## Agriculture and Rural Life in an Industrializing Society

## E. W. HOFSTEE

(Professor of Rural Sociology, Agricultural University, Wageningen)

In the provisional programme of the Fourth World Congress of Sociology discussion group (b) in Section II, The Application of Sociological Knowledge, is announced under the heading "Agriculture." At first sight it seems self-evident to list it so since under (a) "Industry" It indicates that the organizers of the congress had a similar interest in the sociological aspects of the two main branches of economic activity. Nevertheless, hardly any sociologist with a special interest in the people engaged in agriculture would be very happy if the discussions in group (b) really had to be restricted to demonstrable influences of sociology on agriculture. Perhaps there would hardly be any discussion at all in this case, while on the other hand the application of sociological knowledge to industry, even if restricted to the direct application, probably would give rise to a broad and pro-Industrial sociology is a well-defined, accepted, and found debate. rapidly developing branch of sociology, but agricultural sociology does not exist as a specialization in sociology. Those who have the workers in agriculture as their special field of study call themselves rural sociologists, and they refer to their subject as rural sociology. This clearly indicates that they see the scope of their branch of sociology as essentially different from that of industrial sociology. In principle, rural sociology is the study of a certain part of human society, industrial sociology of a certain aspect of another part of human society. Industrial sociologists do not study industrial society but a certain role of man in industrial society, his role as a member of the collectivity of the workers in an industrial undertaking. Rural sociologists study rural society as a whole.

In view of the history of rural sociology, this contrast might seem surprising. Rural sociology as a separate branch of sociology developed first in the United States of America, and its cradle was the Land-Grant Colleges, the institutions of higher learning in that country, which—at least originally—had as their main aim the education of young people in agriculture and mechanical engineering. It seems logical to expect that in such a technical setting the interest in sociology

would have been restricted mainly to the problems of the rural population as the labour force in agriculture and that, because of that, a kind of sociology would have developed quite similar to industrial sociology.

It is a fact that from the beginning rural sociologists were interested in more than socio-economic subjects only. But it was not their lack of interest in the economic aspects of human life that caused rural sociology to develop quite so differently from industrial sociology. Socio-economic problems are, and always have been given, much attention in rural sociology.

The most important cause of the different development of the two branches of sociology is that a special sociological study of the worker in agriculture, restricted to his role as a member of the labour force of a separate enterprise, makes—with few exceptions—no sense. In industrial sociology the relations among members of the labour force in the factory or office, their interactions as such, are the problem to be studied. Of course, social relations within the institution are influenced by the local and general characteristics of the broader society outside factory and office, and one may even ask whether in industrial sociology sufficient attention is always paid to these external conditions. But it cannot be denied that the internal structure and the functions of the industrial labour force and its sub-groups constitute a field of sociological study of its own. In many cases the social conditions in the outside world can be considered a kind of neutral background which has no specific influence on the situation in the factory in question.

In the study of rural workers the circumstances are different. First of all, most agriculture takes place in—as compared with modern industry—small or very small enterprises. There are exceptions, of course. Plantations and other forms of large-scale agriculture in some tropical and sub-tropical areas in the non-Communist world, and collective and government farms in Communist countries, often have a sizable labour force, and they may develop problems somewhat similar to those studied by industrial sociologists. But except for a few sociologists working in the field of the sociology of plantations, rural sociologists in non-Communist countries have been interested almost exclusively in farmers and peasants with few or no hired labourers.\*

In most cases, therefore, the workers on a separate farm hardly constitute as such a problem for the sociologist. The special characteristics of interactions and relations among workers on one particular farm, in their role as members of the labour force, would seldom offer the possibility of drawing any sociological conclusions of importance. Most differences of this kind between two farms could be studied more fruitfully by a psychologist than by a sociologist.

<sup>\*</sup> The literature available to the author gives hardly any information concerning the possible sociological studies of social relations within the labour force of the collective and government farms in Communist countries.

For this reason alone the rural sociologist who wants to analyse the social aspects of the rural labour force will study the labour force not of one farm but of a group of farms. He will try, of course, to choose a group of farms and a group of workers belonging to a social entity of a higher order, for example to the same rural community, so that he can study them in their general social context.

But there are other reasons why the sociologist who wants to analyse the rural labour force has to study it in the setting of rural social life as a whole. As mentioned before, the industrial sociologist often can or even must study the labour force of one certain industrial enterprise more or less separated from its social background. This segregation is impossible in the study of the rural labour force. Especially in larger towns and cities, those who work together in one factory or office have few or no face-to-face contacts outside the building where they meet during working hours. People of different income groups working for the same concern ordinarily live in different parts of the city and its surroundings. Even the homes of those who belong to the same social stratum are so dispersed that they usually meet for the first time when they join the labour force of the same factory, and afterwards their contacts are limited to working hours. They do not enter the factory influenced by a prior history of personal relations with their fellow-workers. The broader society influences the social relationships inside the factory only in so far as it creates the general social setting which affects in a general and abstract way the interaction of different categories of workers, but hardly the personal relations between individual workers.

In the countryside, on the other hand, the social relations among members of the labour force are almost always strongly influenced by personal relations outside their work. This is so, first of all, because in non-Communist countries the great majority of the farms are family farms, in the sense that they depend for labour supply completely or almost completely on members of the family living on the farm. In many countries, moreover, hired labour in agriculture still consists to an important—though decreasing—degree of farmhands and maids living in and taking part in the farmer's family life. In these cases, relations among members of the labour force are one aspect of family relations, and they can be studied only in this context. For the reason already mentioned, the sociologist will hardly be interested in the life of one family; he will be inclined to study family life in a rural community as a whole.

The hired labour force living off the farm in a nearby village, as is usual in Western Europe, have lived in close personal contact during their whole life, both with one another and to a great degree with their farmer-employer. They attended the same local school, they played together and fought together and went to the same church. So when

they meet each other as members of the same labour force, their relations and interactions will always be coloured by their prior personal contacts in the rural community. This means again that to understand the real value and the real meaning of the relations among workers in agriculture as such, one has to study them in the context of the social relations in the community as a whole.

The fact that all who belong to the agricultural labour force usually live in the same community and in relatively close personal contact means, finally, that a strong social control will exist. Thus, the attitudes and values embedded in the culture of the local group will be clearly expressed also in the relations among the members of the community in their roles as employers and hired workers. Relations among persons working on the same farm are shaped much more than among those working for a certain factory by the mores, the traditions, the beliefs, and the opinions that characterize the life of the community as a whole. This also indicates that in the study of rural social relations the role as agricultural workers cannot be separated from the structure and the culture of the rural community in general.

So we come to the following conclusions. First: in contra-distinction to industry, the individual enterprise in agriculture—the farm—is usually so small that the social relations of the labour force of any single unit do not constitute an attractive subject for sociological study. Second: relations among rural people as workers in agriculture are generally so strongly interwoven with the social relations in the rural community as a whole that it is almost impossible to study the relations and interactions among workers in agriculture except in the context of the structure and the culture of the rural community as a whole.

Thus, even though rural sociologists often work in close association with persons whose main concern is to increase agricultural productivity, an agricultural sociology more or less comparable with industrial sociology has never developed. Though many rural sociologists, probably most, have a strong interest in the economic aspects of rural life, they all feel that the characteristics of their general subject, rural society, do not permit too narrow a specialization. This does not mean, of course, that no rural sociologists specialize at all. But consciously or unconsciously they feel, I believe, that their branch of sociology has to cover the whole of rural social life and that specialization should not go too far, for in rural life the social roles the individual plays are far more interdependent than in the non-rural world.

Another difference between rural and industrial sociology, which may be explained by the foregoing, is in the relation between research and its application. Research in industrial sociology is often applied directly in industry. Industrial enterprises employ sociologists in order to use the results of their studies to change the organization of their labour force and the attitudes of their workers so that the factory or office will function better.

Though probably most rural sociological research can be classified as practical rather than theoretical, the findings of rural sociology are seldom applied to the rural population in the same sense as those of industrial sociology to workers in industry. Since the rural sociologist almost never studies a separate farm but rather the farms and the population of a rural community as a whole, his conclusions are likely to be general and thus not directly applicable to the conditions on individual farms. This general character of rural sociologists' findings means that there is no manager or managing body, as in an industrial enterprise, with the power to decide whether they will be put into prac-Even if the findings are directly applicable, it ordinarily requires a long period of education before the rural population as a whole is willing to accept them. Moreover, since the conclusions are general. concerning possible changes in the cultural and structural characteristics of the rural population as a whole, this education must also be of a general character. In most cases, thus, it is rather difficult to distinguish the effects of education based on a sociologist's findings from those of education in general or from spontaneous change in rural society. Such education, finally, is not ordinarily undertaken by the rural sociologist himself, but by teachers in agricultural and other schools. by agricultural advisers, by farmers unions, and by all the other clubs and associations that function in rural education in the widest sense. Thus, even though rural sociology laid a base for the evaluation of activities on behalf of the rural population and in particular of agricultural extension methods, there is little in rural sociology by which one can evaluate how its own findings affect the behaviour of a rural population.

This rather long introduction may not be quite superfluous: rural sociologists often find that the character and scope of their discipline is not always clear even to other sociologists. It may help in understanding the character of the papers written to serve as a basis for discussion in group (b) of Section II. These cover in various ways the most different aspects of rural society, so that at first sight one might be inclined to think them rather heterogeneous. They all belong to applied science in the sense that most of them are concerned with problems of practical importance, but not in the sense that the authors try to find direct solutions. If they will help solve practical problems, it is by educating the people who will educate the rural population. As I have indicated, that is the usual way that—we hope—rural sociological research influences rural society.

The great variety of the contributions we can consider to be a consequence of the general character of rural sociology. It follows from the foregoing remarks that one can expect that papers on rural sociology, whether applied or not, will show a unity as to their subject only in so far as they all deal with rural life.

However, these papers, or most of them, constitute a unity also because of the similar situation of the countryside in the different parts of the world. Even when the concrete subject differed in this respect, the background to the research of almost all the contributors was similar.

This parallel social situation is that of rural life and agriculture in an industrial society or at least one undergoing industrialization. It can hardly be denied, I think, that problems posed by rural sociologists are for the greater part essentially concerned with the position of agriculture and rural society in a world increasingly influenced by industry; one could even argue that without this general problem rural sociology would not exist.

This fundamental problem in rural life has affected the development of rural sociology, though in a different way, both in the so-called underdeveloped countries and in those with a high degree of industrialization. Already in the 19th century the development of modern industry in Western Europe and America caused an important change in agriculture and rural life in the non-Western areas. Because of the great demand in the West for agricultural raw materials, the indigenous agriculture was changed, often by force, from subsistence agriculture to one producing at least partly for the market, while the plantation system continuously developed. The importation of Western industrial products stimulated new economic wants among the peasants, and to satisfy them they needed ready money and therefore also began to grow cash crops, while the imported goods often superseded the products of rural industry. Most of the serious disturbances in rural life in many non-Western areas caused by the industrialization of the West are still not solved, and today constitute the subject of many sociological studies.

At the present time most underdeveloped countries are trying to industrialize rapidly, both to offset the great population growth in most of these countries and to increase their economic and political power. This industrialization will mean a further change of agriculture and rural society. The most essential conditions for industrialization are food for industrial workers and capital. A country that wants to start industrialization cannot tolerate a subsistence agriculture. The production of food must be increased so that part of it can be sold on the market. The capital not supplied by other countries can be created only by the producton of an agricultural surplus with which capital goods for industry can be paid for. The drive to increase agricultural production in the underdeveloped countries, thus, is not only to benefit the agricultural worker but to lay a basis for industry. In underdeveloped countries also, therefore, industrialization is, directly and indirectly, the most important cause of social change in the countryside, and this social change, again, is the most important reason why rural social research needs to be developed in these countries. In the following survey of the papers submitted for discussion, I shall try to emphasize the relation between the special subject of each paper and this general problem of rural life and agriculture in a world undergoing industrialization. In this way we can perhaps find a general starting point for discussion.

From this point of view, Dr. Kotter's paper on the application of sociological research in agriculture could almost serve as a general introduction. He explicitly cites the problem of agriculture and rural life in an industrial society as the most significant issue for rural sociological research, and he shows by a number of examples how the most important problems for the rural sociologist originate in this relation. Kötter discusses at length the question that still often, especially in Western Europe, leads to heated disputes among those interested in the future of rural life—whether rural and urban culture and social life are and have to be essentially different. Kötter comes to the conclusion—in my opinion the correct one—that differences between town and countryside are not essential. In fact, both are subject to the same social and cultural forces, though the countryside may sometimes lag considerably in developing culture traits that already dominate most of modern Western society. For American rural sociologists this conclusion will hardly be surprising, though in Europe not everyone will agree with Kötter.

In a way Mendras' comprehensive analysis of the spread of progress in agriculture could also serve as a general introduction to the subject of rural life in an industrializing society. But while Kötter emphasizes that social change in rural life is necessary in modern society, Mendras points out the difficulties accompanying this change, especially for the small farmer. On the basis of research he did in France and in Greece, he shows that the small farmer often views change in agriculture and social life as possibly beneficial to the rich farmers, the big ones, but only detrimental to him, perhaps the cause of his ruin. Many see progress, change, as a new means of oppression that "they," the mighty ones, the big bosses, have invented. He demonstrates that the culture and structure of rural society often stand in the way of social and technological change. The agents of the agricultural advisory services, he remarks, must understand that the technical change they are trying to promote is only one element of a more general integration of the traditional rural civilization with modern technical civilization.

In his paper, Odd Grande discusses the sociological aspects of agricultural co-operatives. He emphasizes that a sociological point of view as well as that of an economist is needed to understand these institutions, which have become of primary importance for the agriculture of so many countries. Co-operatives, Grande points out, have been an important object of study by rural sociologists in Europe as well as in America.

The study of the co-operatives, it seems to me, can also be seen in the context of the general problem of agriculture and rural society in an industrial world. Co-operatives can be considered a kind of economic auxiliary to adapt agricultural production to the demands of an industrial society. Agricultural production takes place predominantly in family farms, and thus in small enterprises. This smallscale production fitted in well with the economic structure as a whole when its non-agricultural sector still consisted of handicrafts and small business and when, parallel with production, consumption was also organized on a small scale. But industrialization has changed the scale of all economic life. Modern industry means not only mass production but also the mass consumption of raw materials and the mass sale of commodities. For reasons that need not be discussed here, in the non-Communist countries the development of mass production in industry was not accompanied by the development of larger agricultural enterprises. On the contrary, in both North America and Western Europe, the family farm in the industrial age strengthened its position relative to one based on the use of hired labour. Nevertheless, modern industry demanded mass quantities of raw materials of a uniform quality, and the modern market also demanded from the agricultural producer mass quantities of foodstuffs for direct consumption. On the other hand, modern industry wants to sell in wholesale lots all the products the farmer needs, such as fertilizers, machinery, insecticides, etc. If the farmer depends on all kinds of middlemen to transact business between himself and both modern industry and the mass market, it means that he will sell cheaply and buy dearly. cannot trust the commission-agent and the urban dealer, as once he could trust the local craftsman with whom he had a personal, face-toface relation. This is where co-operatives come in. By collecting, processing, grading, and packing, the produce of the individual farm, co-operatives adapted its small-scale production to the demand for mass production of a uniform quality. On the other hand, they combined the small purchases of individual farmers into mass purchases and made a direct contact possible between the farmers as a group and an industrial producer. At the same time, they "tamed" the middlemen for those farmers who preferred not to join the co-operatives.

Modern industry, one may say, forced the farmers to develop cooperatives as a new system of social organization, and all the sociological problems they offer are in fact only part of the general problem of agriculture and rural life in an industrial world.

Migration, discussed in J. Allan Beegle's paper, "Social Components in the Decision to Migrate," is for obvious reasons one of the favoured subjects of rural sociology. Apart from the interesting combination of concepts that the author uses to clarify the process of decision-making in relation to migration ("satisfactions," "social costs," and "aspirations"), the paper has a special value in that migration is analysed as

an aspect of social life, and not primarily of the economic, in the community of the out-migration. As the author points out, there are many studies of the social and psychological problems in the migrants' new environment, but few of those in his community of origin. hardly necessary to emphasize the strong relation between out-migration from rural areas and industrialization. The development of industry not only attracted rural people to the cities and other industrialized areas, but in a great part of the Western world it probably even effected essential changes in rural patterns of marriage and reproduction. Before the development of modern industry almost all countries of Western Europe had institutional patterns by which some balance was maintained between the rural population and its means of subsistence The systems differed in detail but in all a marriage was inhibited or prevented until the man was sure of a living for his future family, either from a farm or from a fixed position as a farm labourer. As a result people married late and many did not marry at all, so that even if birth control did not yet exist, the birth rate was relatively low.

When modern industry begins to develop, this pressure is eased. Those who cannot establish themselves in agriculture find an outlet in industry, so that a higher percentage of those who remain on the farm can marry. Wherever industrialization develops, thus, the percentage of unmarried people in the countryside declines even where marital fertility remains rather high. In most of Western Europe such systems of maintaining a balance between means of subsistence and population are now disappearing. In the rural population the opinion is becoming more and more general that it is normal to marry, and even to marry at not too high an age. Of course, one reason for this new attitude towards marriage is the spread of birth control to the countryside: it offered a new means of adjusting the number of farmers' sons to the number of farms available. But almost everywhere in Western Europe the rural population still shows a natural increase and in many districts even a large one. At the same time, especially after the Second World War, there has been in both Western Europe and the United States a decrease in the number of gainfully occupied in agriculture. Without the outlets in industry, it would be necessary even now to maintain such a system to keep the balance between the number of openings in the economy and the population. Interestingly, apart from some areas of minor importance, Ireland is the major instance of a country that has hardly experienced this change. Ireland, industrialization is still in its beginning phase and leaving agriculture in most cases means emigration. Here marrying late or not at all is still a normal means of adjusting population growth to the limited number of openings in agriculture.

That out-migration has become a very important aspect of social life in the countryside is emphasized by *Haller*, who begins his paper on the occupational achievement process of farm-reared youth in urban-

industrial societies as follows: "One of the great problems of our age concerns the remoulding of agricultural populations into effective urban work forces." Do persons of rural origin become effective urban workers, Haller asks, and if not, why are they not successful in this respect? The-insufficient-data indicate that the farm-reared person generally enters the urban labour force at a low level and stays there. Haller cites Lipset's explanation of these data: rural areas have poorer educational facilities and a more limited occupational differentiation, effecting a low level of educational and occupational aspiration; the low level of aspiration causes a low level of achievement of farmreared people in the urban labour force. Previous research has validated one part of Lipset's hypothesis, namely, that there is a relation between the low educational and occupational aspiration and the poor achievement, but not that part ascribing the low level of aspiration to the limited educational facilities and occupational differentiation. In the present paper Haller reports on a study of farm boys in a county near Detroit with abundant educational facilities and a great occupational differentiation. Those who planned to farm and those who did not were carefully compared with respect to their personality, social background, and educational and occupational orientation. preliminary—conclusion is that the normal expectation of a farm boy is that he will be a farmer, so that "he will fail to perceive the objective requirements for success in the non-farm world even though he is being presented with them in a casual way almost daily. If, on the other hand, this expectation is disturbed, and he begins to visualize himself as a non-farmer, he will utilize the occupational success information presented to him." In that case his level of educational and occupational aspiration will rise, and his achievements also. But many farm boys originally plan to farm, change their plans rather late when conditions compel them to do so, and they enter the urban labour force at the lower levels and mostly remain there.

I give this short summary of Haller's important paper without comment. That it originates in the problems of rural life in an industrial world is clear.

Bose's study of the characteristics of farmers who adopt recommended practices is a very interesting example in an "underdeveloped" country of a type of investigation more or less "classic" in American rural sociology and since 1945 carried out in Western Europe (France, the Netherlands) also. The research in America and Europe has shown that the progressive-backward polarity in agriculture is highly correlated with the farmers' social characteristics, so that when agricultural productivity and income have to be increased, this means that many of the attitudes and values of the farmers have to change. Bose's study shows essentially the same results, but the situation in a country like India seems to be more complicated. Factors that have been shown to be important in Western countries, such as participation in com-

munity activities, are significant there as well, but also the position of the peasant in the caste system and whether he is literate.

We have already mentioned that in the so-called underdeveloped countries the improvement of agriculture not only benefits workers in agriculture but is also a *conditio sine qua non* for the development of industry, so that research like that of Bose is certainly related to agriculture in a world undergoing industrialization.

In the West, furnishing the food supply of the industrial labourer is hardly any longer a problem and agricultural surpluses do not now provide the capital for industrial expansion. In these countries, that is to say, neither the wish to increase agricultural production itself, nor sociological research conducted in order to bring about such an increase can be considered related directly to industrialization. But there seems to be an indirect relation. Today the major concern of the Western governments perhaps is less the income of the agricultural workers as such than the ratio between this and the income of those working in non-agricultural occupations. Fifty years ago, when the real income of agriculturists was definitely lower than it is today, this gave the governments fewer problems than it does now. Industrialization and the relative decline of the rural population made urban life "normal" and rural life "abnormal," and with the development of education and modern means of transportation and communications the farming population was made aware of the discrepancy between rural and urban Thus, almost all Western governments try to keep a certain balance between agricultural and non-agricultural incomes, for social and political rather than economic reasons. Unlike underdeveloped countries, they are not trying primarily to increase the total agricultural production-more and more Western countries must cope with agricultural over-production—but to increase the production per capita of the agricultural population, so that its income can keep pace with that of non-agricultural sectors. That is, even when it is not important in economic terms to increase agricultural production in order to facilitate industrialization, the social situation created by this industrialization imposes a policy that effects such an increase. In such a situation sociological research on the factors in agricultural productivity becomes especially important.

Dr. Hirsch, in his paper on the use and interpretation of quantitative data in the study of rural settlements, proposes to give community studies a new comparative basis. By a quantitative analysis of a number of communities, he wants to establish a typology of settlements according to their functions. Starting from this typology certain anthropological techniques could reveal the qualitative aspects of community life not only of a particular settlement under study, but to a certain extent also of other communities of the same functional type.

Certainly community studies constitute one of the weakest areas in sociological research in terms of both methodology and theory. Some years ago, an international conference in Europe devoted to the problem of community studies revealed such serious shortcomings in defining their essential scientific aims that a witty—female—sociologist characterized it as: "Eighty sociologists in search of aproblem." Nevertheless, community studies are among the most important practical activities of sociologists, and particularly of rural sociologists, especially since they are needed as a basis for effective physical planning. It is no accident, then, that Hirsch, who has a good deal of experience with research for country planning in Great Britain, wrote this con-

tribution to community research.

It is clear that industrialization is related to country planning and so also to community studies as a basis for such planning. As long as rural life was based on agriculture and especially traditional agriculture, there was not much to plan. Social and economic life hardly changed in quantity and quality, nor did its physical equipment. is industrialization that initiated the change—first, because industries were established in the countryside and, second, because an increasing number of urban workers prefer to live in the countryside. changes brought about a rapid increase of the rural population, and thus also a fundamental transformation in the physical equipment of rural life. After many unhappy experiences in the 19th century and the beginning of this century, it became clear that only deliberate planning could solve the problems associated with this change in the countryside. It is only during the last few years that planners have begun to pay attention also to those parts of the countryside not yet directly influenced by industrialization. Insofar as this is a response to a real need, it could be easily demonstrated that most of this need originates in the changes in rural life and agriculture indirectly caused by industrialization.

Those familiar with the literature of rural sociology know that T. Lynn Smith, perhaps more than other rural sociologists, has specialized in land division and problems related to it. In his paper on social aspects of land survey and titles in Colombia, the author describes how most land titles in that country are still based on the antiquated system of surveying introduced by the Spaniards, so that titles are defective, boundaries are vague and partly non-existent, and the relation of plots of land to roads, rivers, and the general topography is often unsatisfactory. He points out how this system—or, perhaps better, lack of system—leads to endless quarrels and law suits, and in general seriously frustrates social and economic life.

Perhaps the relation between industrialization and the systems of land surveying and land division is not obvious, yet for ages and ages everywhere in the world, traditional agriculture got along with simple

and defective systems until at the eve of modern industrial development in the West, the end of the 18th century and the beginning of the 19th the need for exact land surveying was felt. The rationality and exactitude characteristic of modern business and particularly modern industry apparently inspired the governments when they introduced the new surveying methods, sometimes in spite of the resistance of the rural population. Interestingly, Smith notes that the land in Colombia used by foreign fruit companies or oil companies was surveyed in a modern way.

For rural sociologists, the importance of the study of systems of land division is closely related to the increase in agricultural productivity and the consequent greater significance of the farm's layout. Many countries have completed big reallotment projects during the last few decades, and still bigger schemes are planned for the future. As a consequence old systems of land division were compared with possible new ones from the point of view of their influence on social and economic development. Careful studies of the possible land division were also made for big reclamation projects, as in the Columbia River Basin in the United States and the Zuiderzee polder in the Netherlands. The study of land division by rural sociologists led to the rejection of the famous American checker-board system of land division in the Columbia River Basin. How this striving to increase productivity is related to the present position of the agricultural population in an industrial world has already been pointed out.

All of the papers mentioned so far had to do with rural sociological research in non-Communist countries. Those of Tepicht and of Pohoski and Sianko refer to present-day Poland. Tepicht's paper on sociological research in relation to a social transformation informs us on the research in relation to the transformation of Polish agriculture into a collective form. He mentions three subjects of study: (1) change in the social structure of the rural population, (2) evolution of the collectivist "model" in agriculture, (3) "bridges" acceptable to peasants between the individual and collectivist modes of agricultural production. Most of the paper is devoted to these "bridges," which comprise any kind of joint activities on the village level, such as machinery, tractors, bulls, etc., used in common, as well as mutual help, collective renting of pastures, even collective small-scale industrial activities like the manufacture of bricks. Most but not all of these activities are under the auspices of "circles of agriculturists," village associations of peasants. Not every peasant is a member of the "circle" of his village, and not every member takes part in activities sponsored by the circle.

It is difficult on the basis of a rather short paper to judge the incidence and importance of such joint activities. The careful study of these circles, according to Tepicht, is just beginning. One gets the impression, however, that the kind of joint activities engaged in by the

Polish peasantry is not essentially different from their counterparts in non-Communist countries. The collective purchase and use of machinery, for example, is the small farmers' normal reaction to the necessity for the greater capital investments in agriculture that have accompanied industrialization. On the other hand, some of the other joint activities mentioned in the paper, such as the small-scale manufacture of bricks, give one the impression of remnants from precapitalist production in the Polish countryside.

That the Polish rural population is now influenced by industrialization is clearly demonstrated by the paper of Pohoski and Sianko, on the preference the Polish rural population shows as to the future professions of their children. A study of this kind is in itself a symptom of a society undergoing industrialization. Where no outlet is anticipated for the rural population in industry and related professions, it would make no sense to investigate peasants' preferences among various occupations. The answers of the parents show that they are conscious of the possibilities offered by a society being industrialized. The percentage of those who would like their children to remain in agriculture is relatively low even among farmers in the strict sense. There is a strong interest in non-manual labour, especially engineering. who want their children to be manual workers prefer skilled "techni-The rather strong interest in various crafts may perhaps be considered a residue of the pre-industrial phase in the Polish economy. On the whole, the data give the impression that rural people in Poland are well aware of the industrialization of the country and that they are highly interested in careers in industry for their children.

The paper of Moss and Cappannari was intentionally reserved for the last place in this survey. Again and again in the foregoing, the emphasis was that the rural population of a society undergoing industrialization has to face social change. The problem that Moss and Cappanari consider is social changes as such or, better perhaps, the fundamental unwillingness or inability of certain rural populations to accept social change. They investigated an Italian village south of Rome, where in spite of several conditions apparently favourable to change, social life seemed to be almost immobile. As they state in the introduction to their paper: "There is seemingly a tacit assumption on the part of some Western sociologists and anthropologists that possession of sociological knowledge on the part of laymen can be translated into application for promotion of planned social change. Certainly, evidence exists to support this view based on experience encountered by applied social scientists working in various parts of the world. It is our thesis, however, that there is no necessary and attendant relationship between possession of sociological knowledge and its utilization for promotion of social action and social change. Rather our field experiences lead us to believe that many preconditions must exist before a social scientific community study can have an impact upon the population studied."

Few European sociologists ever assumed, I think, that sociological knowledge, if only used rightly, would more or less guarantee social change in a certain direction. This is true only when an essential willingness exists to welcome social change, a state that does not prevail everywhere even in the United States, the country with perhaps the greatest propensity to social change. Studies by American rural sociologists of the spread of new farm practices, for example, indicate considerable differences among American farmers in their readiness to accept change. European rural sociologists also, not to speak of those working in the so-called underdeveloped countries, often meet in their investigations individuals, sub-groups, and even whole communities and regions which seem impervious to social change.

On the other hand, one cannot assume that this Italian case is characteristic of Europe, or even of Italy, as the authors seem to when they state that "we need first develop adequate theoretical models for European peasantry." In almost every country of Europe, thousands of peasants are willing and even eager to accept social and technological change. Nevertheless, the resistance to change, deeply rooted among parts of the rural population, everywhere, in Europe and outside it, is one obstacle to the government's policy of modernizing agriculture and rural life. Sometimes this resistance is baffing—as, for example, in some parts of Ireland, where all efforts to bring about a change in agriculture and in the way of life of the rural population seem to be foredoomed to failure.

Studies of why certain individuals and groups are willing to accept social change and why others are not, it seems to me, is of great importance to applied rural sociology. Such studies might reveal what general conditions cause this resistance to change and how these general conditions might themselves be altered. Then direct activities in various communities and sub-groups, based on an adequate knowledge of their specific conditions of life and needs, might be more successful. Changing these general conditions will probably often be rather difficult. One reasonable hypothesis, for example, is that stubborn resistance to change is often based on a deeply rooted distrust of everything coming from the outside, a distrust based on past or present bad government and bad public morals in general. To restore trust under such conditions demands patience.

But one must try to understand these fundamental obstacles to change and to remove them, for in a society undergoing industrialization—and today that means in fact in the whole world—change in agriculture and in rural society is a conditio sine qua non to continued existence.