and migration are the basis of population statistics. These statistics provide information on the structure of the population of a given country, region, or community, which is invaluable for the government and indispensable to the organization of the many and varied activities in the service of public welfare.

There are innumerable ways in which this basic information can be used. The comparison of statistical data on the population of different areas can reveal facts that would otherwise be unknown. The conversion of registered figures into ratios makes it possible to define areas with certain characteristics, for example, low birth rate or high mortality. The comparison of data collected at different times can show developments in the growth or decline of a population and the change of population structure caused by varying birth or death rates, or migration.

Many kinds of indices and graphs can be used to obtain an insight into the demographic situation of a specific unit. Age pyramids show in a simple way whether a population is predominantly young and will grow quickly, or whether it is " gray " and in danger of dying out. Calculations can be made about the size of the average family; the average proportion of male to female, known as the sex ratio; the rate and age of marriage; fertility in marriage; fertility of mothers in different age groups; mortality and life expectancy in various age groups; and other similar facts concerning the population.

The same techniques can be applied to reveal differentials between certain social categories, such as professional groups, status groups, religious groups; in this manner, for example, many significant differences have been shown between urban and rural groups.

Such knowledge of both the actual situation and the development which has led up to it from the past, enables predictions to be made about the future. Fertility rates show whether a population will replace itself in the next generation or not, or in what proportion it will grow (net reproduction rate). Data on age structure make it possible to predict the future proportion of active to total population. Such information guides the planner in deciding how many schools need to be built before a certain date; how many more hospital beds should be provided for a growing number of old people; how much economic expansion will be necessary to avoid unemployment.

Broadly speaking, all this is common knowledge, and the demographer, who is not necessarily a sociologist and is often an economist or a mathematician, is a well-known figure to those engaged in the develop-

ment of national and regional economy. But population studies extend beyond pure demography; it is necessary to understand why differences exist and why trends develop.

Correlation provides insight

Correlation between the findings of sociological studies in the culture, structure and functions of certain groups and statistical data on the same groups can provide a great deal of information about the causes, or to use a more precise term, the interdependence of the phenomena discovered. There can be correlation between birth rate and religion if, for example, a creed encourages fertility; there is likely to be a correlation between infant mortality and child care; migratory movements may be correlated with living and working conditions in certain professional groups.

Such knowledge of the relationships between facts which, at first sight, may seem to have nothing to do with each other, often enables the influence of social change on demographic structures and processes to be foreseen. Conversely, demographic changes can indicate the intensity and nature of social change. For example, in certain countries statistics show that, on average, the higher-income groups have smaller families than the low-income groups. Other things being equal, this indicates that a rising standard of living will result in a decrease in the average family size. (It should be noted that in another stage of social development the reverse can be true.) To give a further illustration: when statistics show that although landowners tend to marry rather late in life and landless agricultural workers marry at a young age, the difference between both averages is constantly diminishing; the hypothesis can then be postulated that the cultural differences between the two groups are disappearing.

These statistics enable the planner who introduces a change in one sector of social or economic life to judge how this is likely to affect other sectors; for example, better medical care will increase life expectancy, and possibly lead to overpopulation.

Sex ratio helps explain social phenomena

From the extremely large number of population studies which could be usefully described, the example discussed here is by Gurdev Singh Gosal, entitled " The regionalism of sex composition of India's population " (3).

Statistics on the over-all population of India reveal a shortage of women, but further examination shows important regional differences. The largest female shortage is in northwestern India, where the ratio of birth between girls and boys is the lowest, and where there is a high rate of female mortality throughout infancy, childhood, and the reproductive period. In this area, the patriarchal system has been exercised throughout history. In new agricultural settlements and in highly industrialized and urbanized areas to which immigration has been male-selective, the ratio of females to males is also exceptionally low.

On the other hand, in peninsular India, where females have long enjoyed a comparatively good status in society, the population numbers very nearly as many women as men.

Finally, in the areas where insufficient land and poor agricultural resources have led to emigration, there are more females than males.

In each case, in discussing the sex ratio of the region, the author has mentioned other characteristics which probably account for the regional differences in this ratio. Of course, finding a correlation between them does not automatically explain the facts, and the study must go further before its conclusions can have more than a hypothetical value.

The 1951 census of India revealed that there were 947 females per 1,000 males. The author states that in the first instance this phenomenon has a biological basis, as more boys are born than girls; but figures prove that in the first year of life, male mortality is higher than female, and this should readjust the balance between the sexes. The reason why it does not must be sought in regional social conditions.

In areas subjected to the patriarchal system, daughters are much less highly regarded than sons, and girls must be provided with a dowry. When people are poor, girls are less well cared for than boys, so that more girls die. Throughout their lives, women in such areas are in an unfavorable position. Due to the cumulative effect of very early pregnancies, insufficient medical care at confinement, too many children, and exhaustion from overwork, a very high rate of mortality is found in the 15 to 44-year-old age group. The author found a clear correlation between regions with the highest birth rates and those with the highest female scarcity.

The shortage of females in urban areas can be attributed to other causes. In large towns particularly, it is very high: in Calcutta 602, and in Bombay only 596 females per 1,000 males. Urban industries attract a large number of male workers, but since life in these towns is costly

and accommodation difficult, many migrating industrial workers leave their families at home. This fact explains both the deficiency of females in urban areas and their preponderance in areas of emigration, and is in sharp contrast to the situation in the United States and other western countries, where more females than males migrate from rural to urban areas.

From this short account, it will be seen that a study combining careful analysis of population statistics with sociological work on regional groups can lead to discoveries of very practical significance to policy makers.

Agricultural extension work (4)

It is well known that agriculture could never have developed as it has in the twentieth century without applying the results of scientific research. Chemistry and biology, followed by physics, technology, pedology, and later by economy and sociology, have all made their contribution. Biologists evolved new methods of plant breeding and seed selection; chemists produced new fertilizers to increase yields from poor soils; hydrologists improved the irrigation and drainage of land; new agricultural machinery was invented; and improved methods of working and farm management were introduced by economists. All these, and many other single achievements have contributed to the total progress.

Applied research

However, research work in laboratories and experimental stations in universities and factories is only significant when it has been accepted by the farmers. Science and practice must always be in contact to ensure that knowledge gained by research is passed on efficiently to those who will use it in the field. One way of ensuring this is to organize agricultural vocational education in schools; another is to create an advisory service. Many countries now have agricultural advisory services and some have grown into large and efficient organizations.

At first, the basic philosophy of organized agricultural advisory work assumed that everyone was eager and willing to further his own economic well-being. Accordingly, when a new implement, plant variety, or method of farm management could be of advantage to farmers, it was simply a question of telling them about the innovation and teaching them how

to use it. It was expected that when people understood that something new could be used profitably, they would automatically adopt it.

There are some people who invariably accept the sound suggestions of their advisers, and advisory work based on this philosophy was not without success. Nevertheless, taking into account the enormous amount of work and effort on the part of the advisory officers, the total result was poorer than was hoped.

To some extent, this was because lack of staff and resources, lack of equipment and inadequate experience made intensive advisory work impossible.

In the early years, the methods of approach used in agricultural extension were relatively elementary and only some of the farmers could be reached. However, these methods have now been improved and new ones introduced. In some countries, people today can be informed via different media: lectures, organized meetings and demonstrations; by excursions to factories, exhibitions and pilot farms; by articles in newspapers, periodicals and leaflets; and through the media of film, radio and television. In addition, in some countries the advisory services have sufficient personnel to be able to contact all the farmers frequently.

Despite the above, many still do not make full use of advisory services. Agricultural advisory work in the Netherlands is among the most intensive in the world but research has shown that only one third of all the farmers consult the service frequently, one third do so infrequently, and the remaining third practically never. This cannot be explained by an inadequacy in the quality of the advice given, since investigations in the Netherlands and the United States have shown that the farmers who are frequently in contact with the advisory service produce the best results. The attempt to understand the reasons for this lack of response has led to a broadening of the basic philosophy of much agricultural advisory work and to the realization that sociological research has an essential contribution to make.

Sociological research as an aid to extension

Research has been undertaken to test the degree of success of the advisory service in general and individual activities in particular. In this way, the value of an individual method of approach or of a campaign with a specific aim can be assessed. Frequently, advisory officers are too closely involved in their own work to judge it objectively, and a scientific

evaluation of their efforts can be of the utmost help to them in planning new action programs and increasing the efficiency of the service. But sociological research in advisory work goes beyond a simple evaluation; it also attempts to find out why the results have been good, bad or indifferent, whichever the case may be.

Research has shown that there are several distinct stages in the adoption of new farm practices (5). It is unusual for a farmer to adopt a new practice immediately; when he hears of a new idea for the first time he often distrusts it. In the second stage, he becomes interested and wants to know more about it. If the information he receives convinces him that this is something which may be useful, he enters the third stage and begins to think about the possibility of using it on his own farm. Should he decide to accept the idea, then in the fourth stage he affords it a trial and, if this is successful, he will adopt it at the fifth stage.

If the change is a major one, this process of dissemination may take years; in other cases, it can happen very quickly. Sometimes a farmer will not go so far as to adopt the new idea; he may stop at one of the preceding stages.

If the advisory officer is to choose the right approach, it is essential for him to know which stage of the process has been reached. For example, when the farmer is at the second stage, has heard about the existence of a new plow and wants to know more about it, the adviser will be acting too quickly if he gives a demonstration of the implement. The farmer does not, at this stage, wish to know how to handle the plow; he is only interested in its general advantages. By jumping a stage, the advisory officer may have created a misunderstanding which will arrest the further stages of the process, with the result that the plow will never be adopted.

This is a simple example but it demonstrates the importance of knowing the different stages of the "adoption process." Particularly with the complex methods in use today, each stage demands a different approach: those at the first stage may be best reached through mass media such as the radio and press, those at the fourth and fifth by personal contact. Careful study of the form of communication and the media to be used to transmit it most effectively to farmers at different stages can greatly facilitate the adoption of new methods and ideas.

The fact remains, however, that some farmers stop at the first stage. They are told about the new ideas, but they do not manifest further interest; they are not willing to accept change. Sometimes this may be

simply that the difference of opinion which an individual farmer has with his neighbor is reflected in his response to the advisory service, but it can also be the attitude of an entire group.

Culture patterns influence economic behavior

For many years now, sociologists in the United States have been investigating the relationship of the economic behavioral pattern of the farmers to other social data, especially with regard to the adoption of new farm practices. In general, the level of economic activity appears to be related to participation in other social activities of the group, social status, size of farm, education, etc. Continued research has shown that all these correlations have a common background in the culture pattern of the group.

Change is normal to members of a group with a modern pattern of culture. They are usually willing to try something new if they think that it can improve their present position. This mentality makes agricultural extension work very fruitful, but ironically enough, it means that in some respects it is not quite essential. Whether or not he is approached by the advisory officer, the modern farmer will make it his own concern to find out about the latest developments and techniques. It might, therefore, be said that he receives information from the advisory officer which, in any case, he would most probably have discovered for himself.

Groups characterized by a traditional pattern of culture, however, are opposed to change. Their main concern is to preserve what has been done in the past and to defend themselves against intrusion. Even if a new idea is clearly of economic advantage to them, they will not accept it simply because it is new. This is the main reason why agricultural advisory work, no matter how well organized, so often falls short of expected effectiveness. Certainly, this effectiveness has been greatly increased by the use of more carefully aimed and more skillful methods of approach, but in many cases, still more can be done.

Members of a group with a modern pattern of culture tend to be individualists, but in the more or less traditional groups there is a strong system of social control. In these groups, a change can only be made with the help of local leaders — the men to whom the rest of the group will listen, and without whose often silent consent they will not take any action. An interesting discovery has been that these influential local leaders are not necessarily the formal leaders with functions in various associations, and social science has made a valuable contribution in devel-

oping methods of identifying them. This is of the utmost importance, since by failing to recognize such an influential but informal leader, the advisory officer may waste a great deal of effort.

Before an action program is begun, therefore, as much as possible should be known about the social structure, the culture, and the function of a rural group, and especially the nature of its leadership. By discovering this information, rural sociology can increase considerably the effectiveness of extension work aimed at improving technical and economic conditions in agriculture.

Co-ordination for rural development

Although it is rather beyond the scope of agricultural extension, it is useful to note here that in several countries it is now appreciated that advisory work is much more successful in improving rural life if it is sufficiently broadly based to include consideration of the whole personality and culture of the rural group. In some rural reconstruction areas, many problems are being tackled simultaneously by teams of advisory officers in such fields as child education, home economics, health care, professional training, marketing and co-operatives, working together under the guidance of a central authority. As has been seen, a change in one sector often affects others, and by showing the importance of each of these fields of activity in the whole culture and their interrelationship, the rural sociologist can be of the greatest value in helping his colleagues to co-ordinate and predict the effects of their work.

Some examples of such comprehensive planning will be discussed in later sections.

Rural migration

Rural migration is as old as the rural world itself. There have always been people who have gone from one area to another in search of a better way of life. But it is a long way from the days of the prehistoric people following the herds, through the era of the growth of towns, to our own times.

Since the Industrial Revolution, migratory movements in rural areas have become considerable. They have been both a consequence and a cause of social change. Because socio-economic conditions in the world changed, the opportunities for, and the attractiveness of, rural migra-

tion increased, while these conditions were in their turn influenced by rural migration.

Migration has become a complex phenomenon with many human aspects of particular interest to social science. It is not always easy to understand and demands intensive study. Some of the different aspects from which it can be approached will now be discussed.

The first question which can be asked is, " What are the motives for migration? " " Why does an individual, a family, or a group leave the country of origin? "

The answer could be that the overpopulation of the home country induced them to leave. But when is a country overpopulated? Overpopulation is a relative concept which can only be understood by inhabitants of one country when they know of another with a smaller population which can offer them a better way of life; only then can they choose whether or not to migrate.

" Push " and " pull " of migration

In the migration process there are always two forces at work, which can be characterized as " push " and " pull." People do not move into town only because their rural home no longer offers them sufficient means of existence and thus " pushes " them away; they also go because of the " pull " of the town in promising them a better life.

It is not always easy to see which of these two forces is decisive. Sometimes there is no economic need to migrate and the reason can be of a purely social nature. There are examples of agricultural workers migrating to industrial areas where they earn no more, sometimes even less. Town life attracts these people more than life in the country. It may be that their social status is higher in the town, or that they are drawn by the more animated life. The " pull " factor is decisive here. Should a government feel that such a migratory movement must be stopped, research must first be carried out to reveal the exact motives which influence the workers to migrate before appropriate measures can be taken to encourage them to stay at home.

Migrants in a new environment

Another interesting aspect of the subject concerns the reactions of the migrants to their new home. A vast field of study is opening up to explore such questions as to whether or not the new life is different from what the

migrants had expected, whether they themselves are changed by the new environment, etc.

When a group of people arrives in a country which is completely unknown to it and differs in many respects from its own, all kinds of tensions are likely to develop. The group as a whole will be affected by the feelings of its individual members — feelings of loneliness and inferiority, or of having been deceived, which may arise when people find they must do unfamiliar work; when, perhaps because they do not have the right attitude, they are unable to make new friends; when they do not speak the language of the area, or are not adapted to its climate. Unsuccessful migration, when the processes of adjustment, assimilation and acculturation have gone wrong, can create deviant behavior and produce neuroses, political or religious extremism, criminality, and so on. Such cases, especially on removal from country to town, are sufficiently numerous to justify the many studies that social scientists have made of this particular aspect of migration. In many cases, of course, nothing of the kind will happen, and the people soon settle down. But much harm could be avoided by advance information and planning, based on knowledge of the culture pattern of the migrants and that of the new environment.

Are migrants different?

A wide aspect of the subject which cannot be considered adequately here is, " Who are the migrants? " " Why do they go and others stay? " " Are they the most enterprising people, or do they deviate in other respects from their kinsmen? "

The first to migrate are those who have a better chance to acquire what they want elsewhere and/or the least obligation or desire to stay at home. The migrants are not necessarily the strongest and best members of their community, although in some cases this may be so. It is true that migration involves selection but this can be based on quite different criteria, and research is needed to understand clearly the forces at work in areas both of emigration and immigration.

Rural migration affords many special fields of study; for example, the redistribution of population. Excessive emigration in rural areas can create that much-discussed problem, rural depopulation. But not all rural migration leads to the town. It can be from one rural area to another, as in the colonization of new agricultural areas. A most important recent development, which has created quite new problems, is that

today it is not always centralization that is the principal cause of migration. Increasingly, it is a result of decentralization, which moves urban industries and dwellers deeper and deeper into the country.

A further question concerns the distances covered by migratory movements. Obviously, a short move from the village to the neighboring town will be quite different in character from a move involving a long distance, for example, from Ireland to America.

The important demographic consequences of migration is another aspect. It influences the age structure: young people leave and older people remain. It changes the sex ratio: in the United States more women than men go to the cities; in India, as we have seen, the reverse is true.

What makes a "stay-at-home?"

Finally, conditions change not only for the migrants but also for those who stay at home. In an area where emigration has become normal, it is no longer the migrants who deviate but those who remain! They too have made a choice.

The preliminary results of a research study aimed at understanding why some people prefer to stay at home will now be briefly discussed. The study, which has been fully described in a paper by J. Allan Beegle, *Social components in the decision to migrate* (6), shows rural sociology at work in the field of rural migration.

The author regards migration as a continual process of decision making, in which the satisfactions with life in the community of residence are weighed against the social costs of leaving it. The satisfactions in living in a particular place are principally derived from the identification and cohesiveness which result from interaction with groups and social structures. The social costs of migration are the breaking of these ties, which can be very painful.

Whether migration is worth these social costs is determined for each individual by his level of aspiration. He is far more likely to become a migrant if his aspirations are above the level of opportunity offered by his own social environment than if they are in accordance with it. This hypothesis, which the author calls a "theoretical framework for the explanation of internal migration in sociological terms," was tested in research in the county of Upper Peninsula in Michigan, United States. In this region, there is a low standard of living; only a small proportion

of the population is engaged in industry, and for many years there has been continual emigration to the nearby cities of Detroit, Chicago, Milwaukee and Minneapolis. On the basis of this information, Beegle supposed that those who stayed in the county would exhibit a high degree of satisfaction, a lower level of aspirations, and a marked awareness of the great social cost of migration. One out of every four households in the county, a total of 168 families, were interviewed.

The first question asked was: "What do you like about your community?" Most informants answered that they liked living among friendly people, having good neighbors and knowing everybody. Others liked the climate, the scenery, the small-town atmosphere, their jobs, etc. To the second question, "What do you dislike about your community?" no less than 23 percent answered "Nothing." Others did not like the climate, some wanted improvements of streets and buildings, additional shops and other facilities. The third question was, "Considering all your friends, in what general areas do they live?" Fifty-six percent had all their friends in the immediate vicinity, only 12 percent had friends outside Michigan.

The answers to these three questions revealed a high degree of satisfaction. Social interaction was largely confined to the local area, and the community image was favorable.

The fourth question concerned the reason for staying. Many said that they liked being where they were. "This is home," "Just like it here," — were the usual answers. The answers to the fifth question, "If you were to move to the city, what do you think would be the hardest part of getting started?" — showed that the informants anticipated all kinds of difficulties in finding a house and a job. Some feared loneliness.

The replies to the last two questions revealed that the respondents were aware of the social cost of migration.

"Of all the jobs in this community, which job would you like best?", was the sixth question. Fifty-five percent chose their present job. When asked, "Of all the places you know, where would you like to live?" — 50 percent answered that they wanted to stay in their county; many others wanted to remain in the vicinity, and only a small percentage wanted to go far away. The last question, which permitted respondents to give free rein to their imagination and express whatever aspirations they might have was, "What do you want most that you cannot afford now?" Ten percent wanted nothing at all, and the most commonly desired changes

were for slight improvements to the amenities of life, such as house repairs, home furnishings, a new car, etc., presumably in the community of residence.

The answers to these last three questions showed a very low level of aspiration.

Thus the results of this field study, designed to investigate the three components involved in the decision to migrate, supported the usefulness of the author's hypothesis. The study was undertaken to collect material for sociological theory and was not intended to be of direct significance to policy makers.

Planned migration for economic and social improvement

In order to give a fuller picture of the activities of rural sociologists in this field, therefore, this section will be concluded by a short description of some sociological research carried out in France, aimed more directly at practical considerations.

Rural conditions in France are characterized by very striking regional differences in economic development. In some regions, agriculture is continually improving and expanding and the standard of living is rather high; in others, there is a decline in agriculture, sometimes resulting in a complete breakdown of the agricultural economy and, consequently, the standard of living is very low.

These differences are caused partly by variations in the physical environment such as soil and climatic conditions, and partly by poor geographic distribution and combination of the productive resources, land, labor and capital.

An organization known as ANMR (Association nationale des migrations rurales) now tries to canalize the migratory movements of farmers so that they go from regions classified as " areas of departure " to regions classified as "areas of reception" (7). The standard by which the regions are classified is the ratio of supply to demand for the farms.

The areas of departure, with high demand and low supply, are in general the regions in the western part of the country with high population pressure and unemployment, and the regions which are best provided with capital in the bassin parisien.

The areas of reception are the regions where agricultural land is still available, sometimes in abundance, in central, southwestern and southeastern France.

It is hoped that assisting people to migrate along these lines will result in a better distribution of the rural population over the country and enable fuller use to be made of the nation's resources. The economic aspect of this policy is the most important, but there is a social consideration too, in that it gives poor farmers, not trained for any other work, the chance of improving their economic position without changing their occupation.

Continuous evaluation

To overcome the difficulties that such a policy is bound to meet, and to achieve the maximum results from the action program, the progress of the work has to be continuously evaluated.

A. Lévesque (8), a research officer of ANMR, reports some of the interesting conclusions of such an evaluation study. He interviewed 100 families in one region in the area of departure, and 50 families, all originating from the first region, now living in the area of reception.

The general view of the future in Ille-et-Vilaine, the region of departure, was, not without reason, a pessimistic one. The feeling was expressed that with so many people on the too small farms, which are usually divided up into a great number of scattered fields, and with no chance of buying more land to provide farms for their children, it was impossible to " breathe freely."

The migrant farmers who were visited in the area of reception, although they had been there for only five years, were much more optimistic. In spite of the arduous work of clearing the land at the outset, when they compared the present with their situation in the past, they realized they had made great progress. The farms were bigger and gave better results every year and, in a region where if they wished to buy more land it would be available, the future was full of hope.

In general, the migrated farmers have better houses and household equipment than those in the region of origin. This is not solely due to increased prosperity. The migrants are more enthusiastic and prepared to work harder for better housing conditions, while in the region of departure, simple improvements costing a minimum are not carried out because of lack of interest.

Nevertheless, not as many farmers migrate from Ille-et-Vilaine as one would expect. One reason for this is the general apathy born of a hopeless situation; another is that the farmers cannot believe that there are

regions with land to spare while there is such a shortage in their own. When they are offered the chance to migrate, they see pitfalls everywhere. There must be a snag in it; perhaps the land is not suited to agriculture. Many of the migrants who were visited declared that they had left against the advice of their families and friends. "You will starve over there," they had been told.

A third reason for this reluctance to migrate is that the people, especially the women, are afraid of being isolated and lonely in a new environment. To overcome this problem, 70 percent of one group of candidates for migration wanted to leave and settle down in a group. And yet 64 percent of the migrants interviewed in an area of reception considered that isolation was actually of help in making a quick adjustment and therefore advisable. A complete change in attitude had occurred in the new situation.

This last point especially shows the importance of evaluation research since, without knowledge of this change of attitude, the administration might have decided to organize group migration to encourage departure which, in the long run, would not have been of benefit to the migrants.

VICOS - A PERUVIAN HACIENDA

Following discussion on three special studies of rural sociology, the next three examples describe community development projects in which rural sociology can be seen in action as part of an integrated complex of scientific research and policy making. Naturally, these three examples can scarcely illustrate the vast amount of work of this type that remains to be tackled; in many countries today extensive development programs are being planned or are already being implemented. It suffices to mention only such schemes as the colonization of Israel, land reform in Italy and Spain, the irrigation projects in the United Arab Republic and India, and the problems of the Alpine farmers, to indicate how world-wide and extensive are the changes planned.

An action program based on social research

Although the first example, Vicos, is a very good one, proving that intensive social research combined with an action program can lead to excellent results, it is by no means typical, since the organization of the

project was quite exceptional. The material for this description is derived from two articles by Allan R. Holmberg (9).

In 1952, Cornell University sponsored a five-year research and development program aimed at modernizing rural life on a Peruvian hacienda called Vicos. The program was unique, in that an American anthropologist, Allan Holmberg, was appointed manager. The advantage of this appointment, and the reason for it, was that it ensured that social research would be a principal concern of the management. The disadvantage was that it is extremely difficult for a manager to work with the unbiased detachment which scientific observation and judgment demand. That the author appears well aware of this dilemma inspires confidence in the scientific value of his findings.

Holmberg records that although the problems were approached scientifically, his mission required that he influence the society under investigation. The objective, which was approved by most of the 2,000 inhabitants of Vicos, was the establishment of a just community in which each member should have his rights and duties and a fair share of the rewards, where medical services and education should be available to all, and where there would be respect for private life.

Land tenure system outmoded

The hacienda of Vicos was owned by a Public Benefit Society operating in the town of Huaraz. These societies run hospitals and other similar institutions and receive their income from the rent of land acquired by legacies or as a gift from the government. This land is leased out for periods of ten years at public auction to the highest bidder. Before Cornell University became the patron of the hacienda, the leaseholder in Vicos had full rights over the land and was entitled to demand three man-days of labor each week from every family of peons, the people living on the land. The peons were allowed to till a portion of the land in their own time for their own use, but the leaseholder retained the best land for himself. The system was not particularly profitable for either the owners or the leaseholder, and certainly not for the peons.

This unsatisfactory situation could have been solved by granting the land directly to the peons but the government could not do this for political reasons. The peons were too poor to buy the land. The Cornell management, therefore, tried to make it gradually possible for the peons themselves to take over the lease on the land.

Practical steps toward progress

The first practical step undertaken in the project was the improvement of potato production, and in five years the yields were increased from four- to sixfold. The advisory work involved in this improvement was co-ordinated with training in professional and managerial skills and the development of responsible leadership. The Vicosines were therefore being prepared to take over within their own community certain responsibilities which had previously been discharged by outside organizations. A school and a hospital were built, and a body was instituted to carry out public works, which were to be financed by the income of the hacienda. A system of democratic self-government was instituted and a Junta de Delegados comprising ten men, each representing a geographical district, was chosen by the population.

When Cornell University withdrew at the end of five years, the peons were able to take over the hacienda themselves, each contributing a sum of money to the Junta toward payment of the rent. The good land formerly used by the leaseholder was now at the disposal of the peons and was farmed collectively. The profits gained by this additional land were used for paying installments on new equipment and making improvements for the general good. The technique of agriculture had been improved and $7,000 were borrowed from the Agricultural Bank to buy seed potatoes for the collective land. When, only one year later, it was possible to repay this loan, this was due not only to the increased yields but also to the over-all improvement in the productivity of the labor under the more efficient organization.

With this economic evolution the entire culture changed. The people developed broader views on life, they became more enthusiastic, they felt more responsible for communal goods, and theft became much less frequent; and they cared more for their community.

One stimulating example at the right place and time can lead to marked progress in a social system, and the Vicos experiment had a very positive influence on the surrounding areas. By 1958, there were five such projects, advised by Vicos and even financially assisted by it, enabling the peons of other haciendas to rent land directly without the need for outside patronage to initiate the development. Research on the further progress of Vicos and its influence on the surrounding regions and on the whole country is being continued (10).

Research needs "feedback"

Holmberg illustrates his discussion of the function of social research in this project by a comparison with the natural sciences, where practice and research are continually interacting. Research is followed by the application of results in practice. In practice, new problems are revealed which must be solved by research. Thus further research is stimulated by what is called the "feedback" from practice.

The development of social science tends to be slower than that of natural science largely because research is rarely followed directly by practice and there is little stimulation from feedback. It must be admitted that such a one-sided relationship between research and practice is inadequate.

In the behavioral sciences, one investigation is rarely a sufficient basis for prediction, because it is impossible to take into account the probable change in behavior of the subjects on learning its results. For example, an investigation showing that in a certain country there are twice as many farmers' sons as there are available farms, and only 25 percent of the sons choose a nonagricultural career, might lead to the prediction that in ten years' time there will be too many farmers. But this prediction will prove quite wrong if, as a result of the publication of these findings, 50 percent of the farmers' sons decide on different careers.

Strategy for withdrawal

One of the marked advantages of the unusual organization of the Vicos project was that it ensured continual feedback from practice to research. One problem, for example, was the creation of decision-making authorities, strong enough to carry on unaided when the Cornell management left, but without the risk of subjecting the community to domination by a few powerful personalities. Firstly, a group was chosen to carry out a certain activity in which teamwork was essential. The results of the activity and the behavior of the team were studied. If practice showed the original hypothesis, which had determined the formation of the group, to have been faulty, then it was reformulated in accordance with the new needs shown in practice, and a further experiment was undertaken. Such experiments were repeated continually until the decision-making authorities had been constituted satisfactorily.

Another problem was the lessening of the tension which existed be-

tween the Indians and Mestizos in the community, and which was an obstacle to harmonious development. Based on various hypotheses, certain methods were put into practice to bring the two peoples together in work or recreation. When it appeared that these were not achieving the desired effect, the research staff continued formulating new hypotheses, until the methods based on them proved successful.

Vicos - comprehensive in scope

Thus an entire strategy of research was developed. Naturally, since this was a comprehensive project of community development and not merely a change in one specific sector, numerous problems had to be studied and solved. No less than 130 lines of interlinked research and practice, each leading to a particular development goal were undertaken, ranging from the diversification of agriculture to the development of community leadership, and from the reduction of the social gap between Indians and Mestizos to the increase of educational opportunities.

A chart was devised, in which each objective was represented by a column and amended continually to indicate the immediate situation. Studied vertically, the columns revealed the stage of progress toward each particular goal, from planning to implementation and, if necessary, adjustment. Studied horizontally, the chart showed the over-all picture and the changing relationships between different aspects of the work. This visual presentation, in fact, frequently helped to increase the efficiency of the development work by showing how one particular measure had aided progress toward several different goals.

For many reasons, the university-sponsored Vicos program is not an example of a project which can be used as a blueprint in other areas of community development. However, it was of tremendous significance in providing social sciences with a large volume of practical experience and new and tested theory, and the general principles that it helped to evolve are invaluable everywhere.

THE GEZIRA - A DEVELOPMENT AREA IN THE SUDAN

In marked contrast to Vicos, the Gezira is an example of a development project in which practically no use was made of the services of rural sociologists.

It would have been simple enough to choose an obvious example of a program which failed completely because of the lack of social insight of its leaders. Quite often an action program failed because it was not realized that the proposals made might prove totally unacceptable to the people because they violated religious taboos, upset the traditional hierarchy, or changed the status of the housewife in a way that threatened the existing balance of married life. However, a description of the Gezira is far more instructive and interesting because, although in most ways it has been successful, some points emerge which show very clearly that the results could have been even better if social research had been an integral part of the program.

The material for this section has been derived from a book by A. Gaitskell (11), who participated in the scheme.

Water and cotton - hope for the future

The Sudan is the largest state in Africa and has only 12 million inhabitants. The south is a land of tropical forests, the north an area of very dry desert where the White and Blue Nile flow together, enclosing between them the approximately 2 million hectares of the Gezira plain. The Sudan has always been a very poor country and the only way to improve its prosperity was to irrigate the land and produce a crop for export to the world market. The only area suitable for irrigation was the Gezira.

To start the project foreign capital was needed, and the first to become financially interested in the development of the Gezira was an American businessman who saw possibilities for the cultivation of cotton. The British, who at that time were in effective control, decided to initiate a project themselves, since they were rather apprehensive about the influence that other countries might acquire by investing capital in the Sudan.

In 1913, a syndicate was founded to promote the Gezira scheme, to build irrigation works, and to allocate the land to sharecroppers, a proportion of whose crop was due to the syndicate and to the Government of the Sudan.

By 1914, the construction of an irrigation canal was begun and part of the project implemented. In 1925, the Sennar dam was built, enabling the irrigated area to be considerably extended.

Progress retarded

However, the path of the scheme was far from smooth. Disease ruined several cotton harvests and there were economic crises. Consequently, social development received little attention. The Government of the Sudan pressed for more autonomy and rights of self-determination for the people of the Gezira, to a point of accusing the syndicate of trying to impose a colonial plantation system. The fear of corruption and deterioration in management that might result from granting too much autonomy kept the syndicate from giving way to these demands.

However, when the concession was to be renewed in 1939, the government and the syndicate were more in agreement with each other and a system of tenant representation was adopted. In each village a headman and a village council were chosen. A farmer, agreed upon by the people and the syndicate, was selected to represent agricultural management, acting merely as a middleman, with little danger of wielding too much power.

The system was further developed during the second world war, when it became clear that the village councils had insufficient contact with the government and that the increased prosperity had not led to a corresponding improvement in the standard of life.

Social investigation

The tenants had become good cotton growers under the syndicate but without improving fodder crop cultivation or cattle breeding. In this period of adequate prices and yields of cotton, they had more money than ever before, but housing and hygiene, education and recreation remained at the same low level. After describing these shortcomings, Gaitskell says, " One of our difficulties was to know the true facts. No one living outside the villages could really tell the extent of all these or other needs and their comparative importance. There seemed a real need for an intelligent social investigation."

Here Gaitskell exposes the weak link in the syndicate's program. It had taught the tenants how to make money by growing cotton but not how to spend this money wisely to improve their standard of life. If the syndicate had included sociologists in its teams of experts initially, it could also have helped the people adopt a way of life appropriately adjusted to the changing economic conditions.

Tenant independence

Meanwhile, the tenants strove continually for further independence. They no longer accepted the paternalism of the syndicate. Disturbing rumors arose about the destination of the money in the reserve fund, in which the syndicate retained a proportion of the profits. However, such measure was essential in an economy which depended on a single cash crop. The tenants, nevertheless, were ill at ease about the matter and, in 1946, they organized a strike to compel the syndicate to distribute the money in the fund.

It was by now evident that the British had lost touch with the rising educated Sudanese leaders and with the spirit of the times. They had not realized how much the increased prosperity had enlarged the viewpoint of the tenants, who began to make demands based on the changes that they knew were taking place in the towns.

This crisis resulted in the establishment of a more democratic organization, and each village was now entitled to elect a deputy. From among themselves, these deputies elected 40 " block deputies " to meet regularly with the directorate of the syndicate.

Even then, the problems were far from being solved. The tenants had grown accustomed to high yields and high prices; the more their incomes rose, the greater became their demands. Much of the difficulty was caused by their desire to become gentlemen farmers. As soon as they were in a position to do so, the tenants hired labor from outside the Gezira, so that they themselves could cease to work. Naturally, when they reached this ideal status, they needed still more money, while those who had not yet achieved it were envious and strove to emulate them.

When the concession was terminated in 1950, the syndicate withdrew from the Gezira and was replaced by the Sudan Gezira Board. Although greater numbers of Sudanese officials were appointed to the new board, there was little increase in the influence of the tenants in management.

A Tenants Representative Body was founded to remedy this but did not succeed in alleviating the general situation: the directorate was obliged to expend too high a proportion of the profits; excessive prosperity led to inflation and commodity prices became extremely high. Their "conspicuous consumption" made the Gezira tenants unpopular in the very poor areas surrounding them.

Poor communication retards social development

In 1950, the Gezira Board also became responsible for a social development program. As a result, an agricultural school was founded, an experiment was undertaken in one of the villages, and some of the most modern forms of agriculture were demonstrated; women welfare workers, an anthropologist and a dietician were appointed; an antimalarial campaign was undertaken; a newspaper was published.

It was then found that the tenants were extremely interested in all that pertained to agriculture and technology; in short, in everything which promised financial profit. They were far less interested and reluctant to invest in such services as education and medical care, which they regarded as the responsibility of the government.

There were capable Sudanese leaders in all the different branches of the development project but lack of communication destroyed much of their work of its effectiveness since, although they maintained regular contact with the block deputies, these 40 men were not sufficiently in touch with the 20,000 tenants whom they represented. The Tenants Representative Body was consequently changed into a Tenants Union with free membership and assumed a political character that led to much friction with management. More recently this situation has improved.

Gaitskell concludes that the British were mistaken in assuming that the tribal leaders were the actual leaders and that the educated minority were of value technically but without political significance. They were too concerned with the technical changes they were bringing about to be aware of the importance of the social change. Afraid of being too precipitate, they tried to slow down the development, thus making themselves suspect to the nationalist movement. In Gaitskell's opinion, this resulted in the British having to leave the Sudan too quickly, before the Sudanese were sufficiently well prepared to take over the management of the Gezira scheme — a point of view which is denied by M. O. Beshir, who describes the more rapid social development which took place after the British left the Sudan (12).

Changing social structure and cultural values

The state of readiness for self-government is a general problem of decolonization in many young countries and outside the scope of this study. It is mentioned here simply because Gaitskell shows so clearly that insufficient knowledge of the area's changing social structure and culture was the root of much of the trouble in the Gezira.

He cites some interesting material collected by Mrs. Culwick, an anthropologist who studied in the Gezira after 1950, and whose report does not appear to have been published separately.

Mrs. Culwick found three clear-cut status groups in the villages: tenants, half-tenants, and hired workers. There were marked differences between their standards of living, especially during the boom period of the Korean war.

The tenants were living like gentlemen farmers and their expenditure on hired labor was much too high. The women no longer worked in the fields but stayed at home acting solely as housewives. This in turn led to an unwillingness to await one's turn at a medical clinic, and people went to doctors by taxi as private patients. On pilgrimage to Mecca they traveled by airplane. Thus they were living beyond their means and at a level which could not, in the long run, be sustained. The end of the Korean war and falling prices put an end to this period of inflated prosperity, leaving them disenchanted and bewildered.

These aspects of village life, which were generally known to the management but not in sufficient detail, explain why the tenants often reacted so extravagantly to the decisions of the Gezira Board, and why their demands were seemingly excessive. The attitude of the tenants had not developed overnight but was the final result of a lack of social adjustment to the technical and economic changes. They had adopted the material side of western culture without understanding it; they produced for a world market and were knowledgeable about prices but had no conception of the delicately balanced and ever-changing factors on which their prosperity rested; they had not learned to save and, if anything went wrong, it was blamed on management.

It will now be seen how invaluable sociological research would have been in the Gezira, since such a profound change can only be brought about successfully when the existing group life, its culture, structure and functions have been studied carefully. If a social development program had been integrated in the project at an early stage, or, better still, before it had been initiated, many of these difficulties could have been avoided.

The IJsselmeerpolders

The last of the three development areas to be discussed is the polder area in the former Zuiderzee in the Netherlands, where the part played by rural sociology was neither so important as at Vicos nor as neglected as in the Gezira.

In this long-term project, the work of the sociologist has been gradually integrated in the many other forms of research needed for the reclamation of the area. At first, the principal task was the solution of the agricultural and technological problems involved in the scheme; then it was discovered that the development of the reclaimed land required extremely careful study; while more recently, social planning began to make an important contribution to the work.

An essential difference between this project and the other two cited above is that it followed a long tradition of land reclamation in the Netherlands and was new only with regard to its scale and method of organization. In this case, a social development program was not a primary need, since no radical social changes were to be expected. In addition, the relatively high level of education of the settlers enabled them to build their own community life without much guidance by management.

In this newly settled land, the increased speed and significance of social change which has affected all rural areas has led to situations requiring extensive social research. Thus many of the activities of rural sociologists will be discussed in this section. The material is derived from a sociological study by A. K. Constandse (13) dealing principally with the factors that determine the pattern of the settlement.

Early history

For many centuries, the people of the Netherlands have been evolving techniques for the reclamation of land lying below the level of the sea. Originally, the work was undertaken by rich merchants, and it was not until the nineteenth century that the first government reclamation project was carried out. In the early years in that area there were no houses for the farm hands, no adequate roads, no schools, no churches, insufficient medical services, and the land proved to be inadequately drained. In these circumstances, many of the pioneers were unable to make a living and were thus forced to leave.

By 1927, progress in modern techniques of building dikes and establishing large pumping stations for drainage was such that the reclamation of 200,000 hectares of agricultural land in the enclosed Zuiderzee could be undertaken. The reclamation was planned in five separate units (polders), of which two have now been completed; the third is under construction.

Building social foundations

The experiences of the nineteenth century project had shown that simply to drain the land was not enough; a great deal more was needed for the migrants to settle contentedly and successfully. Therefore, the government created a special agency to be responsible for the new area after drainage. Its functions include the initia cultivation of the land, the building of rms, dwellings, and villages, subsidizing the establishment of churches and assisting the setting up of various organizations. In short, the agency prepares the foundation for a new society.

A comprehensive plan was made for the whole area and a regional plan for each of the polders. The technique of preparing these plans, which involves the co-ordination of the technical hydraulic work, the development of agriculture and transport, and the provision of good living and working conditions, has advanced considerably since the drainage of the first polder in 1930.

An important feature of the plan is the allotment system which, for reasons which will not be discussed here, is of farms of different sizes. In the second polder, known as the Northeast polder, they vary in size from 12 to 48 hectares, and the majority are 24 hectares.

Obstacles to village planning

In the Northeast polder, the farmhouses, outbuildings, and a proportion of the dwellings for the agricultural workers were sited alongside the roads; the dwellings for the remaining agricultural workers and those not engaged in agriculture were grouped in village centers. The planning of these villages has proved one of the most difficult problems of the settlement scheme.

The rural village in the IJsselmeerpolders was planned as the center of all the activities of local importance. The elementary schools, churches, some shops for daily needs, the workshops of the craftsmen, the meeting places for voluntary organizations and other services were all located in the village.

In the old rural areas in the Netherlands, comparable agriculturally with the new polders, the people at work on the land could easily walk or go by horse and cart to the village center, which was rarely more than 3 kilometers from the farm.

In 1930, when the first polder was drained, it was at first decided to

introduce this traditional pattern. At a number of crossroads, land was reserved for the settlement of villages. It soon became clear that the government would have to stimulate the building of these villages, and the construction of three villages was undertaken. It was expected that further villages would emerge as the area developed, but they never proved necessary.

The siting of the three existing villages was found to be far from ideal. They were too close together and the areas they served overlapped. Furthermore, there was no clear division of functions between them. The village which was intended to be the seat of local government was built last, by which time the first village had already gained a monopoly of business activities, and thus neither was able to serve as the polder's vital center.

By the time the Northeast polder was planned, during and shortly after the second world war, the agency was employing sociologists as permanent staff members and they were responsible for the research that led to the new settlement pattern. As a result of the experience of the first polder, this was given a great deal of study and considered as an integral part of the whole plan. In the center of this polder, a little town was planned where all the activities of more than local importance were concentrated. In a circle round this regional center ten villages were built. This number was chosen because it entailed traveling distances which, although somewhat greater than usual, research had shown to be still acceptable. At that time, in the 1940s, the maximum allowable distance from village to farm appeared to be 5 kilometers; distances greater than this, even in the era of bicycles and some motor cars, meant that the people were unable to participate as much as they would have liked in village life.

Another factor that has complicated the establishment of the polder villages has been that the migrants come from all parts of the Netherlands and, consequently, all the religious denominations of the country, which normally tend to be distributed regionally, are assembled together in the area. As religion in the Netherlands plays an important role in many aspcts of social life, in formal education, recreation and professional organizations, the equipment of these villages has had to be more complex than it is in other areas. In each village, three elementary schools must be built, undenominational, Protestant and Roman Catholic, and at least three churches are needed. Obviously, this has made the problem of the size of the village community even more complex.

When the plan was designed, a population density of one person per hectare was expected in the Northeast polder, and it was calculated that there would be a population of 1,000 to 1,500 in each of the ten village centers. This was considered adequate for a satisfactory social, economic and cultural development program. However, in the past 15 years, the mechanization and improved efficiency in agriculture and other sectors of economic life have increased productivity to such an extent that the density of population in the Northeast polder has remained much lower than had been expected and consequently the population of the villages smaller. More and more people now own motorcars, and this has made them less dependent on their villages. They can easily travel to larger centers where more specialized goods and services are available. In the polder, as in the rural areas of most western countries, this led to a decline of the small villages.

Towns or villages - a problem for research

It is easy to see that the changes of the last few years have prevented the full realization of the aims envisaged in the original plan, and the tendency toward lower density of population in the new agricultural areas, with ever-increasing concentration of activities in bigger centers serving larger geographical areas is continuing. One logical conclusion seems to be not to construct more villages and to establish only towns in future development areas. Some planners have made this recommendation and their advice may be sound. However, in itself, the fact that the villages attract less people than before does not prove that they have lost all their value. Many questions may still be asked: " How have the villages changed? " " Which functions have they lost and which retained? " " If it is decided to alter the settlement pattern so fundamentally, what further changes will follow in the various other sectors of social life? "

Careful research must be carried out before these questions can be answered. It is not enough merely to conclude that the villages are too small. The standards of comparison by which they have been judged must be established. Are they considered too small in relation to the villages in the old rural areas, to those laid down in the original plan, or in the opinion of the present population of the polder? If the latter, then this again must be more precisely defined. The population is composed of several social groups, all with varying ways of life and interests.

Do they all think that the villages are too small? Has the village the same significance for each of them?

Research reveals that in order to answer these questions satisfactorily the culture, social structure and functions of the group of settlers must be studied completely. In this case, the special factors arising from colonization must also be taken into consideration.

From the many examples of field research in rural sociology that have been designed to study such questions in the IJsselmeerpolders, two will now be described.

Distance - a major consideration

The first study was aimed at learning more about the effects of distance from farm to village on social life and at estimating the results of increasing distances between farms and village. For this purpose, 500 families living in the Northeast polder were visited by interviewers.

Due to the relatively low density of the population, the public transport facilities in the area were inadequate; thus it was important to know what proportion of the population had its own means of transport. The questionnaire revealed that 70 percent of the farmers owned a car; further analysis showed that among the group of farmers on the larger farms this percentage was nearly 100. Among the agricultural workers living near farms, 60 percent did not even possess a motorized bicycle and very few owned cars; the majority had to cover the distance to the village by pedal cycle. This information dispelled the idea, held both popularly and in policy-making circles, that "all the workers have motorized bicycles nowadays and distances no longer matter."

In general, the wives have more need to visit the village center than the men. In this connection, the questionnaire revealed that although a rather large proportion of farmers' wives had the use of the car, only 11 percent of the workers' wives had a motorized bicycle at their disposal. Only 10 percent of the children, who have to go to the village to school each day, used the bus or were brought by car; the majority cycled or walked. Of course, it is true that motorization is progressing rapidly, but the distance factor will become of minor importance only when the majority of families have a second car — and that is still a long way off in the Netherlands.

Then the study tried to discover how people react to these distances, and a correlation was found between the distance from the village and

participation in village life. The agricultural workers living outside the village centers were much less involved in the activities of voluntary associations than the workers living in the center. In the case of the farmers, the correlation was rather more complex: the larger farms were usually farthest removed from the village and their farmers were not interested in the village so much as in the larger trade centers. The middle-sized farms were situated a medium distance away, and these farmers formed the most active group in the life of the village. The smallest holdings were closest to the center, but here the farmers were much more tied to their farms because they had no hired labor, and they participated far less in village life.

This information, together with the answers to other questions, for example, where their friends lived, showed that people tended to be more or less isolated according to the distance of their dwelling from the center. The conclusion could be drawn from this that the distance radius cannot be greatly extended without the risk of exclusion of some members of the local society, which would impair the viability of the village. Equally, a distance radius which ensures that no one lives too far away to participate fully in the life of the village would result in too small a unit for the development of the necessary social and economic activities.

The ideal situation being obviously unattainable, a test was designed to determine the best compromise. The people interviewed were offered a hypothetical choice among three plans for a new area, based on (*a*) bigger villages and larger distances from farm to village center; (*b*) the situation already existing in the Northeast polder; and (*c*) shorter distances and consequently smaller villages.

It soon appeared that people's opinions were principally governed by their present situation. The majority of those living farthest from the village chose plan (*c*), with the shortest distances, while those already settled in the village, who had been less inconvenienced by the journey, were unconcerned about the longer distances and chose plan (*a*). There was no unanimous agreement, but the highest proportion of people selected plan (*a*) — bigger villages and larger distances.

Another question was aimed at establishing the maximum distance acceptable under certain conditions, for example, with the provision of a school bus system; or the settling of all the agricultural workers in the village, so that only the man would need to travel to work. The various groups of respondents gave different answers, and it was interesting to note how their answers changed in response to the different conditions

presumed. These meant changes for everyone, but not everyone recognized them as improvements. For example, the workers enjoyed living in the village and were prepared to travel longer distances to work than had been presumed, but the farmers feared difficulties in the recruitment of labor. Some people opposed the school bus system, thinking that long journeys to school would keep the children away too long from their homes; others believed it offered a good solution. The replies to this group of questions were determined to a large extent by whether the respondents regarded the traveling distance or the size of the village as the more important.

From the answers to all these carefully chosen questions, the conclusion was drawn that a compromise plan in which distances were larger than in the Northeast polder would be generally acceptable in the future.

This field study clearly showed the differences in attitude among workers, small farmers, and large farmers. These status groups were formed very shortly after colonization, and a further study, which will now be briefly described, aimed at a fuller understanding of their structure and nature.

Size of farm and family relationship

One of the smaller village areas which had been settled five years previously was chosen for this study. The 123 farmers in the village were each asked to list their family friends in order of frequency of visits to them, and to state the name, address, occupation, size of farm, if relevant, religion, province of birth and motive for visit of the first five persons mentioned. Between them, the 123 farmers mentioned 475 acquaintances, 175 of whom were living outside the village area. The number of 300 within this area, of course, represented only between 100 and 150 people, since many were named by more than one respondent.

Next, friendships within groups classified according to farm size were analyzed under the following headings: (*i*) geographical location; (*ii*) occupation and size of farm; (*iii*) motive for friendship; and (*iv*) geographical origin and religion. In this way, it was hoped to establish what effect the size of farm has on the nature of personal relationships.

Geographical location. It was found that on the smallest farms 60 percent of the family friends were neighbors, on the largest but 23 percent. Only 13 percent of the friends of the smallest farmers lived outside the village area, while for the big farmers this figure rose to more than 50 percent.

Occupation and size of farm. Insofar as the friends of the small farmers were concerned, 67 percent had farms of 12 hectares; 60 percent of the acquaintances of farmers with 24 hectares also had 24-hectare farms. Of the farmers with 48-hectare farms, 54 percent of their acquaintances farmed 48 hectares, 27 percent 36, 9 percent 24, and only 2 percent farmed 12 hectares. This clearly demonstrated that the farmers chose their friends from among those with farms of the same size as their own. In each of the groups, very few friends were listed who were not farmers too, and the social contacts with farm workers were negligible.

Motive for friendship. The farmers with 12 hectares of land stated that they had originally become acquainted with 60 percent of their friends because they were neighbors. The farmers with 48 hectares mentioned this motive in connection with only 23 percent of their friends. Other motives, such as personal liking and similar interests, were not so easy to classify. Sometimes it was obvious that the real motive for friendship was very different from the one stated. For example, the size of farm was not mentioned at all in this connection, while the facts show it to be of the utmost importance.

Geographical origin and religion. It was shown that the region of origin exercised some influence on the choice of friends but that this was not so important as similar religions. Again, although this was rarely mentioned as a motive for friendship, analysis revealed that 72 percent of the acquaintances of Roman Catholics were Roman Catholics too, and the percentages were only slightly less for the other religious denominations.

Thus the field study clearly demonstrated that the size of farm had considerable influence on the pattern of relationships. Lines drawn through the areas of slight social contact revealed the three interacting status groups formed by the 12, 24 and 48-hectare farmers. There are several reasons for this. The income of the 48-hectare farmer is much higher than that of the 12-hectare farmer, which permits him a far better standard of living. The bigger farmers are less tied to their farms, since their work is more managerial; they have the time and money to choose their friends from a wider area. Then again, largely due to the selection principles of the colonization policy, these farmers are better educated and are therefore more critical in choosing their friends. A neighbor does not become a friend simply because he is a neighbor, even if he has a farm

of similar size. The farmers with the smaller farms are much less selective. For them, it does not so much matter if a man has another religion or comes from another province; it suffices that his neighbor is a farmer of the same type as himself to make a friend of him. The results of this study show that the policy of grouping together in the polder farms of the same type, as far as possible, has been justified.

Apart from the three status groups among the farmers, the study also showed a fourth group of agricultural workers, and a less well-defined group of a nonagricultural population. The village has a different value for each of these groups, from the bigger farmers who, with their urban outlook, are the least tied to the village, to the agricultural workers who are dependent on it for most aspects of their social life. Other studies undertaken on the significance of the village for associational activities, primary education and church life all pointed to the conclusion that, even in the modern, rather progressive situation in the polders, the village still has an essential role to play. Therefore, in the third polder, which is now under construction, although fewer in number than before, villages have again been projected.

Sociological research as it affects decisions

The IJsselmeerpolders project is an example of direct co-operation between sociological research and practical planning but, obviously, the planner cannot always be so guided by the findings of sociological research in the field. It is quite possible that the wishes of a certain group of people would not correspond with what was necessary or desirable in the framework of the larger social system. In other words, although sociologists may decide that in the new areas the village performs many functions in group life and is regarded as necessary by the population, the government is not necessarily obliged to establish villages in the new polders. Other equally important reasons might make such a decision inadvisable, and the government must base its policies on the long-term interests of the nation as a whole.

The value of sociological research in this example is not that it has provided the planner with a formula of what to do, but that it has enabled him to know in advance the likely effects of the decisions that have been made. Without the wide knowledge that has been gained of the typical Dutch rural culture during the establishment of the first two polders, the planners might have relied too readily on their own ideas which, as expe-

rience has shown, are always likely to be too simple and straightforward. Even in modern society, the culture of the people is deeply rooted, and it is important that those with the considerable responsibility of trying to induce social change should have all the available knowledge of the culture of the people among whom they are working.

This example also shows how quickly modern society changes, whether planned or not. Considerable alterations can take place during the implementation of a project, which is why sociological research should go on throughout and until the completion of the work; by continuously evaluating what has already been carried out, modifications can be made, if necessary. This method of working enables the planner to keep the project as flexible as possible, so that the latest results of research can continually be incorporated.

The importance attributed to sociological research in the IJsselmeerpolders may be regarded as rather excessive even by those engaged in development planning in other areas; it would seem to them unnecessary to center attention on aspects which, in their opinion, are only details. But as soon as the stage of economic development has been overcome, these details can suddenly become of the utmost importance and, as the example of the Gezira has shown, it is necessary to be prepared for the changed situation. To those who have to cope with the problems of hunger and disease, it may seem superfluous to worry about whether a farm should be 5 or 10 kilometers from the village. However, they will discover one day that, as soon as people have enough to eat and have reached a reasonable level of prosperity, the question of distance may be decisive for the viability of a society.

Change essential to improvements of social life

The six examples of special activities in rural sociology that have been discussed in this section were chosen in order to give some idea of the scope of the work that is being undertaken at present. Many other subjects could have been selected for special discussion; for example, there is a group of sociologists specially devoted to the study of the rural family; another is particularly interested in religion and its implications for group life; other special fields are housing, education, health, relations with the government, leadership, social status, labor relations, co-operatives, media of communication, and many others. It will now be clear, from the discussion of the projects at Vicos, the Gezira and the IJsselmeerpolders,

that there is an interdependence between all these subjects. The improvement of rural life means change, and change always affects the totality of culture, structure and functions of social groups.

These examples have also illustrated that sociology today is primarily an empirical science, and it has been indicated how rural sociology can be integrated with other sciences into the organization of planned social change. It is also essential for sociological research to be further developed in research institutes and universities, since both pure and applied science can make valuable contributions to the improvement of the social and economic conditions of rural life.

3. THE NEED FOR RURAL SOCIOLOGY IN A DYNAMIC SOCIETY

Concluding remarks

Problems of change

Rural society is becoming increasingly dynamic in large parts of the world. In some respects the decline of traditional society can be considered unfortunate, yet it would not be justifiable to preserve museums with living human beings as inhabitants. While it would be impossible to try to keep progress in check, it is equally wrong to allow change free rein. Without guidance and planning, tensions and crises develop which are not only unacceptable from an ethical point of view, but which also present a serious danger to the welfare of the world.

The need to solve the problems accompanying change in rural society are manifest everywhere. However, the essential nature of these problems is not always easy to determine. Provided they are purely of a technical or economic nature, such obstacles to further development can usually be overcome by the specialists engaged in rural development projects; but invariably, the problems are, at least in part, of a social nature, and here the help of the rural sociologist is essential.

Action research

Rural sociology has the task of clarifying the character and background of social change, and of indicating the readjustments which the rural population will need to make and how these can be achieved with a minimum of disorder. It is able to do this because it gathers, by scientific methods, an extensive range of knowledge, as a result of which specialized sociological theory can be established, thereby facilitating the formation of hypotheses that can subsequently be tested in field work. In this fashion,

research is effective and efficient, and it remains the backbone of rural sociology.

Three different stages can be discerned in this research. Firstly, there is fact finding, when the existing situation and the relations between the observed phenomena are established; secondly, there is the dynamic aspect of social change, which is the main problem at present — and research must go further than simply analyze an existing situation; it must also concentrate on processes and trends in order to formulate predictions on future situations; thirdly, research can also be combined with action, and perhaps this is the most fruitful way of working. When a sociologist is actually engaged on a project, after the decisions are in operation (which perhaps his original predictions have influenced), he can continue his research and evaluate the results of the action. New decisions can be based on the outcome of this latest research, so that science not only feeds practice but itself continually receives a feedback from practice.

The chances of ultimate success which this method offers have been illustrated in the description of the projects at Vicos and IJsselmeerpolders, and it is clear that if full advantage is to be taken of rural sociology as a practical science, it must be continually in contact with all those who are responsible for social change. Equally, the policy makers, administrators, extension officers, welfare workers, and [the [even wider circle of those able to help the progress of the science should have some understanding of the "language" of sociology and of rural sociological problems.

It is hoped that this study may make a small contribution to the promotion of rural welfare throughout the world by providing such people with a brief guide to the essentials of the subject and arousing the interest of a wider public in the vital work of rural sociology.

REFERENCES

(1) ROGERS, EVERETT M. *Social change in rural society.* New York, Appleton
1960 Century Crofts.

(2) MENDRAS, HENRI. Les études de sociologie rurale en Europe. *Sociologia Ruralis,*
1960 *Journal of the European Society for Rural Sociology,* 1: 15-34.

(3) GOSAL, GURDEV SINGH. The regionalism of sex composition of India's popu-
1961 lation. *Rural Sociology,* 26: 122-137.

(4) VAN DEN BAN, A. W. Research in the field of advisory work. *Neth. J. agric.*
1961 *Sci.,* 9: 122-133.

(5) BOHLEN, J. M. & BEAL, G. M. The diffusion process. Ames, Iowa State
1957 College. Special Report No. 18.

(6) BEEGLE, J. ALLAN. *Social components in the decision to migrate.* Paper presented
1959 at the Congress of the International Sociological Association, Stresa.

(7) PAUTARD, J. Migrations rurales et économies régionales. In *Les migrations*
1958 *rurales, communications et échanges de vue. Premier Congrès de la Société européenne de sociologie rurale.* Louvain, p. 212-225.

(8) LEVESQUE, ANDRÉ. *De quelques transformations constatées dans la psychologie*
1958 *des familles agricoles avant et après la migration.* In *Les migrations rurales... Premier Congrès de la Société européenne de sociologie rurale.* p. 228-232. A more extensive work by the same author: *Le problème psychologique des migrations rurales en Ille-et-Vilaine.* Paris, Association nationale des migrations rurales.

(9) HOLMBERG, ALLAN R. The research and development approach to the study
1958-59 of change. *Human Organization,* 17: 12-16. Land tenure and planned social change. *Human Organization,* 18: 7-10.

(10) *Community and regional development. The joint Cornell Peru experiment.*
1962 *Human Organization,* 21: 107-124.

HOLMBERG, ALLAN R. & DOBYNS, HENRY F. *The process of accelerating community change.*

DOBYNS, HENRY F. *et al. Summary of technical-organization progress and reactions to it.*

LASWELL, HAROLD D. *Integrating communities into more inclusive systems.*

(11) GAITSKELL, ARTHUR. *Gezira, a story of development in the Sudan.* London, 1959 Faber.

(12) BESHIR, M. O. The Gezira Scheme. *Civilisations*, 11: 63-67. 1961

(13) CONSTANDSE, A. K. *Het dorp in de IJsselmeerpolders, sociologische beschouwingen* 1960 *over de nieuwe plattelandscultuur en haar implicaties voor de planologie van de droog te leggen IJsselmeerpolders* [*The village in the IJsselmeerpolders, a sociological study on changing rural culture and its implications for planning of future IJsselmeerpolders.*] Zwolle, Tjeenk Willink. (English summary)

BIBLIOGRAPHY

General sociology

JOHNSON, H. M. *Sociology: a systematic introduction.* London, Routledge and Kegan Paul. 1961

OGBURN, W. F. & NIMKOFF, M. F. *A handbook of sociology.* London, Routledge and Kegan Paul. 1960

In French

CUVILLIER, A. *Manuel de sociologie.* Paris, Presses universitaires de France. 1958

GURVITCH, G. *Traité de sociologie.* Tome I, 1958. Tome II, 1960. Paris, Presses universitaires de France. 1958-60

In German

FRANCIS, E. K. *Wissenschaftliche Grundlagen soziologischen Denkens.* Bern, A. Francke Verlag, Dalp Taschenbücher. 1957

GEHLEN, A. & SCHELSKY, H., ed. *Soziologie: ein Lehr- und Handbuch zur modernen Gesellschaftskunde.* Düsseldorf-Köln, Eugen Diederich. 1955

In Spanish

HEINTZ, P. *Curso de sociologia: algunos sistemas de hipótesis o teorías de alcance medio.* Santiago, Chile, Editorial Andrès Bello. 1960

Anthropology

KROEBER, A. *Anthropology today: an encyclopedic inventory.* Chicago, University of Chicago Press. 1953

SPICER, E., ed. *Human problems in technological change: a case book.* New York, Russel Sage Foundation. 1952

In French

LEVY-STRAUSS, C. *Anthropologie structurale.* Paris, Plon. 1958

MAUSS, M. *Sociologie et anthropologie.* Paris, Presses universitaires de France. 1950

Social psychology

KRECH, D. & CRUTCHFIELD, R. S. *Theory and problems of social psychology.* New York, McGraw-Hill. 1948

NEWCOMB, TH. M. *Social psychology.* New York, Dryden Press. 1952

In French

DEVAL, R. *Traité de psychologie sociale.* Paris, Presses universitaires de France. 1963

MAISONNEUVE, J. *Psychologie sociale.* Paris, Presses universitaires de France. 1955

STOETZSL, J. *La psychologie sociale.* Paris, Flammarion. 1963

In German

HOFSTÄTTER, P. R. *Einführung in die Sozialpsychologie.* Stuttgart-Wien, Humboldt Verlag. 1954

Methods and techniques

GOODE, W. J. & HATT, P. K. *Methods in social research.* New York, McGraw-Hill. 1952

LAZARSFELD, P. *Language of social research.* Chicago, Free Press. (An adaptation in French by Lazarsfeld and Boudon is in preparation) 1955

SELLTIZ, C. *et al. Research methods in social relations.* (Revised one-volume edition.) New York, Henry Holt. 1959

In French

DUVERGER, M. *Méthodes des sciences sociales.* Paris, Presses universitaires de France. 1959-60

LEBRET, L. J. I. *Guide pratique de l'enquête sociale.* I. Manuel de l'enquêteur, 1952. II. L'enquête rurale, 1951. Paris, Presses universitaires de France. 1951-52

In German

KÖNIG, R., ed. *Praktische Sozialforschung.* I. Das Interview, Formen, Technik, Auswertung, 1957. II. Beobachtung und Experiment in der Sozialforschung, 1956. Dörtmund/Zürich, Gemeinschaftsverlag Ardey und Regio. 1956-57

KÖNIG, R., ed. *Handbuch der empirischen Sozialforschung.* Stuttgart, Enke Verlag. 1962

Rural sociology

BERTRAND, A. L., ed. *Rural sociology: an analysis of contemporary rural life.* New York, McGraw-Hill. 1958

LOOMIS, C. P. & BEEGLE, J. A. *Rural sociology: the strategy of change.* Englewood Cliffs, Prentice Hall. 1957

NELSON, L. *Rural sociology.* New York, American Book Co. 1948

ROGERS, E. M. *Social change in rural society.* New York, Appleton Century Crofts. 1960

SMITH, T. L. *The sociology of rural life.* New York, Harper. 1953

SOROKIN, P. A. & ZIMMERMANN, C. C. *Principles of rural-urban sociology.* New York, 1929 Henry Holt.

In French

CHIVA, I. *Les communautés rurales: problèmes, méthodes et exemples de recherches.* 1958 Paris, Unesco.

FRIEDMANN, G. *Villes et campagnes: civilisations urbaines et civilisation rurale en France.* 1953 Paris, Colin.

GEORGE, P. *La campagne, le fait rural à travers le monde.* Paris, Presses univer- 1956 sitaire de France.

MAGET, M. *Guide d'étude directe des comportements culturels.* Paris, Civilisation 1953 du Sud.

In German

BLANCKENBURG, P. VON. Einführung in die Agrarsoziologie. Stuttgart, Enke. 1962

In Spanish

LEONARD, O. E. & CLIFFORD, R. A. *La sociologia rural, para los programas de acción.* 1960 La Habana, Instituto Interamericano de Ciencias Agricolas, Zona Norte, Programa de Cooperación Tecnica de la Organización de Estados Americanos.

VIDART, D. *Sociologia rural.* 2 vols. Barcelona, Salvat. 1950

The elements, determinants and indicators of rural welfare studied by rural sociologists are found in:

FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS. *Essentials of rural* 1958 *welfare.* Agricultural Studies No. 27. Rome, FAO.

A clear introduction to methodology is given in:

FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS. *Fact-finding with rural* 1962 *people,* by H. P. Yang. Agricultural Development Paper No. 52. Rome, FAO.

The above contains an extensive list of literature on social surveys, methods, and studies of rural life in different regions. Extensive bibliographical material is also found in:

MEAD, M. *Cultural patterns and technical change.* Paris, Unesco. 1953

The history of rural sociology in the United States:

BEEGLE, J. A. & LOOMIS, C. P. Rural sociology. In Roucek, J. S., ed. ***Readings in*** 1961 *contemporary American sociology.* New Jersey, Paterson.

BRUNNER, E. DE S. *The growth of a science: a half century of rural sociological research* 1957 *in the United States.* New York, Harper.

Equivalent in German:

BEEGLE, J. A. & HONIGSHEIM, P. Agrar- und Stadtsoziologie. *In* Eisermann, G. 1958 *Die Lehre von der Gesellschaft.* Stuttgart, Enke.

Regional studies

BRACEY, H. E. *English rural life: village activities, organizations and institutions.* London, Routledge and Kegan Paul.
1959

FRIEDL, E. *Vasilika: a village in modern Greece.* New York, Holt, Rinehart and Winston.
1960

HOFSTEE, E. W. *Rural life and rural welfare in the Netherlands.* 's Gravenhage, Government Printing and Publishing Office.
1957

KÖTTER, H. *Landbevölkerung im sozialen Wandel.* Düsseldorf-Köln, Diederich.
1958

LEONARD, O. E. *Bolivia: land, people and institutions.* Washington, D.C., The Scarecrow Press.
1952

MENDRAS, H. *Sociologie de la campagne française.* Paris, Presses universitaires de France.
1959

MENDRAS, H. *Six villages d'Epire: problèmes de développement socio-économique.* Paris, Unesco.
1960

NELSON, L. *Rural Cuba.* Minneapolis, University of Minnesota Press.
1950

RIVERA, G. F. & MCMILLAN, R. T. *The rural Philippines.* Manila, Philippine Council for United States Aid and the United States Mutual Security Agency.
1952

SANDERS, I. T. *Rainbow in the rock: the people of rural Greece.* Cambridge, Harvard University Press.
1962

SMITH, T. L. *Brazil: people and institutions.* Baton Rouge, Louisiana State University Press.
1963

TAYLOR, C. C. *Rural life in Argentina.* Baton Rouge, Louisiana State University Press.
1948

TAYLOR, C. C. *et al. Rural life in the United States.* New York, Knopf.
1949

WHETTEN, N. L. *Rural Mexico.* Chicago, University of Chicago Press.
1948

WHETTEN, N. L. *Guatemala: the land and the people.* New Haven. Carribean Series No. 4.
1961

For detailed aspects of social change:

BENVENUTI, B. *Farming in cultural change.* Assen, van Gorcum.
1961

DUBE, S. C. *India's changing villages.* London, Routledge and Kegan Paul.
1955

FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS. *Rural problems in the alpine region: an international study,* by M. Cépède and E. S. Abensour (with the collaboration of P. and G. Veyret). Rome, FAO.
1961

MUNCH, P. A. *A study of cultural change: rural-urban conflicts in Norway.* Oslo, 1956 A Achehoug.

WURZBACHER, G., ed. *Das Dorf im Spannungsfeld industrieller Entwicklung.* Stutt- 1954 gart, Enke.

Bibliographies, bulletins, and periodicals

Activities of rural sociologists in Europe:

Bibliography on rural migration in ten European countries (privately published, Bonn). 1959

Changing patterns of rural organization: *papers and discussions of the Second Congress* 1961. *of the European Society for Rural Sociology* (privately published, Bonn).

Rural migration: Papers and discussions of the First Congress of the European Society 1959 *for Rural Sociology* (privately published, Bonn).

For information on rural sociology in the United States and Canada, the following is suggested:

Bibliography of agriculture. Washington, D.C.

SMITH, T. L. Rural sociology: a trend report and bibliography. *Current Sociology,* 1957 6 (1).

Rural sociology in Southeast Asia. *Current Sociology,* 8 (1). 1959

World agricultural economics and rural sociology abstracts. Published quarterly in co-operation with the International Conference of Agricultural Economists by the International Association of Agricultural Librarians and Documentalists. Amsterdam, North Holland Pub. Co.

In French

Bibliographie internationale d'économie rurale. Institut international d'agriculture, Rome (for the period prior to 1946).

Laribe, numéro spécial du *Bulletin de la Société française d'économie rurale.*

Répertoire bibliographique d'économie rurale, par Michel Augé.

Les sociétés rurales françaises. Eléments de bibliographie réunis par le Groupe de 1962 sociologie rurale du Centre d'études sociologiques sous la direction d'Henri Mendras. Paris, Fondation nationale des sciences politiques.

Many studies on rural sociology appear in bulletins of agricultural experiment stations of universities in the United States.

In the Netherlands, the Agricultural University of Wageningen, Department of Rural Sociology, also publishes a series of bulletins on rural sociological research.

Listed below are periodicals that specialize in rural sociology:

Les cahiers ruraux. Centre d'études rurales, Bruxelles.

Etudes rurales. Ecole pratique des hautes études, Sorbonne. The Hague, Mouton.

Rural sociology. Journal of the Rural Sociological Society, East Lansing, Michigan.

Società Rurale. Società Italiana di Sociologia Rurale. Bologna, Edagricola.

Sociologia ruralis. Journal of the European Society for Rural Sociology. Assen, van Gorcum.

Zeitschrift für Agrargeschichte und Agrarsoziologie, Frankfurt am Main, DLG Verlags Gmbh.

Roma, 1964 - S.p.A. Tipografica Castaldi - Via Casilina, 49

SALES AGENTS FOR FAO PUBLICATIONS

MEXICO	Manuel Gómez Pezuela e Hijo, Donceles 12, Mexico, D.F.
MOROCCO	Centre de diffusion documentaire du B.E.P.I., 8 rue Michaux-Bellaire, Rabat.
NETHERLANDS	N. V. Martinus Nijhoff, Lange Voorhout 9, The Hague.
NEW ZEALAND	Government Printing Office: Government Bookshops at State Advances Buildings, Rutland Street, P.O. Box 5344, Auckland; 20 Molesworth Street, Private Bag, Wellington; 112 Gloucester Street, P.O. Box 1721, Christchurch; Stock Exchange Building, corner Water and Bond Streets, P.O. Box 1104, Dunedin.
NIGERIA	University Bookshop Nigeria Ltd., University College, Ibadan.
NORWAY	Johan Grundt Tanum Forlag, Karl Johansgt. 43, Oslo.
PAKISTAN	*East*: Orient Longmans Ltd., 36/1 Toynbee circular Road, Motijheel Commercial Area, Dacca 2. *West*: Mirza Book Agency, 65 The Mall, Lahore 3.
PANAMA	Agencia Internacional de Publicaciones J. Menéndez, Plaza de Arango No. 3, Panama.
PARAGUAY	Agencia de Librerías de Salvador Nizza, Calle Pte. Franco No. 39-43, Asunción.
PERU	Librería Internacional del Perú, S. A., Casilla 1417, Lima.
PHILIPPINES	The Modern Book Company, 518-520 Rizal Avenue, Manila.
POLAND	Ars Polona, Krakowskie Przedmiescie 7, Warsaw.
PORTUGAL	Livraria Bertrand, S.A.R.L., Rua Garrett 73-75, Lisbon.
SOUTH AFRICA	Van Schaik's Book Store Ltd., P. O. Box 724, Pretoria.
SPAIN	José Bosch Librero, Ronda Universidad 11, Barcelona; Librería Mundi-Prensa, Castelló 37, Madrid; Librería General, S. Miguel 4, Saragossa.
SWEDEN	C.E. Fritze, Fredsgatan 2, Stockholm 16; Gumperts A.B., Göteborg; Almquist & Wiksell Lindstanls AB, Wenner-Gren Center, Sveavägen 166, Stockholm Va.
SWITZERLAND	Librairie Payot, S.A., Lausanne and Geneva; Hans Raunhardt, Kirchgasse 17, Zurich 1.
TAIWAN	The World Book Company Ltd., 99 Chungking South Road, Section 1, Taipeh.
THAILAND	Requests for FAO publications should be addressed to: FAO Regional Office for Asia and the Far East, Maliwan Mansion, Bangkok.
TURKEY	Librairie Hachette, 469 Istiklal Caddesi, Beyoglu, Istanbul.
UNITED KINGDOM AND CROWN COLONIES	H. M. Stationery Office, P. O. Box 569, London S.E.1. *Branches at*: 13a Castle Street, Edinburgh 2; 35 Smallbrook, Ringway, Birmingham 5; 50 Fairfax Street, Bristol 1; 39 King Street, Manchester 2; 109 St. Mary Street, Cardiff; 80 Chichester Street, Belfast.
UNITED STATES OF AMERICA	Columbia University Press, International Documents Service, 2960 Broadway, New York 27, New York.
URUGUAY	Héctor d'Elia, Oficina de Representación de Editoriales, Plaza Cagancha No. 1342, Montevideo.
VENEZUELA	Suma, S.A., Calle Real de Sabana Grande, Caracas; Librería Politécnica, Apartado del Este 4845, Caracas.
YUGOSLAVIA	Drzavno Preduzece, Jugoslovenska Knjiga, Terazije 27/11, Belgrade; Cankarjeva Zalozba, P. O. Box 41, Ljubljana.
OTHER COUNTRIES	Requests from countries where sales agents have not yet been appointed may be sent to: Distribution and Sales Section, Food and Agriculture Organization of the United Nations, Via delle Terme di Caracalla, Rome, Italy.

FAO publications are priced in U.S. dollars and pounds sterling. Payment to FAO sales agents may be made in local currencies.

PRICE: $ 1.00 or 5s. 8.64/E/1/3600