

# Economics of Peasant Farming

Doreen Warriner



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## FOREWORD TO FIRST EDITION

**I**N all the East European countries which I visited in 1935, 1936, and 1937, I received much help from peasants and large landowners, as well as from economists and administrative officials. In Poland I received much hospitality and help from Professor Heydel, M. Poniatowski, and Dr. Styś, who introduced me to peasant villages in Central, Eastern, and Southern Poland, and from Miss Ewa Estreicher of the State Statistical Office. In Czechoslovakia my thanks are chiefly due to Dr. Milan Hodža, who first drew my attention to the economic problems of this part of Europe. In Rumania my thanks are due to Dr. Manuila, of the State Demographic Institute, who enabled me to visit the villages where his teams of trained investigators were working; in Yugoslavia to Dr. Marković of the Export Institute; in Hungary to Dr. Varga and Dr. Matolcsy; and in Bulgaria to Dr. Koestner of the National Bank, and Dr. Zagaroff of the State Statistical Office.

Mr. H. D. Henderson and Mr. P. Lamartine Yates read the typescript of the book, and I am very grateful to them for many suggestions.

I am indebted to the Ethnographical Museum in Cluj for permission to reproduce three photographs of Transylvania taken by Mr. Denis Galloway.

With the partition of Czechoslovakia the European agrarian problem enters on a new phase. The basis of agricultural prosperity, the connexion with industry, has been destroyed by the division of the industrial and agricultural regions of Bohemia, and it is impossible for the state as it now exists to maintain the same standard of living. German economic policy is designed to keep the remainder of the country as a source of food-supply for the Reich, and as such it cannot employ its present population in the land. The need for emigration is now almost as acute in Czechoslovakia as it is in the other countries of Eastern Europe.

DOREEN WARRINER

PRAGUE,  
*November 1938*

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## INTRODUCTION TO THE SECOND EDITION

**T**HIS book, first published in 1939, was originally conceived as an investigation of peasant farming in Europe—a horizon which then seemed wide enough. At the time that it was written, in the years of the agricultural depression of the nineteen-thirties, the habit of generalizing about 'the peasant' was prevalent, even in serious academic discussion. He was doomed, or he was eternal, according to the underlying outlook. I wanted to find out the facts, and found that in the singular he did not exist.

What I found was an immense contrast between the well-capitalized commercial peasant farming of Western Europe and the poor subsistence farming of the remotest parts of Eastern Europe; and between these two extremes a wide range of variation in standards of living and farming efficiency. This observation is now a commonplace, and the student will find fuller and more exact comparisons in specialized studies of European agriculture. But at the time that I wrote the range was not charted, nor had it been related to differences in the course of economic and social development during the nineteenth century.<sup>1</sup>

Within Eastern Europe, there proved to be sufficient contrast in economic and social conditions to make a book about peasant farming in that region only. As I studied the agrarian countries, I found that they suffered from over-population, resulting from a low rate of capital investment and a high rate of population growth; so the book became a study in what is now called under-development. As such it was in advance of its time.

In considering the remedies for farm poverty, as I called it then, I was concerned with various practical possibilities rather than with ideal solutions or models of development.

<sup>1</sup> For the nineteenth-century background, see *Contrasts in Emerging Societies: Readings in the Social and Economic History of South-Eastern Europe in the Nineteenth Century*, by G. F. Cushing, E. D. Tappe, V. de S. Pinto, and P. Auty, ed. Warriner, University of London, Athlone Press, 1964.

It was logical to begin with unbalanced trade, caused by the shrinkage of the market for the grain and meat surpluses of the agricultural exporters, since in the nineteen-thirties this was the immediate problem, and the only one which engaged the attention of economists. 'The German solution', then imminent, did offer a market for these surpluses, but would not touch the deeper underlying imbalance of the economic structure, due to the preponderance of agriculture oversupplied with manpower.

As to the prospects of raising rural living standards by improving farming efficiency, there was what would now be called a distortion in the pattern of land use, correlated with maldistribution of rural population. The naturally fertile Danubian plains, which could have been Europe's Corn-Hog Belt, were cultivated too extensively, in large estates or in peasant farms alike, and their great potential neglected, while the poor mountain soils were over-cultivated, because they were too densely settled. The plain regions could have been developed by means of public investment in irrigation and more intensive farming generally, and this development was needed, to raise the rural living standard—which in Rumania it could certainly have transformed. But it was not likely to increase employment in agriculture sufficiently to absorb labour from the poor regions.

As to land reform, the measures carried through after the First World War had been a remedy for one generation only. There was not, at that time, a broad general prospect for relieving farm poverty by further redistribution of land, because, excepting in Hungary, most of the land was already peasant owned. 'The Russian solution', in the sense of collectivization, was no solution for countries which had no great expanses of uncultivated land; there were some prospects for industrialization through planning on the Russian model.

The conclusion was that either the agrarian countries must industrialize, or their populations must migrate. This conclusion still seems a sound diagnosis of the situation as it was before the war, though it was much attacked at the time for its pessimism.

## I

By way of introduction to this second edition (which is a re-issue of the first, except for corrections to mistakes in the original text), it seems necessary to give the reader some idea of how the agrarian situation in Eastern Europe has changed since the book was written.

This is difficult, for two reasons. Twenty-five years is a long time. The region experienced 'the German solution' in its terrible totality. To Poland and Jugoslavia, the war brought death and destruction on a scale inconceivable in any period of European history. After the war, Poland was shifted westwards into new frontiers. The expulsion of eleven million Germans meant a migration out of the region on an unprecedented scale. These vast changes cannot be described here; and yet they are what my generation most remembers.

The other reason is that the results of 'the Russian solution' cannot be assessed in relation to the main theme of the book, the desirability of raising the peasants' standard of living, for that is not its aim. In the years immediately after the war, it did indeed seem as if communist policy were doing the things that needed to be done. Industrialization was the chief aim, and it was certainly needed; for agriculture, the target was quick recovery to the pre-war level of production, which would have meant a considerable increase in food consumption in the countries with smaller populations; and for the poorest peasants there were radical land reforms. There was then much greater scope than before the war for redistribution of land, because the German exodus left large areas available for resettlement. In the post-war chaos, it was good to meet again peasants from the over-crowded villages of Southern Poland on their large new farms near Wroclaw, and to find that the destitute farm labourers of Northern Hungary had become owners of sizable farms.<sup>1</sup>

Since that hopeful interim, the full solution has been applied: the expansion of heavy industry and collectivization.

<sup>1</sup> For the results of these reforms, see Warriner, *Revolution in Eastern Europe*, London, 1950, Chapter VII.

For communists these policies are ends in themselves, because they signify power. In so far as higher wages in industry are needed to secure increased production, the achievement of these ends implies a rise in urban living standards. So far as the peasants are concerned, the aim is to lower their living standards, even at the cost of food production, unless supplies are reduced to a level which threatens the towns with starvation.

If this is not understood, and it is believed that the object of planning is to raise living standards in general, then the policy appears an unintelligible failure, and there is no solution to the problem of why economies that have been investing at high rates for a long period should show such poor results. In Poland, for example, where the much needed increase in food production on the poor sandy soils depends mainly on fertilizers, one might easily conclude that the planners are insane when one finds that even by 1958 fertilizer production had not recovered to the pre-war level (within the present frontiers, where consumption was much higher than in the old Poland), and learns that fertilizers have been exported to China. Refrigerators, expensive and unsaleable in the shops, are hollow symbols when meat and milk are luxuries; and one might argue that investment has been misdirected, if one assumes that necessities should come first. But from the communist standpoint, such things are not mistakes: industry comes first, and agriculture is the buffer sector.

So all that can be done is to take the situation as described in the book point by point, and note the main changes in outline, with more detailed observations on Yugoslavia and Poland, where the peasants have to some extent come back into their own, within the limits uneasily set by dogma.

In the first place, the pre-war trade balance is now reversed. Eastern Europe is now a grain deficit region. Net grain imports in 1958-60 averaged 3.5 million tons per annum, of which Poland and Czechoslovakia each imported 1.6 million tons, Yugoslavia 200,000 tons (with an export surplus in 1960 for the first time since the war), Hungary 188,000 tons and

Bulgaria 70,000 tons; Rumania's net exports averaged only 180,000 tons. The explanation of these large and generally increasing imports is presumably higher consumption, since grain output per head of population is now at the same level as before the war (see Table I). Higher consumption in the countryside may account for the need to import food for the towns, which suffer chronic shortage of meat and milk and occasional shortages of bread.

So the priorities of 1939 are now reversed. Then industrial development was the first; now it is increased food production. The movement of population into industry creates a demand for food which agriculture cannot supply, partly for lack of capital, and partly for lack of incentive.

Next, agricultural over-population. This was shown to exist in two forms: (i) a failure of agricultural production to keep pace with the growth of agricultural and total population—a rather muted Malthusian devil, because there were then the export surpluses to fall back on; (ii) labour redundancy on the land, since hypostasied by others into the monster of 'the surplus'. How have these conditions changed?

(i) As regards the first condition, the following table shows changes in grain production between the pre-war average and the average of 1958–60, in relation to total populations, for the countries for which agricultural production statistics are available. Since the war Rumania and Bulgaria have not published agricultural production statistics on a basis comparable with pre-war, but following the Russian practice quote figures of 'biological yields', instead of the normal barn yields; this inflates the figures to an unknown extent.

Table I shows that grain production did not recover to the pre-war level by 1948 or 1949, the targets set in the short-term recovery plans, except in Hungary, where agriculture had suffered comparatively little from war devastation. In Poland and Jugoslavia the pre-war level was not reached until 1957, and in Czechoslovakia not until 1960. During the early fifties, when the process of collectivization reduced production, grain output per capita fell, but by 1958–60 it was up to

TABLE I

*Changes in Grain Production and Population  
in East European Countries*

	POLAND	HUNGARY	JUGOSLAVIA	CZECHO-SLOVAKIA
Grain Production (million metric tons) 1934-8 Average				
Present Frontiers	13.3	6.1	8.1	5.6
1948 . . . . .	11.3	6.3	7.6	4.9
1949 . . . . .	11.9	5.2	7.3	..
1950 . . . . .	11.6	5.4	4.6	4.9*
1951 . . . . .	11.0	6.2	7.2	..
1952 . . . . .	11.7	4.0	3.8	..
1953 . . . . .	10.0	6.2	7.5	n.a.
1954 . . . . .	11.0	5.4	5.1	n.a.
1955 . . . . .	12.7	6.6	7.4	5.1
1956 . . . . .	12.1	5.3	5.9	5.4
1957 . . . . .	13.5	7.0	10.2	5.2
1958 . . . . .	13.5	5.7	7.5	4.8
1959 . . . . .	14.1	7.3	12.1	5.5
1960 . . . . .	14.3	6.9	11.0	5.8
Average 1948-50 . . . . .	11.6	5.6	6.5	4.9
1958-60 . . . . .	14.0	6.6	10.2	5.4
Populations (Present Frontiers) (millions)				
1937 . . . . .	34.5	9.1	16.3	14.4
1949 . . . . .	24.6	9.2	16.1	12.3
1959 . . . . .	29.3	9.9	18.4	13.6
Increase or Decrease per cent. in Grain Production				
Pre-war to 1958-60 . . . . .	+ 5.3	+ 8.2	+25.9	- 3.6
1948-50 to 1958-60 . . . . .	+20.0	+17.9	+56.9	+10.2
Increase or Decrease per cent. in Population				
Pre-war to 1959 . . . . .	-15.0	+9.3	+12.9	-5.6
1949 to 1959 . . . . .	+19.1	+7.6	+14.3	+9.9
Per Capita Grain (metric tons)				
Pre-war . . . . .	0.39	0.67	0.50	0.39
1959 . . . . .	0.48	0.66	0.55	0.40

\* The only available figures relate to 1948 and to the average of 1948-52.

Sources: For Poland, *Statistical Yearbooks*; for the others, FAO, *Yearbooks of Food and Agricultural Statistics*.

or slightly above the pre-war level. Hungary still shows a much higher per capita level than the other countries, and throughout the post-war period food has been much more plentiful than in Poland and Czechoslovakia, as might be expected, now that Hungary's formerly large export surplus has turned into a small import surplus.

Thus the grain supply position is not worse than before the war, and there has certainly been an increase in consumption. None the less, for Poland, with an adverse trade balance, the outlook is graver than it was, because population is now increasing at a higher rate than before, and higher yields cannot be attained without much more investment in agriculture. If the agricultural potential of the Danubian plain were to be developed, production could of course be increased at much lower costs, and Hungary and Rumania could export to the rest of the communist bloc, thus reducing its dependence on grain imports from Russia. But in agriculture each country is autarchic, and no attempt has been made to utilise the most fertile land more productively, except in Jugoslavia, which therefore shows a much higher rate of increase in grain production than the other three countries.

Although it is in grain cultivation that large-scale operation might be expected to show better results than peasant farming, grain production in the later nineteen-fifties increased faster in Poland and Jugoslavia, where collectivization had been abandoned, than in Hungary and in Czechoslovakia, where it was still proceeding. Czechoslovakia shows the poorest results, partly because the once well-farmed German lands went out of cultivation after the war (according to recent reports about half a million hectares are still uncultivated). Official indices of total agricultural production show the same broad contrast between the countries, but show Poland in a more favourable position; owing to its more rapid increase in livestock production, which is encouraged in order to squeeze out an export surplus of pigs and bacon.

(ii) As to the existence of labour redundancy on the land, agricultural populations are now smaller, both relatively and absolutely (with the possible exception of Rumania, where the only figures available show an absolute increase). Changes

in the size of the agricultural populations up to 1950 were mainly due to changes in frontiers and total populations. From 1950 to 1960 the decreases were due to the growth of industrial employment, which has been large enough to absorb the increase of the working population and also to draw labour off the land. The following table shows these changes.

TABLE II

*Total and Agricultural Population in  
East European Countries*

(Present Frontiers, except where otherwise stated)

Column 1 Total population at census date, millions.  
Column 2 Agricultural population at census date, millions.  
Column 3 Agricultural as per cent. of total population.

	Pre-War			Post-War					
	1	2	3	1950-59			1960 (1961)		
				1	2	3	1	2	3
Poland	(1931)*32.0	19.1	60	(1950) 25.0	11.6	47	29.7	11.2	38
Czechoslovakia	(1930) 14.0	4.6	33	(1950) 12.4	3.1	25	(61) 13.7	2.7	19
Hungary	(1941) 9.3	4.5	49	..	..	..	10.0	3.6	36
Jugoslavia	(1931) 14.5	11.1	79	(1953) 16.9	10.3	61	(61) 18.5	9.3	51
Bulgaria	(1934) 6.1	4.4	73	(1956) 7.6	4.2	55	..	..	..

\* Pre-war frontiers

Sources: Official Statistical Yearbooks, FAO Production Yearbooks.

In spite of these large shifts in the balance of occupations, the proportion of the total population in agriculture is still high by comparison with Western Europe, except in Czechoslovakia, where it is similar. Although labour productivity by comparison with Western Europe is still low, it must have risen considerably, since a larger volume of output is now produced by a smaller labour force. Unfortunately recent labour force figures are scanty, and their comparability with pre-war uncertain; moreover the growing practice of combining agriculture with industrial employment renders comparison difficult. However, such figures as are available may be quoted to show the large absolute reductions in the

agricultural labour force in Poland and Czechoslovakia, and the much smaller reductions in Hungary, Jugoslavia and Bulgaria. The Rumanian figure quoted shows that the proportion of the labour force in agriculture was still high in 1956.

TABLE III

*Total and Agricultural Labour Force in  
East European Countries*

(Present Frontiers, except where otherwise stated)

Column 1 Total active population at census date, millions.  
Column 2 Active agricultural population (both sexes) at census date, millions.  
Column 3 Column 2 as per cent. of Column 1.

	Pre-War			Post-War					
	1	2	3	1950-59			1960 (1961)		
				1	2	3	1	2	3
Poland	(1931)*15.0	9.6	64	(1950) 13.2	7.0	53	..	..	..
Czechoslovakia	(1930) 6.7	2.5	37	(1950) 5.8	2.2	38	(61) 6.1	1.5	25
Hungary	(1930) 3.8	2.0	53	..	..	..	4.9	1.8	38
Jugoslavia	(1931)* 6.5	5.1	78	(1953) 8.4	5.4	64	(61) 9.0	4.8	52
Bulgaria	(1934) 3.4	2.7	80	(1956) 4.1	2.6	64	..	..	..
Rumania	(1941) ..	6.5	..	(1956) 10.4	7.3	70	..	..	..

\* Pre-war frontiers

Sources: Official Statistical Yearbooks, FAO Production Yearbooks.

Has industrialization absorbed the surplus of labour on the land? Put in this way, the question cannot be answered. Any estimates of excessive manpower based on pre-war conditions are out of date in the countries where there have been large changes in populations. Moreover, for reasons explained below, the surplus was not precisely measurable in numbers. The degree of mechanization in agriculture is still low, except in Czechoslovakia, but it must have affected labour requirements to some extent. There is certainly a shortage of farm labour in Czechoslovakia now, which is not surprising, since

excess of manpower was formerly localized in Eastern Slovakia, and also in Ruthenia, which is now in Russia. In Hungary also a shortage is reported, which is surprising, since the reduction in the farm labour force between 1930 and 1960 amounted to only 200,000 workers. As to Poland, the man: land ratio is now more favourable, and on this overall basis there should now be no surplus labour; but there is still an excess of farm population in Southern Poland, though there is a shortage in the north-west. As to Yugoslavia, there is certainly some surplus labour still in the poorest regions, though in other regions there are shortages. So although no reassurance can be found in figures, it can be concluded that in these four countries there is less surplus labour in agriculture than there was.

Another aspect of occupational imbalance is now much more striking: the maldistribution of labour between industry and services. In industry there is much obvious under-employment, while too little labour is employed in transport and distribution. The transport bottleneck is one of the main causes of urban food shortage. In agriculture itself, whatever the labour supply situation, more capital and labour should now be employed in improving the infrastructure, through land reclamation, farm roads, transport and marketing facilities. So today the problem of occupational imbalance is too complex to be stated in terms of the simple old anti-thesis between agriculture and industry.

From the standpoint of this book, the important question is whether the movement of labour into industry can be shown to have relieved the extremes of farm poverty. As the map on p. 71 shows, Southern Poland and Yugoslavia south of the Sava were the regions most densely populated in relation to farm land, and as Chapter VII shows, they were among the poorest, with no prospect of agricultural development, and therefore greatly in need of alternative employment. How has industrial development affected them?

The Polish government has followed a policy of industrial dispersion, in consequence of which peasants in the south-eastern region (formerly Southern Poland) have benefited by the expansion of the new industrial centre of Krakow, round

the new steel works in the suburb of Nowa Huta, which houses some of the recruits to industry; they also find work in the old industrial centre of Katowice, also expanding, though not so fast as Kraków. Movement into industry largely takes the form of daily migration from the countryside by small farmers or members of their families. In the mid-fifties 'peasant-industrial workers' were estimated to number between 900,000 and 1,200,000 in Poland as a whole. In 1960 there were estimated to be 400,000 such workers in Kraków voivodship alone, in a total population of 2.3 million. They are the best off among the industrial workers, since the farm, even if small, provides a secure food supply; the wages earned by the commuting members of the family provide cash for consumption goods, and also for new farm equipment and building. According to a sample survey covering 80 villages in Poland in 1947-57, nearly half the peasant families in the south-eastern region derived some income from industrial employment, and one quarter of them derived over 60 per cent of their income from off-farm earnings.<sup>1</sup>

Official opinion holds that this is a temporary situation, since for orthodox doctrine these commuting peasants are two-timers in the class war. None the less, it is cheaper to provide double-decker railway carriages for them than to build more new urban housing. So commuting makes the best of two bad jobs, because industrial wages are low, food dear and urban housing hard to get. It is the peasants' answer to planning, just as it is the peasants' answer to the economic miracle in Western Germany.

The Yugoslav government has also followed a policy of industrial dispersion, for strategic, political and social reasons. This has resulted in a relatively larger increase in industrial employment in the regions south of the Sava, although the absolute increases are much greater in the old industrial centres.<sup>2</sup> Power stations and new plants have been located in the agriculturally over-populated republics, in Bosnia and

<sup>1</sup> *Spoleczno-ekonomiczna struktura wsi w Polsce ludowej*, B. Gałęski, Instytut Ekonomiki Rolnej, Warsaw, 1960.

<sup>2</sup> F. E. I. Hamilton, *Recent Changes in Industrial Location in Yugoslavia*, London University Ph.D. thesis, 1962.

South Serbia for economic as well as social reasons, and for social reasons in Macedonia, Montenegro and Kosmet-Metohija, the regions officially described as backward.

In old and new centres alike, the to-and-fro movement is very evident. Huddled forms with swaddled feet on the stations are the daily commuters, who travel up to 2 hours daily each way, to work in the factory from 6 a.m. to 2 p.m., and then return to work on the farm. When the journey home is too long, the bread-winning wife or child will carry food to the station where the commuter sleeps. A floating mass of temporary migrants from still remoter districts comes to work for two or three months in the towns, and then returns to the farms for the harvest, tired of factory discipline and having earned enough cash for the moment. About half the industrial labour force are estimated to be peasant-industrial workers of one kind or another.

So in these regions industrialization does to some extent absorb the surplus, including the part-time workers and the seasonal slack. Manpower is more fully employed and earnings have increased. Probably the poorer peasants are better off than they were, even though their conditions of work are exhausting.

Peasants in general would also have benefited from industrialization if the increase in the urban demand for food had raised prices and stimulated production. But communist policy has kept farm incomes down, by fixing low prices for compulsory delivery quotas, thus eliminating the price inducement to higher productivity. Some improvement in village living standards has come through industrialization, as for example rural electrification. But when a Polish planner explains that the peasants are now allowed to build again, as if this were an immense concession, one realises that even in Poland the peasants are still an oppressed class.

So far as collectivization is concerned, the arguments of the book have stood the test of time. Nothing was learnt from the Russian experience, except a more sophisticated strategy; the results were far less disastrous, because the process was

far less brutal. When the process started in 1948-49 (in Bulgaria in 1945), laws were passed to the effect that membership of the various forms of co-operative, set up to provide a framework for the transition to collective farming, should be voluntary; in practice, coercion was used.

Economic incentives were also used. Co-operative farmers were given higher prices, cheap or free credit, all supplies of new farm equipment, and were lightly taxed. At the same time, 'private' farmers were subjected to various penalties, such as lower prices, higher delivery quotas, higher taxes, while their savings were wiped out by currency conversions. These punitive measures reduced production, as shown in Table I above. By 1953 the whole region faced a food crisis, which forced a revision of the policy: prices were raised and quotas reduced; the pressures were relaxed and the process slowed down.

Jugoslavia tore into collectivization with characteristic élan and snapped out of it with equally characteristic decision after the catastrophic harvest of 1952, the lowest within living memory. Poland never went far, and tacitly gave it up after the October Revolution of 1956. In Hungary, after the rising in the same October, most of the co-operatives broke up; after the rising was crushed, the process was resumed. Collectivization is now complete in Bulgaria and all but complete in Hungary, Czechoslovakia and Rumania. The co-operative façade has now been abandoned; the statutes of the collective farms in Czechoslovakia and Bulgaria are now identical with those of the Russian kolkhoz.

Peasant attitudes are as hostile as they were in Russia, but more sophisticated. Czech farmers continue to cultivate well, as they always did, but express their hostility in the traditional Czech manner through a Schwejk conspiracy to keep targets low. Hungarian farmers also cultivate well, but the bulk of the meat and poultry supplies now comes from the tiny fraction of the land held in private plots—the same ridiculous misuse of land as in Russia. In Poland, according to an eminent economist, 'pressure on the peasants was sufficient to induce them to join the co-operatives, but not sufficient to induce them to increase production'. In practice, this meant

that the co-operative farmers earned higher incomes by re-selling their cheap fertilizers to the individual farmers at black market prices. Still, the peasants have suffered, as they were meant to do, since for them socialism is intended to be a punishment.

However, the industrial workers, for whom it is intended to be a reward, have suffered also. If farmers have had to pay the price of industrialization in shortage of consumer goods, townspeople have had to pay the price of collectivization in food shortage as well. Much capital has been invested in farm buildings and machinery which brings in no return in increased food supplies. Even in communist terms, the policy has been self-defeating, because scanty foreign exchange must be used to buy grain instead of capital equipment. No doubt when Russia abandons collective farming the satellites will thankfully follow suit.

In the meantime, the interesting question is how to organise agriculture after collectivization has failed. In Poland and Jugoslavia, the conflict between dogma and common sense presented a real dilemma, dragged out for years in dreary debate about 'the peasant', while production slowly recovered. In Jugoslavia the communist party at length found a compromise solution in 'the break-through on a narrow front', i.e. concentrating state investment in the fertile lands of the Voivodina, through state farms and a new type of co-operative, which provides farm equipment for its members and also tractor service, against payment. This is the policy adumbrated on pp. 137-8 of this book; as Table I above shows, it has been successful, though unfortunately the rapid rate of increase in 1957-60 has not been sustained.

In Poland, the problem has been tackled less vigorously. The Agricultural Circles grow slowly, owing to mistrust of their ultimate objective; they are a loose form of co-operative organization, financed from the proceeds of the difference between the prices paid to farmers and the market prices of farm produce; with these funds the circles buy tractors and other equipment for the use of their members. The old and genuine dairy co-operative societies have been revived. Compulsory delivery quotas are now fixed at only 30 per cent of

production; under a system of contracts, at favourable prices, produce is sold to state bacon, sugar-beet and oil seeds factories. The government is wisely undertaking land reclamation on a large scale. Poland has in fact, though not in theory, more or less reverted to a West European pattern of farm organization.

To-day the disparity in farm income levels between Eastern and Western Europe is greater than ever. For in Western Europe agricultural production has increased much faster, while the farm labour force has continued to decrease. Peasant farming, with no change in the structure of farm ownership, is now highly mechanized.<sup>1</sup> Now it is the Western European farm surpluses which cannot find markets. So superficially at least the conditions of 'Europe's farm problem' appear to have been reversed; but Europe as a whole is better fed by fewer people than it was in 1939, so that in reality there has been progress.

## II

Since the book has acquired broader connotations than it was originally intended to have, it seems necessary to use the opportunity of this introduction to explain how far I have found its arguments applicable in other contexts, and why they can be misinterpreted, as in one important respect they have been, if they are applied to under-developed countries in general.

The chief source of misinterpretation has been the idea of surplus population in agriculture, about which so much nonsense has since been written. This condition, though it was

<sup>1</sup> See UN/FAO: *European Agriculture, A Statement of Problems*, Geneva, 1954; Warriner, 'Changes in European Peasant Farming', *International Labour Review*, Geneva, 1957, and *Why Labour Leaves the Land*, I.L.O., Geneva, 1960.

real enough, can be seriously misleading if it is used as a key to the problems of under-development. Excessive manpower in agriculture is not a condition specific to under-developed countries. On the contrary, even in countries which are developing fast, with rapid movement of labour from agriculture into industry, pockets of surplus farm labour may persist, because the least efficient farmers are often the least mobile, for various reasons, such as age, poverty, small scale or remote situation, which prevent a change of occupation. But where such groups form only a small fraction of a relatively small agricultural population, as in the United States and in several West European countries, such differential mobility is not an obstacle to development, but a consequence of it: labour is redundant only in relation to a rising general standard of living and a rising level of productivity in agriculture, which these farmers cannot attain.

In the agrarian countries of Eastern Europe, by contrast, the existence of surplus labour on the land *was* a serious condition, because the level of productivity in agriculture was not rising, but tending to fall. The real problem, of which excessive manpower was only one aspect, was that agricultural production did not keep pace with the growth of agricultural (and total) population. Over-population meant that there were too many mouths, not merely too many hands; and the primary need was to make the hands more productive, in order to feed the mouths. Because this was the primary need, I estimated the numbers who did not have enough to eat (p. 88), before I guessed at the numbers who could not be employed by the development of agriculture (pp. 138-9). I attempted to gauge the scope for increasing agricultural production and employment, which was large, but not large enough to absorb all the surplus labour from the poorest regions. Thus the employment of the surplus was a residual problem, and not the starting point.

Unfortunately, economists and demographers have since made it their starting point, by concentrating on the labour aspect of over-population to the exclusion of the food aspect, and have busied themselves with elaborate calculations of the number of redundant bodies in agriculture, disregarding the

question of how these bodies were to be fed. One estimate calculated the size of the surplus in Eastern Europe in the existing pre-war conditions.<sup>1</sup> Another authority worked out the hypothetical surplus, on two different standards of labour requirements,<sup>2</sup> an exercise which certainly demonstrated under-employment among statisticians. Observation made me wary of such precise estimates; and reflection has reinforced this scepticism.

One of the difficulties in such calculations is that in any system of farming subject to much seasonal variation in labour requirements, it is difficult to isolate all-the-year-round redundancy from seasonal unemployment. It was particularly difficult to do so in the agrarian countries of Eastern Europe, where the seasonal variation was much greater than in Central and Western Europe, because livestock husbandry was backward and arable cultivation was extensive and one-sided. Any estimate of the size of the labour surplus which is made by relating manpower actually available to labour requirements in man-days (whether these are calculated for the country concerned, or on a standard derived from other countries) will inevitably exaggerate the size of the surplus, because such estimates take only total man-days into account, and not their timing, so that the seasonal variation is ignored. If, that is to say, the annual labour requirements of a farm are 270 man-days throughout the year, then one man can do the work, but if the man-days must be worked during three months of the year, then three men will be needed. Or to put it another way round, if all the workers are unemployed for half the year, it does not follow that half the workers are surplus, though some of them may be. The real surplus consists of those workers who are employed only for a short period in the peak season, and who could work throughout it, if they had larger farms, or could find work on other farms. Where the amount of land per worker in agriculture is very small, in such extensive systems, then there is a true surplus

<sup>1</sup> P. N. Rosenstein Rodan, in an unpublished memorandum for the Royal Institute of International Affairs.

<sup>2</sup> Professor Wilbert E. Moore, *Economic Demography of Eastern and South-Eastern Europe*, League of Nations, Geneva, 1945.

of workers who could leave agriculture without reducing production. It is for this reason that I used density of farm population as my main criterion, and referred to overpopulated *regions*. However, for practical purposes it is impossible to distinguish, in precise numbers, between the true surplus and the seasonal slack, because the length of the peak season is imprecise. My guesses at the proportion of the actual surplus (p. 68) and the numbers of the residual surplus (pp. 138-9) were deliberately rough, and were possibly too high, because I did not take the seasonal variation sufficiently into account.

Another difficulty in estimating the size of the surplus is that the labour force in agriculture is usually heterogeneous, and in this region was particularly so. Farmers differ in ability; workers differ in skill and strength, and in their part-time contributions to the work of the farm. If a large number of good farmers are expelled, as in the case of the Germans from the Czech borderlands, or from the Voivodina, agricultural production will fall, because good farmers are not easily replaced. If the same number of young men move to the towns from small farms in poor regions, it is probable that the older men and women can work harder, and maintain the low level of production, so that in this case the surplus is reduced. In family farming (which in this region offered fuller employment than large estates, cf. pp. 148-50) it is always difficult to assess the contribution made by part-time women workers, and the extent to which they could take on fuller employment. Though women worked hard on the land in the agrarian countries, as several of the illustrations show, they could not, as a rule, take over the whole of the work of the farm, as the effects of wartime mobilization proved. From the concrete examples in the text, the reader will note that it was easy to observe *symptoms* of labour redundancy, such as waste of labour on poor land (pp. 136-7) or an inordinately large number of workers on a group of small farms (pp. 130-1), and yet difficult to *identify* the surplus workers. But the fact that the surplus was not precisely measurable does not mean that it did not exist, only that rough guesses are more honest than precise figures.

The post-war experience in Eastern Europe has shown that the surplus was certainly large. How otherwise account for the fact that in Poland in 1957 the pre-war grain output was produced by an agricultural population of 11 million, instead of the pre-war 19 million? Apart from a low degree of mechanization, there have been no changes in methods of farming or capital inputs which would explain such a great increase in output per head of agricultural population (there are unfortunately no comparable figures for active agricultural population). As to Yugoslavia, the change is less striking, but there too production recovered by 1957 to the pre-war level with a smaller labour force and very little capital input (though the recent rapid increase in production is due to new capital investment). Why then labour the point that precise calculations of the size of the surplus are not possible? They drew attention to a serious condition, a type of disequilibrium which economists had hitherto ignored.

The real objection to calculations of this kind is not merely that they cannot be precise; it is that they tend, by their apparent precision, to convey the impression that the surplus of labour is an absolute magnitude, i.e. a definite number of workers who cannot be employed in agriculture in any conditions. But all estimates of agricultural surplus population are of course relative to given conditions; the type of farming, technical methods and agrarian structure must be assumed to be fixed. In a short period this assumption is legitimate, but in a longer period it is unrealistic, because agricultural policy can quickly induce changes which increase employment (such as the encouragement of intensive crops and livestock production, or the development of irrigation), as well as changes which decrease it. Yet in discussion, as so often happens, the basis of the estimate tends to be forgotten, and the assumption of 'given conditions' tacitly translates itself into a belief that agricultural employment cannot be increased. From the apparently hard fact that there are, say, one million surplus workers on the land, it may then be inferred that there are one million workers who can be employed *only* in industry. Economists then proceed to draw up development plans based on the rate of industrialization needed to absorb this number.