

## AGRICULTURE UNDER SOCIALISM\*

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### Introduction

In his book *The Structure of the Slovenian Economy 1848-1963* Toussaint Hočevar devotes a chapter to "Agriculture and Forestry under Socialism."<sup>1</sup> He traces the post-World War II developments in Slovene agriculture and describes the policies which have led to the problems besetting agriculture to this day. Agriculture has been the problem child of most, if not all, centrally planned economies, including those of the Soviet Union, other countries of Eastern Europe, and China. In addition to an unfavorable physical and climatic environment common to all agricultural producers, the problems in socialist agriculture are exacerbated by the lack of incentives, the lack of capital resources and, at times, by the adverse political climate within which the agriculture operates. A case could be made for the argument that the key to the entire development of these economies is to be found in a close analysis of their agricultural problems.

### The Importance of Agriculture

Ordinarily, in the early stages of economic development, it is important to have a strong and prosperous agriculture. Industrial development can accompany agricultural development, but it can seldom precede it. Khrushchev was cognizant of this fact when he stated, ". . . without the advance of agriculture the problems of building communism cannot be successfully solved. Communist society cannot be built without an abundance of grain, meat, butter, and other agricultural products."<sup>2</sup>

Food products and raw materials not only support the populace in the non-agricultural sectors but in many instances are used as important foreign exchange earners which finance imports of capital goods for industrial development. Canada, for example, built up its industry on the export of timber, as did Japan on the export of silk, and the United States in the early years of its development paid off its foreign loans with shipments of grain and tobacco.

In market-oriented economies one can observe that the changing structure of agriculture follows a "natural economic path." At lower stages of economic development the real price of capital is high and that of labor is low, and thus farming is labor intensive. Size economies are small in labor intensive agriculture and there is no pressure toward large scale farms. Where labor is the major input or resource, it can be used over a diverse set of enterprises. Farms are diversified and produce both for home consumption and for the market.

With increases in farm productivity some farm workers move to varied non-farm employment. Fewer and fewer people are needed in farming, because new technologies enable more food to be produced by fewer people and more workers produce the other products and services desired by society. In this way each stage of economic development calls also for a different structure of agriculture.

### Agriculture in Centrally-Planned Economies

Centrally planned economies did not follow this "natural economic path." Changes were ordinarily abrupt and were created by government *fiat*. The abruptness of changes in these

economies' agricultures in most instances transformed farming technology less than it affected the number of people making their living in agriculture. The exodus of farm labor was more rapid than the inflow of capital needed to substitute for the labor, and agricultural output therefore declined.

The changes in these countries were politically rather than economically motivated. The building of socialism was considered an end in itself, and agriculture was used to serve that system as a supplier of cheap food for the non-farm population and as a supplier of needed labor for rapid industrialization and urbanization. The model used by these socialist countries was that used for Soviet agriculture. The fundamental characteristic of this model and the concomitant agricultural policies had an incentive-killing effect on food production.<sup>3</sup>

It can be noted that most of these countries were once not only self-supporting but even exported food surpluses; now, however, they are forced to rely on food imports. The 19th century brought about the end of feudal society in most of Europe, and the accompanying land reforms gave the farmers the rights of land ownership and the impetus for transforming the traditional low-producing agriculture into one that in a relatively short time increased the yields of crops and livestock. These increases in production were made possible by the expansion of cultivated land and through the introduction of new breeds of livestock and new varieties of crops. The new freedom unleashed the creative powers of the farmers, who began to experiment with new methods of cultivation. The new freedom was the driving force behind the agrarian revolution. Farmers in the Slovene lands were not immune to these changes. Hočevac records the enthusiastic support given by Slovene farmers at the turn of the century to the cooperative movement and to the acceptance of Swiss methods in dairy farming. Cooperative ownership differed from so-called state cooperatives in that it involved the active participation of its members in the management of the entire cooperative property.<sup>4</sup>

In contrast, in socialist economies the dogmatic adherence to the belief that all private ownership of the means of production represents a negation of socialism led to an adoption of policies that had a depressive effect on agriculture. In most, if not all, of the countries the farmers constitute the poorest group. The leadership favors the political supporters of the régime, viz., the industrial workers, soldiers, police, and bureaucrats.<sup>5</sup>

### New Developments

The Socialist countries of the world are experiencing difficulties in feeding their people, and some are therefore beginning to question the viability of their economic and political systems. A growing diversity among the centrally planned economies' social and economic systems can be observed, a diversity that is becoming more and more apparent and is assuming an increasing importance. The growth in this diversity is strikingly demonstrated by contrasting the developments in the agricultural systems in countries such as Poland, Yugoslavia, Hungary, Czechoslovakia, the Soviet Union, and China. In each of these countries "agriculture" works differently: the systems vary widely in the way in which agricultural policies are formed and implemented. Therefore, centrally planned economies no longer have one pure strain of "imported" seed (the Soviet model) but several hybrids, developed to fit their particular circumstances and needs. One can still however observe one common trait: the farmers and the peasantry continue to be considered a remnant of capitalism and are treated as an outgroup. This contributes significantly to the conclusion that it is in food production that the socialist countries have experienced their most significant failures. It is also an indication that agriculture is difficult to plan and to control.

It is becoming more and more evident that agriculture, unlike the manufacturing industries, does not lend itself to central control and planning.

After 70 years the Soviets, for example, are still not able to grow enough food to provide an adequate diet for their population. Russia under the tsars was an exporter of grain, whereas today the Soviet Union imports grain from the West.

China, too, was historically a net agricultural exporter; but with the adoption of a Soviet-style agricultural system its agriculture stagnated. During the period of collectivized production the prevailing policies in China led to indifference among farmers, and to the misuse of land, fertilizer and other inputs. The new policy initiated in 1978 however placed importance on households rather than on collectives as the most important rural units. Along with this change the profit motive now played a much greater role than central planning. The government increased the prices paid to farmers, and the former collective production system was replaced with the land being allocated to households and farmers who were allowed to freely dispose of production above the amounts set in annual contract with the government. The new system linked farm income directly with production, unlike the old one, in which households received a share of the collective income that was largely independent of how hard they worked.<sup>6</sup>

The new Chinese system has given the Chinese farmers more freedom and control over the land they farm; it is therefore not surprising that Chinese agriculture has been transformed in a relatively short time from a net importer of agricultural products to a net exporter. Since 1978 China's total agricultural output grew by more than 50%—a gain of almost 40% per capita—in contrast to virtually no growth in the previous three decades.

Unlike the Chinese, who appear to be more pragmatic in their reversal of agricultural policies, the rest of the socialist bloc still considers the private sector an anomaly. Ideologically the private sector is considered to be alien, politically suspect, and economically backward; morally it is thought to stand in the way of the creation of the new socialist and communist man.<sup>7</sup>

In the Soviet Union, for example, year in and year out private plots still provide a substantial share of the country's food supply; this underscores their importance and the country's dependence on the output from these private plots. These small plots amount to about 3% of the planted acreage; but they produce about 60% of the potatoes, 37% of the vegetables, 35% of the meat and milk, 50% of the eggs, and 20% of the wool, that is produced.<sup>8</sup> Nevertheless, for the Soviets the kolkhoz and the sovkhoz still represent the "ideal" type of farm organizations and functioning realities. For them the "correct" socialist form of the system still takes precedence over the achievement of greater production.<sup>9</sup>

### Slovene and Yugoslav Agriculture

Developments in Slovene agriculture are tied to the national policies pursued by the central Yugoslav government. Immediately after the war the rulers of postwar Yugoslavia decided to follow the Soviet agricultural model. The building of socialism was taken as an end in itself and agriculture was used to serve that system as a supplier of cheap food for the non-farm population and as a supplier of needed labor for the country's rapid industrialization and urbanization.

To expedite the process of development agriculture was collectivized through the creation of producers' cooperatives. In addition the policy included compulsory deliveries of agricultural products and government-controlled prices for the procurement of agricultural products; these prices were ordinarily below the costs of production. The subordinate and marginal role given to agriculture on the part of the central planners coupled with the

farmers' resistance to forced collectivization did not bring about a showcase of the superiority of this kind of farming organization. The attempt failed, and further collectivization was officially abandoned in 1953; the dissolution of the functioning cooperatives quickly followed. Thus, since 1953 the organization of Yugoslav agriculture has been bimodal: it is composed of a socialist sector and a private farming sector.

Farming in Yugoslavia is currently carried out predominantly by farmers who own 83% of the arable land and most of the livestock. The 2,600,000 farms are small, averaging 11 acres; they produce for both home consumption and the private market.<sup>10</sup> Most of these farms can thus be considered subsistence farms, where production is diversified and geared more to household needs than to the market.

Socialized enterprises, on the other hand, practise large-scale farming, use more modern production techniques, are equipped with processing facilities, and produce only for the organized market. The farms in the socialist sector control about 17% of the total arable land, but use nearly 40% of the total amount of mineral fertilizer. Along with greater fertilizer use, these farms enjoy a higher level access to agrotechnical services and to better-quality seeds.

The socialist sector accounts for nearly 50% of official sales of food and fiber on a nationwide basis. It should however be pointed out that while the socialist sector is compelled to sell through official procurement channels at the officially determined prices,<sup>11</sup> the private sector does not operate under the same constraints. Generally, the private sector contributes most of the vegetables, potatoes, beef and fresh milk. The socialized sector, in contrast, contributes the bulk of wheat, rye, barley, corn, oats, apples, eggs and pork.<sup>12</sup>

Overall, postwar Yugoslav agriculture—judged by crop yields—shows considerable improvement because of the introduction of new varieties, the more intensive use of commercial fertilizers, and the conversion of marginal arable land to grass, pasture, or non-use. The same yields placed in their European context, however, appear unremarkable.<sup>13</sup>

Western Europe made a rapid comeback after World War II because it had a large pool of managerial capabilities and was able to efficiently use the capital aid that was made available. Perhaps Yugoslavia could approach similar possibilities in the future, if it were to place enough value on agriculture. In the past agriculture has tended to be taken for granted, with agricultural prices kept low (i.e., below world prices), with price policies directed for the benefit of the urban masses, and with small allocations of capital investment in agriculture. Excessively low prices have deprived farmers of the income and the capital that would have enabled them to invest and modernize as farmers in the West have been able to do.

In addition, the abruptness of change in post-war Yugoslav agriculture changed farming technology less than it effected the number of people who made a living in agriculture. In 1939, nearly 70% of the working population was engaged in agriculture, but the percentage dropped to 37% in 1965; in Slovenia the total is now less than 20%. The large exodus of labor from the agricultural sector was more rapid than the inflow of capital needed as a substitute for that labor.<sup>14</sup> Thus, in comparison with the needs and potentialities, improvements in land use in postwar Yugoslavia have been modest.

It should also be recognized that while farming in Yugoslavia is still largely manned by about 2,600,000 households, the average farm size of 11 acres is below that for the 1930s. The current Yugoslav average of 11 acres compares, for example, with averages of over 160 acres in Great Britain, 60 acres in France, and 40 acres in West Germany and Belgium.

It is true that averages may not accurately describe the structure of farms in a particular country, because they are a composite of many part-time and hobby farms, but they do indicate the nature of the problem. The Yugoslav farmer is limited to farm a maximum of 25 arable acres; his counterpart in the West is not. Yugoslav farmers with farms close to the 25 arable acre figure are precluded by law from purchasing smaller holdings of farmers who might wish to sell out. In addition, it is illegal to lease or rent land to expand to a size of farm which could make the use of modern technology and machinery more economical. While the farms of Western Europe are increasing in size, the trend in Yugoslavia is the reverse: the number of small farms in the private sector is increasing, and the number of large farms is decreasing.

The size and structure of farms in Yugoslavia is not a function of cost and size economies.<sup>15</sup> In agriculture, size and cost economies were considered a largely theoretical phenomenon, as they still are in primitive agricultural economies. Cost economies generally occur because of substitution relationships among inputs. Enterprises in less developed agriculture are labor intensive, and the costs per unit of output do not vary appreciably as the size of the enterprise increases or decreases.

In primitive agriculture the number of alternative methods of producing an output is limited because the substitution possibilities are limited due to a lack of available inputs. The inability to substitute inputs also makes farms more homogenous. Given the traditional technology, there may be only one way to produce wheat, make hay, or milk cows.<sup>16</sup>

Under the existing technologies, private sector farms in Slovenia are too small to take advantage of the cost economies. Fixed investments in farm machinery, for example, when spread over more units (more units or great numbers of livestock) reduce the per-unit costs. As it is, the small-scale farm operators on Slovene and other Yugoslav farms are placed in a position of income depression due to the squeeze between the prices received for their products and their production costs. On the other hand, studies show that the size and cost economies are exhausted long before a farm reaches 10,000 or more acres, or 100,000 or more hogs,<sup>17</sup>—which is the current size of some of the state (socialist) farms.

The present policies continue to be nurtured by the vision of large-scale enterprises and farms, and on the demise of private farms, which are prohibited by law from growing beyond a specified size and thus cannot take advantage of cost economies when they utilize modern, more capital-intensive technology. Not only are most of the private farms too small to be efficient, but also fragmentation of fields wastes manpower. A farmer may have as many as ten or more fields that are under one acre in size, and which are miles apart from each other.

Rural people no longer rely on agriculture alone for their livelihood. More and more farmers are forced to take jobs away from their farms just to exist; it is off-farm employment that provides the lion's share of farm families' income. Yugoslavia's postwar growth in manufacturing and other non-agricultural activities could not have been achieved without a massive shift in workers from agriculture. In addition to labor transfer, transfer of income from agriculture via taxation and the sale of farm products at low prices helped support workers who, during the first postwar years, reconstructed communications and rebuilt and expanded industry.

The level of farmers' incomes has been much lower than that of industrial workers. While in recent years the relative prices of agricultural products have increased, the disparity has not been appreciably corrected. The average farmer's income is about 50% that of the average socialist sector worker's income.<sup>18</sup> It is therefore not surprising that the rural youth continues to seek work in off-farm employment, particularly in regions with

relatively high industrial development. In addition, nearly a million Yugoslav workers are employed in the countries of Western Europe. Consequently, Yugoslav agriculture is manned more and more by part-time farmers who, time permitting, continue to cultivate the more productive land and leave the marginal land idle.

### The Current Situation

One of the most interesting developments in Yugoslav agriculture has been an apparent continued search for a solution to agriculture problems, a search which has been going on since the mass dissolution of the collective farms in 1953. Over a period of years communist ideology and the communist attitude toward the peasants have undergone a profound change. One major factor of influence has been the shortage of some of the agricultural products, and the consequent need for agricultural imports which use scarce foreign exchange. Another factor responsible for the change in attitude toward the peasants is their mass exodus into industry. The movement of labor away from agriculture, once encouraged, was (as stated above) more rapid than the in-flow of capital needed as a substitute; in fact, the policy of the last two decades—because of unemployment—has been one of trying to stimulate the peasants to remain on the land, not to forsake agriculture. There is also a need to obtain more output from the private farms, since there are limits to increasing production in the socialized sector.

While more and more voices are being heard in their attempts to redirect agricultural policy, the decision-makers seemingly continue to believe that the socialized sector will eventually triumph over the “obsolete” private farms. While this process is expected to require a prolonged period of time, the prevailing view remains that the farmer stands outside of “the system”, and the ultimate aim is to bring him into it. This may be one of the prime reasons why Yugoslav farmers cannot expand their operations beyond the maximum set by law some 30 years ago. The continued favoritism shown to the socialized sector may well have been shortsighted. Unless the policies designed to provide greater support and encouragement to the private sector are adopted and implemented, the laggard private farm sector may well continue to impede the country’s overall economic development.

The Yugoslav economy is in crisis. Persistent efforts and attempts to circumvent and overturn the laws of economics and subdue the age-old natural incentives to work have brought with them anticipated results: an economy plagued with shortages, waste and inefficiencies. The low level of efficiency is particularly apparent in agriculture and in service industries. While the cures for the present ills may be recognized, they have not been prescribed because of the ideological fear that the true remedies may release the “evil genie of capitalism” from the bottle. Nikolay Shmelyov, a Soviet economist, wrote in the June 1987 issue of the magazine *Novy mir*:

“Perhaps we [in the U.S.S.R.] will lose our ideological virginity, but it now exists only in the fairy-tale editorials of newspapers. There is more theft and graft than ever under this virginity. What is more, there are people who have income without creating anything, without either knowing or wanting to create. . .”<sup>19</sup>

Perusal of Yugoslav periodicals leads one to a similar observation.

### Conclusion

There is growing evidence that economic aid to those developing countries where farmers do not control the land they farm is not as effective as to countries which have

ended their landlord system through land reform. Non-owners do not make the vital on-farm improvements that are needed for increasing agricultural production. For example, the three nations in East Asia where land reform and government support for agriculture created relatively ideal conditions for individual farmers—Japan, South Korea and Taiwan—have done the best in increasing rice production during the last three decades.

The engine of growth starts when farmers are allowed to farm as they think best without being impeded by government policies. Agriculture is part of a dynamic economy; it should not remain stationary. Each stage of economic development calls for a different structure of farms. In a developing economy one can observe the trend toward fewer and larger farms. These changes do not necessarily mean the end of family farms. The farm as an institution is, and will remain, the same. It is the size of the farm, the machinery and the know-how of the operator that differ.

The ultimate significance of present-day developments in centrally planned economies is difficult, if not impossible, to envision. So also is the staggering mission of world agriculture, to feed the increasing world population in years to come. Most nations are extremely concerned about agricultural productivity but under widely different conditions of development. The agricultural sector plays an important role in the development of any nation's economy. In most cases it not only provides food and fiber for the non-farm population, but also serves, at least in the initial stages of a country's development, as an important source of capital for the development of other sectors.

In Yugoslavia it appears that the agricultural sector will remain the problem child of the country's economy at least for the near future. The governmental attitude and policies have had a demoralizing effect on agriculture. The government has been rejecting the "natural economic path" to agriculture's development, in the belief that the building-up of the private farming sector would strengthen capitalism. Continuation of present policies, however, may pose a greater threat to the country's development than any efforts directed to making Yugoslavia's private agricultural sector more viable.

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## NOTES

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12. Source: as in note 10.

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## POVZETEK

### KMETIJSTVO POD SOCIALIZMOM

Socialistična gospodarstva so zamotana v globoki gospodarski krizi in to še posebno na kmetijskem področju. Države ki so včasih z lahkoto pridelale dovolj hrane ne le za svoje potrebe pač pa tudi za izvoz so danes primorane živila uvažati. Tudi slovensko oz. jugoslovansko kmetijstvo je zabredlo v velike težave. Med vzroke teh težav sodijo prisilna povojna kolektivizacija in oddaja kmetijskih pridelkov po zelo znižanih cenah, zemljiški maksimum in izrecna prednost dana družbenemu kmetijstvu.

V zadnjih desetletjih agrarna politika poudarja večjo vlogo, ki naj bi jo imelo privatno kmetijstvo v razvoju gospodarstva, vendar nosilec tega razvoja naj bi še vedno bilo družbeno gospodarstvo. Gospodarstvo v slednji državi je dinamično in vsaka stopnja razvoja terja obenem primeren razvoj na vseh panogah gospodarstva. Podatki kažejo, da na primer 10-hektarni zemljiški maksimum obdelovanja zemlje predstavlja oviro v nadaljnem razvoju privatnega kmetijstva, ker zmanjšuje učinkovitost delovnih rezultatov in obenem povečuje stroške kmetijske proizvodnje.