

education in certain fields with the broader outlook on life older women may have gained. On the other hand it was recognized that many learning processes for both young and older women will be necessary.

The conviction was expressed that developing societies must hold to their values, among which veneration and respect of the old has to be an outstanding one. Women from so-called developing countries think very highly of their own responsibilities as educators of other women. Applied to intergenerational relations, this was pronounced as follows: It is our responsibility as women to educate our children to take care of their elders and to respect their opinions; this responsibility becomes the more urgent, as it will be harder and harder for them to do so. On the other hand, we must not teach them respect for their elders on the sole expectation that we shall profit from it ourselves. Rather we must see that continuous options remain open for our later years, and go on influencing attitudes through our own behaviour, what eventually will lead younger persons to follow voluntarily.

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FARMERS AND RURAL SOCIETIES IN UNCERTAIN FOOD PRODUCTION SYSTEM*)

Introduction

The idea of the Congress, the change and uncertainty, aptly expresses the basic *Leitmotiv* of the development process and adjustment of the world agriculture. Changes leading to "breaking" of equilibrium in technical, economic and social relations of production factors, aiming at new equilibrium conditions, allow to study and determine the driving forces of the changes, i.e. the development or regression of agriculture. Getting to know the causative powers of changes, breaking of old, and searching for new equilibrium conditions determine the content of the concept of agricultural dynamics, which is, in my opinion, the essential category, without which all programming of agriculture will be a voluntaristic activity, unlinked with the realities of life. The uncertainty, interpreted as "not being dependent on", that is to say, situation, conditions independent of the agricultural producer, is undoubtedly, a factor of changes in farming, it "feeds" those changes. It means that specified changes in agricultural management are a protection from the menace brought by the category of uncertainty. On the other hand, the dynamics and development, while introducing agriculture in new areas, in new technical-economic and social conditions, confront it with new uncertainties, new threats.

Thus, we state that changes and uncertainty are categories closely linked with agricultural management. You cannot get to know their functioning mechanism if you consider them apart, and not in a mutual causal-effective nexus.

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The subject of these observations is the problem of uncertainty in the process of changes and evolution of categories such as the farmer and the local rural societies. It means that our aim is to show conditionings of signs of uncertainty, and the reaction of agricultural producers and rural societies to the uncertainty in the sequence of thinking, formulate in the phrase: change and continuity or transformation and continuity (1).

Conditionings of reasons for uncertainty of farmers and local rural societies

In short detail, we can speak of four types/areas of reasons for uncertainty of farmers and local rural societies.

Climatic conditions, biological processes of agricultural production

This type of uncertainty accompanies agriculture since the time it developed to be man's activity. The fluctuation of climatic conditions, susceptibility of cultivated plants and raised animals to pests and diseases account for the effects of farming and the volume of agricultural production obtained being always risky and hard to predict precisely. These features are the foundation of the frequently raised specific character of agricultural production.

With the development of agriculture there takes place the process of becoming independent from natural conditions. Present-day agriculture in countries of developed economy has far exceeded in its production level the natural fertility of soil or the production efficiency of animals. Agricultural output, supported in its production process by fertilizers, pesticides and herbicides, is able not only to reach a high productivity per land unit or piece of raised livestock, but also to limit effectively or simply eliminate fluctuations in the production level due to geo-natural conditions.

It is worth noting that if we compare the scale of fluctuation of agricultural and non-agricultural production for the past decade, the non-agricultural production shows a higher degree of fluctuation.

We may say in conclusion that the natural conditions of agricultural production are, nowadays, a factor, which brings about, in a small degree only, the uncertainty of farming.

What is more difficult to speak about is the future. It remains an open question so far, whether a wide introduction in agricultural production of genetic engineering, hormone stimulants in husbandry, etc., will make agriculture more sensitive to fluctuation of production results, i.e. it will increase the degree of risk, of uncertainty, or whether, contrariwise, it will make agriculture more immune. As it seems, one can be more optimistic than pessimistic about it, but one cannot say for sure.

Economic and social surrounding of agriculture

Contrary to natural conditions, the surrounding of economic and social character, in which agriculture is functioning, is the basic sphere of reasons causing conditions of uncertainty. You may say that the development stage of agriculture and the agricultural uncertainty are determined by the three following factors (2):

- The *economic market*, which we define as the whole of supply and charge processes, transformation and regulation of agricultural production, food production. Thus, the economic market reflects the technical and economic aspect of farming. It is obvious that the economic market is run by its own order rules, which allow to provide agriculture with optimum assumptions for achieving of both dynamics of development processes and the rationality of transforming reserves and supplies into production effects. The content of the economic market, of the economic side of agricultural production, are relations, trends and also driving forces of the agricultural development mechanism.

The variability of those relations and of driving forces and mechanisms of agricultural development makes an endless chain of reasons for uncertainty in farming. It should be emphasized that the position of a single agricultural producer towards the economic market is weak. The supply of information he has in the sphere of trend of business, of new elements of the economic situation, is, necessarily, inconsiderable. This knowledge

becomes dramatically clear on the market, after the production cycle is ended. Therefore, making decisions in advance is extremely restrained on the scale of an individual farmer. That is the reason for so frequent an inconsistency between the volume and structure of agricultural production and the expectations formulated in this respect by the national economy or, in a wider sense, by the world market of agricultural products.

- The *ideology market* covering the system of ideas, conceptions and evaluations, concerning the shape of agriculture in form of production techniques, economic and social structures. We may speak of a specified revaluation of the technical-economic aspect of agricultural production from the viewpoint of the criteria of a given system of ideology, and of giving a new, ideological qualification to technical and economic aspects of farming. The market of ideology seems to be determined by two basic factors namely, the prevailing doctrine and the social interest, in the broadest sense of the word. To put it more precisely, by a specified articulation of the social interest by the social governing group.

I believe, the viewpoint can be formulated that the ideology market gives rise to particular assumption of uncertainty conditions, actually for all forms of agriculture, peasant, farmer, collective, state or agrobusiness. If, however, the economy market is a place of reasons for uncertainty for the given production cycle, then the ideology market bring uncertainty for long periods of time, so to say, secular development trends for a given form of agriculture. These are the ideological assumptions, which often "decree" whether the specified forms of agriculture have any future or not. Considering the fact that ideological systems have their own development logic, in the sense of creating forces, slow rate of changes, threats and uncertainties may be coming from those systems, almost entirely independent from the leading actors of farming, i.e. agricultural producers.

The example of Poland, practically in the whole past four decades, may prove that the ideology market can be the source of acute conditions of uncertainty. When peasants had full possibility of articulation of their demands, in the years 1970 - 81, the demand for constitutional permanence of peasant farming was a universal demand, e.g. the insuring of profitable conditions for agricultural production.

- The *policy market* is reduced to a system of legal and economic instrumentation, in the sphere of orders and bans, rule principles of organization, management and administration of agricultural affairs. The policy market is, on the one hand, an executive apparatus of the ideology market, and on the other hand, it implements directly interests of social forces, which are in control in the country.

The policy market, owing to its direct executive character, is considered to be the most important source of uncertainty in the agricultural process. The uncertainty created by the market of policy can be of both economic, legal and administrative nature. Moreover, it may concern both the farming and the life of agricultural producer's family. Referring to the example of Poland, peasants' demands addressed to the agricultural policy, come down to its being lucid, readable and stable.

The inside functioning of the markets of economy, ideology and policy, and, moreover, their mutual conditionings and relations, are not in the least incidental, but are the effect of specified reasons and results, which produce in consequence specified conditions of economic, ideological and political forces. These latter condition, not to say determine, the state and development trends of agriculture. I think we may speak of some causalities of market functioning, and of determinations of the agricultural condition and development. It seems certain that all the above named markets, of economy, ideology and policy, exist and function in each agriculture, regardless of the degree of its technical development, modernization level or structure of social organization. The viewpoint that some agriculture is the effect of the influence of only one market, cannot be maintained.

According to the subject of this paper, we presented single markets as sources of uncertainty of farming. This is, however, only one side of the functioning of the named markets. There is no denying of the other, favourable side, that is to say, the creative role of markets in agricultural and farming development as well as in the functioning of local rural societies. If we consider the process of transformation of traditional agriculture into a modern one to be a very special achievement of agriculture, we have to say that, undoubtedly, this process is a sort of product of these markets.

Meanwhile, the attitude of agricultural economists to the single markets is highly differentiated (3). It seems that the most common attitude of agricultural economists is the underestimation or simply disregard of the market of ideology, less frequently of the market of policy, in formulating the strategy rules for agricultural development. Most of the agricultural economists tend to withdraw to the sphere of purely economic phenomena, i.e. the market of economy, both in formulating the theory of agricultural development or in postulating the specified strategy of agriculture, or even the actual planning-programming tasks. They assume that the power of arguments in the real (economic) sphere, the logic of technical and economic development will find their way to implementation regardless of the market of ideology or policy. I wonder, if this attitude is not the main reason for poor "implementation force" for concepts of solutions of agricultural development problems, submitted by economists.

The functioning and evolution of single markets set specified forces in motion, therefore, they can be recognized as determinants of agricultural conditions and development in the long evolution from natural to market agriculture, from traditional to modernized, from stagnant (balanced) to dynamic, from peasant to farmer's agriculture. It is characteristic that the evolutionary process of agriculture shows many common, universal causalities (4). It is especially conspicuous if we use the concept of turning points of trends of production factors in agriculture.

If we consider as the evolutionary turning point of the factor labour the moment when the number of agricultural population (manpower reserves), after having reached the uppermost volume, begins to show a downward trend, with further relative decrease of labour reserves in agriculture in comparison to non-agricultural sectors, the consequences for agriculture are essential, and can be formulated as follows:

- The turning point "opens" agriculture to the expansions of non-agricultural sectors. There starts the process of subjecting agriculture to national economy, and mainly to its most dynamic sectors - primarily industrial production and then service activity.

- This point introduces the modernization of agriculture, both by sucking in of new technique and technology by agriculture, and by extracting

manpower from agriculture.

- The turning point in manpower reserves starts the era of commercialization of agriculture. The economic calculus becomes the basic assumption for making production decisions instead of tradition, routine and customs.

As a turning point of the evolution of the factor land in the process of farming there can be assumed the condition of the uppermost volume of that reserve, and the beginning of the process of arable land reduction.

The reaching of the turning point by the factor land is also of vital consequence for farming and for food production.

- The turning point introduces the substitute calculus to farming - land can be replaced by the factor capital, the consequence of which is the arising of a land market, on which land appears as a regular commodity. The land, by becoming a commodity, becomes demythologized, loses the quality of a supreme value, value as such, which, for a long time, has been creating social stratification of local agricultural societies.

- The scale of agricultural production volume becomes, to an ever higher degree, independent from the area of land possessed. This provides conditions furthering its far-reaching mobility as a production factor, with an evident trend to match the manpower magnitude, mainly in the individual system of farming.

- Substitution of the land mainly by capital, and by labour as well, opens agriculture to the expansion of non-agricultural sectors.

- Finally, the reduction of arable land reserves initiates the process of shifting food production outside agriculture, and is, at the same time, a result of this shifting, to some degree. This process is revealed both in the production increase of food additives, and in the attempts of rendering agriculture fully independent from production of so essential an element of food as protein.

In the process of the evolution of capital as a production factor in agriculture, the turning point is reached when there occurs the balancing of capital

profitability in agricultural production and in non-agricultural sectors. This situation also brings about many consequences:

- The turning point means full opening of agriculture, to the penetration of non-agricultural sectors of economy. The effect of this penetration is an intensive inflow into agriculture of non-agricultural production factors such as technique, chemistry, biology, as well as taking over from agriculture of specified operations and organizing them either in the system of industrial production or in the system of services. The turning point in the evolution of the capital factor in agriculture starts an increasing process of "melting" of agriculture, and food production in the scale of the entire national economy, and also through import and export in world scale.

- The turning point of the capital evolution in agriculture provides conditions furthering the equalizing of effectiveness of agricultural and non-agricultural production. This offers to agricultural producers, to the agricultural population, a chance of equalizing many parities, primarily the income parity.

The turning point, while offering through the abundance of capital possibilities of a wide substitution of land and labour, introduces in agricultural production technical and biological advance, in the wide sense of the word, the scale of which is so great that it creates the so-called intellectual factor, that becomes the fourth independent production factor in agricultural production.

Consequently, the present-day agriculture, after having reached the turning points in the evolution of production factors, shows specified rules of farming, rules of behavior:

- The driving forces of the development of agriculture today, which reached the turning point in the evolution of production factors, are identical or, to put it otherwise, typical for the driving forces of non-agricultural sectors, that means for the general economic development. The so-called specific character of agriculture stops playing an essential role in farming. This role is taken over by the general business outlook of national economy.

- Agriculture, having reached the turning points, reacts and develops according to the rules of the economic game, to the correctness in technical and economic relations typical for non-agricultural sectors.

- The turning points in contemporary agriculture mark the beginning of the era of rational agriculture. A synthetic illustration of this trend is the growing effectiveness of total inputs per unit of agricultural production.

It is easy to prove that the process of evolution of agriculture, of reaching the turning points in developing production factors, is, simultaneously, a series of sources, assumptions, of uncertainty and threats in farming. A characteristic thing is some evident shifting of the sphere of uncertainty from climatic, natural conditions to the uncertainty in the sphere of economy, trends of business and ideology, as well as of agricultural policy.

Farmer's partnership in social life

Undoubtedly, an essential factor accounting for conditions of uncertainty in farming is the disregard of agricultural producers and of rural societies in social stratification. Unfortunately, the situations are still common, when agricultural producers feel they are "second-class" citizens, when the economic position of their farms is easily sacrificed to the interests of non-agricultural sectors of national economy. This occurs, when the economic strategy is implementing, often in a drastic scale, the process of accumulation of means in agriculture in favour of industrial development, or in countries, which artificially maintain the policy of low food prices.

The phenomenon of social disregard of agricultural producers, lack of their subjectivity in social stratification, brings about the major threat for agricultural producers and rural societies by bringing in operation the mechanism of unfavourable selection in the process of migration from agriculture to non-agricultural jobs, from villages to towns. The feeling of being a "second class"-citizen in the social or political stratification is most actually experienced by gifted individuals, who are outstanding on the local scale, and the way of solving these problems most frequently leads to abandoning agriculture, and abandoning the countryside.

Transformation of local rural societies, distortion of identity of local rural societies

The process of transformation of agriculture does not only essentially change the local rural societies. There occurs the vanishing of economic functions of the local society, which results in a reduction of common economic initiatives, of neighbourly aid. In effect there appears the process of economic atomization, when, in the course of production, single farms establish connections with the "outside" institutions, and are not involved in neighbourly cooperation. The thesis can be confirmed that modern, well prospering agriculture is not tantamount any longer to a well prospering local society.

Similarly dramatic changes occur in the cultural sphere. The traditional value system, typical for traditional stratifications of local rural societies, the role of local authorities and of the local opinion are gradually eliminated. They are superseded by universal value systems, considered to be urban ones, containing, of course, new determinants in the value system, of categories such as leisure time, privacy of home and family, and the like. All that brings about changes of the peasant model of life, from the model, in which the farm and the land were supreme values, and the farming was a way of life, to the model of living for the sake of oneself, which is typical for non-agricultural professions and societies.

Types of reaction of farmers and local rural societies to conditions of uncertainty

The types of reaction of agricultural producers to conditions of uncertainty actually indicate the way of the evolution of agriculture from its natural and traditional state towards a modernized agriculture, fully open to the market.

The basic reaction of traditional agriculture to conditions of menace and uncertainty was withdrawing to the scale of the farm and reducing the consumption level of the peasant family, absorbing of unfavourable impulses of the outside world, expressed in unfavourable prices for agricultural produce, increase of taxes and other burdens. Frequently, a peasant's reaction to worsening business conditions was the increasing of production

offered to the market, which led to further aggravation of business outlooks, and which allowed the economist to formulate a thesis on "irrational" behaviour of the peasant on the market.

The uncertainty and the conditions of menace in traditional agriculture also led to consolidation of local rural societies. This rural society was the first, and often the only instance, which helped to survive uncertainty, and conditions of menace, and which allowed to organize specified forms of self-aid and common protection. Those were the conditions of uncertainty and menace that created the category of local rural society, the category which played a vital role in agricultural development for, you may say, many hundreds of years. Nowadays still, in countries such as Poland, Yugoslavia, and elsewhere, it is constantly an important imperative for the behaviour of agricultural producer in the way of agricultural production, in the way of life.

In the modernized agriculture the reaction of agricultural producers to the conditions of uncertainty shifted from the scale of a farm and the producer's family to a wider scale namely, to specified activities on the market of agricultural policy. This state is a simple consequence of "sinking" of agriculture into national economy, when the general business outlooks determine the opportunities of farming.

The present-day agriculture has developed two specific forms of reactions to the conditions of uncertainty and menace, which are: organizations, farmers' unions, and the agricultural lobby. Their instruments of activity are, primarily, of a political activity character, on the policy market. It is worth considering the sources of "break-through power" of both these forms. Although the share of agriculture in national economy is decreasing drastically, the number of farmers keeps declining, and their percentage compared with that in other professions amounts to a few percentage points only in many countries. Can one imagine that 70 % of the EEC budget are designated for financing of agriculture, that the agriculture of EEC countries is producing "owing to" subsidies, reduced rates tariffs and protections systems, at the cost 30 % higher than the prices on the agricultural world market, and that all the above is possible without the break-through force of farmers' unions and of the agricultural lobby? Could you, without these two categories, farmers' unions and the agricultural

lobby, explain the fact that various forms of aid, subsidies for the USA agriculture, are approximately of the level of profits achieved from agricultural production by farmers?

The above observations allow to raise the final problem, which we would like to present in the sphere of uncertainty in farming.

Evaluation of the uncertainty and menace in agricultural performance

The opinion of many agricultural economists, especially those interested in farm economics, as well as the viewpoints of many rural sociologists, concerning the sphere of uncertainty in farming, can be resolved into the following statement. The uncertainty, often changing into the condition of menace, is explicitly an unfavourable state, whereas the situation without any uncertainty in farming, or with as minimal uncertainty as possible, is ideal. I dare express some doubts as to full rightness of such views, and I will formulate my doubts in the following questions:

Is there a possibility of separating uncertainty in farming from the evolutionary process, of transforming traditional agriculture into a modern one?

Is the advance in agriculture, in the wide sense of the word, possible without uncertainty?

Is then the uncertainty the price paid for the advance?

Is the uncertainty a prerequisite for Darwinist concept of development in the area of agriculture, through the evolution from simple to more complex forms, from less to more efficient forms of farming?

Consequently, does it make economic and social sense to excessively eliminate conditions of uncertainty in farming?

Does not the excessive elimination of uncertainty conditions in farming result in supporting, as production goes, of poor farms that are economically and socially ineffective, in short, is not this a blockade of

progress?

Would not the reduction of subsidy system in the European and the US agriculture, actually the limitation of uncertainty conditions in farming, improve in effect in the world agricultural market, providing a chance for agricultural development in the developing countries?

Finally, a somewhat paradoxical question: Would not the limitation of excessive elimination of uncertainty in farming give in effect a greater economic power to the agricultural sector, a greater break-through ability in making bargains with other sectors?

Notes

1. W. W. Rostow, *The Stages of Economic Growth*, Cambridge at the University Press, 1962.
2. T. Hunek, *Rozwój wsi i rolnictwa - implikacje teoretyczne* (Rural and Agricultural Development - Theoretical Implications), Instytut Rozwoju Wsi i Rolnictwa, Warszawa, 1985.
3. T. W. Schultz, *Tensions between Economics and Policies in Dealing with Agriculture*, The University of Chicago 1984, Paper no. 84: 24.
4. E. Szczepanik, *Agricultural Policies at Different Levels of Development*, FAO Rome 1975.
5. In turning points concept we are following R. Bićanić, *Economic Problems of Agriculture in Industrial Societies*, Mac Millan, 1969.

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