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PROCEEDINGS OF THE  
TWELFTH  
INTERNATIONAL CONFERENCE  
OF  
AGRICULTURAL ECONOMISTS

HELD AT THE  
PALAIS DES CONGRÈS  
LYON, FRANCE  
24 AUGUST-3 SEPTEMBER 1965

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Disparities in the Pace and  
Form of Agricultural  
and Rural Development

LONDON  
OXFORD UNIVERSITY PRESS  
NEW YORK TORONTO  
1966

# THE FUTURE OF PART-TIME FARMING

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## *The Concept of Part-time Farming*

THERE could be considered three types of part-time farmers:

- (1) Those who are a result of the historical process of disintegration of the peasant or farmer.
- (2) Those from the opposite side, deriving from a process of movement 'back to the land'.
- (3) The individually owned plots and cattle of the socialist collective farms.

I shall deal mainly with the first type since it is a mass phenomenon; the second group is far smaller and I do not consider that the third comes within the terms of reference of my paper.

Part-time farming is defined as a regular twofold occupation of the head of the family who may, on the one hand, be working permanently in non-agricultural industries either as an employee or as an independent craftsman, merchant, or member of a profession, and on the other, in agriculture on a holding not large enough to afford a full-time occupation. Sometimes these holdings are cultivated only by the dependents of the head of the family. Some authorities<sup>1</sup> restrict 'part-time farming' to cases where only the head of the family, as owner, has a twofold occupation (*ouvrier-paysan*). There are instances and regions where an opposite division of work within the family—the man in agriculture, the wife in non-agriculture—is also considered to be part-time farming. A holding affording full occupation to the owner and his wife while one or more children work elsewhere (and sooner or later leave the home) is generally not counted as a part-time holding. Nevertheless, many authors and statistical sources, as in the U.S.A.<sup>2</sup> and in Japan, do not distinguish which member of the family works on the farm and which away from it, if the family lives on a twofold income, and classify all such holdings as part-time farms.

<sup>1</sup> e.g. R. Rubatel, *Contribution à l'étude des ouvriers-paysans en Suisse. Résultats d'une enquête*. Brougg 1959. Publications du Secrétariat des Paysans suisses.

<sup>2</sup> In U.S.A. the objective criterion is the amount of annual sales for a part-time and residential farm (below \$2,500, but more than \$250 a year, in some publications, as those of the Department for Agriculture, whilst elsewhere the upper limit is \$2,000).

Our concept, however, does not include the age-old occupation of farmers and their families in winter with crafts and home and cottage industries. The same is true of workers who possess some small cottage property and work either permanently or occasionally on larger holdings. A border-line case is the seasonal work of small cottagers in forestry and construction. These people with twofold occupations are called by different names which sometimes refer to somewhat different economic and social situations and do not always exactly fit our concept. The classical Marxian literature uses the term 'semi-proletarians', no matter whether a capitalist or a socialist country is in question, and sometimes regardless of how the income of these strata and their situations may be in contradiction with the word 'proletarians'. They are referred to in traditional popular language as half-peasants or semi-farmers. In the literature of French-speaking countries and regions we find the name *ouvriers-paysans*, which for the purpose of this paper would be theoretically the best definition expressing the historical process of rural disintegration. Unfortunately, the available data in almost all countries do not follow a corresponding classification. In Anglo-Saxon literature the term part-time farmers is used placing, at least formally, the emphasis on agriculture, whilst Germans actually use the term *der landwirtschaftliche Nebenerwerbsbetrieb* (the agricultural accessorial holding), placing the emphasis very clearly on non-agricultural occupation as a main source of income. In this way neither term confines the non-agricultural occupation to the *salariat* alone.

The difference in terms coincides with differences and nuances in the historical stage, regional (geographical) location and socio-economic structure of this population, ranging from the type of migratorial and beggar-like search of half-ruined small farmers and cottagers for temporary occasional and seasonal jobs through a regular and relatively stabilized twofold occupation on a higher level of technique and income in both branches. A uniform concept for the entire world would hardly be workable.

In addition, in countries with some developed industrial regions and a strong labour movement, the dual process of reducing the working day from ten to eight or seven hours (or reducing the working week to 40 hours or less) and spreading industry over the country in search of cheap, immobilized labour with its own housing and some subsistence from the land, is accompanied by a simultaneous development of small-scale agricultural mechanization and modern transport and communications. This in turn makes a regular twofold occupation—both outside agriculture and on the reduced acreage of

the old agricultural holdings—possible and even profitable for the threatened small farmer. The emphasis at first is usually placed on agriculture and later on non-agriculture, but in both cases a much higher total income is obtained than from one of these occupations alone. While a marginal full-time farmer possesses a holding, which may be too big to combine intensive husbandry with a non-agricultural occupation, a holding of less than full-time acreage does not tie the occupier to the field for a whole day and he can find time for another supplementary regular occupation outside agriculture. Thus he achieves a better income than a marginal full-time farmer. The borderline between a full-timer and a part-timer in agriculture is very elastic, varying not only by country and region, soil and seed, but also by method of cultivation, transportation, and marketing conditions, the individual farmer and, last but not least, by governmental support and taxation policy. The delimitation becomes more and more difficult since nowadays even the full-timers, or members of their families, obtain all kinds of relatively small, more-or-less temporary, non-agricultural earnings. These earnings are far less significant than the non-agricultural income of part-time farmers and the emphasis is never placed on non-agricultural occupation.

As yet economic theory and sociology have not dealt systematically and fully with these population strata, or have limited themselves to some smaller and marginal observations. Only recently some economic institutes, particularly in the United States of America<sup>1</sup> (mainly since 1950, though in some instances from the thirties) and in Germany<sup>2</sup> (mainly in the last five to six years) have made closer and systematic analytical research in this, as they say, generally neglected sphere.<sup>3</sup> They made it, however, mainly on a limited regional basis, by counties or states. The reason for the long neglect is not simple omission. The general opinion of economists was, and is, that part-time farming is a temporary, transitional phenomenon accompanying the passage from agriculture into industry in a developing country,

<sup>1</sup> In co-operation with the Agricultural Experiment Stations and the U.S. Department of Agriculture, as for instance in Tennessee (authors G. V. Douglas and A. B. Mackie), Texas (J. R. Martin and J. H. Southern), Kentucky (E. Galloway), North Carolina (C. R. Pugh and C. E. Bishop), Ohio (H. A. Wayt, H. R. Moore, and C. H. Hillman), and numerous individual authors such as F. B. Sauders, Glen V. Fugguitt, G. D. Donohue *e.s.f.*

<sup>2</sup> Mainly O. E. Heuser, F. Kuhnen, F. Rieman, H. Röhm, M. Rolfes, Th. Schaper. A series of short treatises by various authors is published in the *Schriftenreihe für ländliche Sozialfragen der Agrarsozialen Gesellschaft* in Göttingen.

<sup>3</sup> From other countries I may quote: R. Rubatel, H. Franck, A. Hauser, H. Weiss, from Switzerland; Yves le Baile from France; Fr. W. Simon from Holland; R. Bryk from Poland and a number of articles in *Wież współczesna* and in *Zagadnienia ekonomiki rolnej*; S. Komar from Yugoslavia; V. Venzer (in *Voprosy ekonomiki*, Moscow, 1962).

in other words, accompanying the process of a slow and automatic industrialization. In such circumstances, part-time farming is considered not worthy of such attention as is paid to typical and classical socio-economic strata; it is not considered to play any decisive role either in production or in consumption or in the distribution of the national income. At the end of the transitional period it is generally assumed that part-time farms may disappear or drop to a negligible proportion.

A closer analysis and an historical survey shows, however, that the story is more complex. The proportion, the size, the duration and the economic potential of these strata are largely underestimated, and their role in development bypassed or ignored. Furthermore, they appear not only in developing capitalist countries but also in a number of socialist countries, where they play a considerable role and create their specific problems. We shall now look into this matter as it appears in the European and North-American continents and in Japan. The lack of reliable or authentic information makes it impossible for this survey to cover other regions where specific research may be needed. The situation there seems to be more complex since in some countries part-time occupation in agriculture is linked with absentee ownership with various feudalistic features.

#### *Statistical Information on the Number of Part-time Farmers*

The easiest way to deal with the information is in relation to holdings for which we have the best data. However, for our special purpose, from the point of view of economic development and economic policy, it may be better to consider these units from the point of view of households with double incomes and of populations with double occupations with all their implications for productivity, income, and markets. The relevant information can be gathered only from special surveys and special studies, which are very few.

Because of the undefinable, varying situations and statistical shortcomings, and because of the differences in evolution, in concept and in definitions, the number of part-time farmers cannot be reliably and uniformly established. The statistics cannot help us with an exact and clear picture of the proportions of these strata. The traditional official population censuses and surveys normally do not deal with mixed transitional, intermediate social groups, and part-time farmers appear in them either as farmers or non-farmers. Only in a few countries does statistical information give some additional data on mixed occupations, and even this, generally, only agricultural and non-agricultural. In most countries we can only guess from the census of

agriculture that a number of farmers of agricultural holdings below a certain acreage live either on additional temporary work on larger holdings without permanent working relations or are more or less permanently and primarily engaged in urban occupations. Some statistical data make it possible to find only the proportion of non-agricultural earnings in total farm households, rarely cross-tabulated according to size of farm.

Let us now turn to a few countries which in their agricultural censuses offer more concrete statistical information for our purposes, though not with entirely uniform concepts.

In the Federal Republic of Germany almost one third of all agricultural holdings, about 650,000 out of 1,700,000 in 1960, belong to the category of the *landwirtschaftlicher Nebenerwerbsbetrieb*. Only holdings from 0.5 to 2 ha. are included, with some holdings of from 2 to 5 ha. whilst holdings from 0.05 to 0.5 ha. are excluded. On the average, the upper limit is 2 or 3 ha. but most of these holdings range from 0.5 to 1 ha. Their strength in numbers does not correspond to their share in the total agricultural area of 21,369,600 ha. The first group possesses only 549,200 ha. and the entire group of 2-5 ha. (including full-timers) possess 1,314,900 ha; holdings from 0.5-5 ha. together amount only to 1,864,100 ha. It is worth while saying in this connexion that one half of industrial workers live in the country. A trend is noted that marginal full-timers are passing into part-timers; and part-timers are becoming workers with small gardens. The majority of part-time farmers produce for self-consumption, rather than for the market. Their second or main occupation is, for two-thirds of the cases as workers and employees, mainly in metallurgic plants, construction, wood-industry, paper mills, and transport, whilst one-third are independent.

Their number is relatively smaller in the U.S.A. A part-time farmer there is considered to be a person whose annual sales amount to from \$250 to either \$1,199 or \$2,499; the holder works more than 100 days a year outside the farm or receives more than half of his annual income from outside; the Department of Agriculture also considers as part-time farming a situation where members of the household earn outside the farm an amount of money higher than the income of the farm itself. The number of part-time farms amounted in 1950 to 639,000 (11.9 per cent. of holdings) and in 1954 to 574,000 (12 per cent.) or, together with residential farms, in 1950, 31.0 per cent. and in 1954, 30.4 per cent. of holdings. The number of both types has increased steadily since 1929, with the number of commercial farms decreasing (with progressing concentration and increase in the

average size) from 4,723,000 in 1929 to 3,100,000 in 1954. The share of part-time farms in the total area and total production of the country is quite as negligible as in Germany. However, there may be some regions where they are relatively stronger. In some Southern States 20 to 40 per cent. of all farm families are part-time farmers, and in the typical part-time farm counties even 90 to 95 per cent., whereas the acreage of one such farm may reach even 165 acres on the average in some counties. One study from Texas, compiled in 1961,<sup>1</sup> shows that part-time farmers possess 40 per cent. of all farm and land resources, and marketed 28 per cent. of all farm products sold (in terms of value), but received only 16 per cent. of the net money return from farming in the area. Their land is often cultivated by tenants and agricultural workers who sometimes possess small plots of land and need additional employment. Commercial production prevails. Their non-agricultural occupations are very diverse: craftsman (miller, tanner, hatter, carpenter, blacksmith), employee, teacher, physician, lawyer, even minister.<sup>2</sup>

The regional distribution of part-time farmers in both these countries is highly illuminating. In Germany, though they are more or less spread all over the country, they are dense in the less industrialized south, whilst in the central north and north, the artificially created post-war settlements around cities prevail. The percentage of part-time holdings in the hilly areas of the south-west amounts to 40 or 50 per cent. of all agricultural holdings and that of the marginal full-timers to 35 or 40 per cent. In the United States part-time holdings are most densely distributed in the belt from southern Michigan and south-western New York State through to the eastern part of Texas, covering in this way west Pennsylvania, both west Carolinas, Virginia, Kentucky, Tennessee, Missouri, Alabama, Oklahoma, and Arkansas whence the centre of grain production has been moving in the last hundred years steadily towards the West.

In Switzerland<sup>3</sup> it is believed that at least 42 per cent. of all agricultural holdings represent part-time farms, counting as such only the twofold occupation of the owner himself; the size of the farm varies from 1 to 4 ha. Below 1 ha. a holding is not considered agricultural but amateur. There is a strong trend among part-time farmers to leave agriculture wherever possible.

<sup>1</sup> J. R. Martin and J. H. Southern, *Part-time Farming in North-East Texas*, Bulletin 970 of Jan. 1961 of the Agricultural and Mechanical College of Texas, Texas Agricultural Experiment Station, in co-operation with the U.S. Department of Agriculture.

<sup>2</sup> G. V. Douglas and A. B. Mackie, *Some Social and Economic Implications of Part-time Farming*, Report no. T 57-1AE, T.V.A. Division of Agricultural Relations, Agricultural Economics Branch, Knoxville, Tenn., June 1957.

<sup>3</sup> e.g. R. Rubatel, op. cit.



For Scandinavia<sup>1</sup> I may quote some information from Denmark: On 0.55 to 3 ha. holdings, work outside was found by 21.7 per cent. in 1950-1, whereas ten years later 22.3 per cent. of the farmers had some outside work; the corresponding figures on 3 to 5 ha. farms are 14.3 per cent., and 18.4 per cent. The number of part-timers is thus increasing slightly. The number of working days outside farms amounted in 1959-60 in the first group to 225 and in the second to 174.

In Japan<sup>2</sup> the definition of part-time households embraces the engagement of either the householder or of any of his family in any kind of occupation other than agriculture. In the years 1950, 1955, and 1960, of the total farm households the number of part-timers was 50.0 per cent., 65.2 per cent., and 65.7 per cent. A little less than half of the latter were employed chiefly in non-agricultural occupations and increasing in number (21.6 per cent., 27.5 per cent., and 32.3 per cent.), against the greater part of them, employed chiefly in agriculture (28.4 per cent., 37.6 per cent., 33.6 per cent.). This high and increasing proportion of mixed occupations is due partly to the low limit in land reform and partly to the Asiatic identification of the holdings with the family; each family member, no matter where occupied, is tied to the holding. The engagement of part-timers in commercial production is considerable. Among 3,798,000 part-time farm households more than 208,000 are in the highest income group of holdings selling more than \$833.3 a year (against the total number of 679,000 full-timers in this group), and 872,710 have reached sales of \$277 to \$833 a year (against the corresponding number 924,772 of full-time farmers).

Unfortunately, we cannot present here reliable data on other more-or-less developed European and Latin American countries. The information about Italy seems to be conflicting and unclear; there are supposed to be no part-time farmers in the less developed south, but they exist in the developed north-west because of better communications and widespread industrialization. We can, however, present information about two central European countries where socialist economic conditions are established: Poland and Yugoslavia. Here there is indirect information available about the size and economic strength of their 'semi-proletarians' or 'half-peasants'. In Poland 'one quarter of the farmers are earning half or more of their incomes from non-farm occupations, and possibly another quarter are earning between a quarter and a

<sup>1</sup> Publications of the Danish Statistical Department.

<sup>2</sup> *The 1960 Census of Agriculture and Forestry in Japan*, Tokyo.

half'.<sup>1</sup> That means that about 50 per cent. of farm holdings are either peasant workers or near-peasant workers and are earning a considerable part of their total income outside agriculture. The analysis of some characteristics of the Yugoslav population census of 1961 shows that, of the total families, one-fifth live on mixed agricultural-non-agricultural earnings, and of all agricultural (individual, private) holdings about 40 per cent. live on mixed incomes. Furthermore, in the more fully developed regions of the country, every fourth, and in less-developed regions every second family of the total population has some income from land, no matter how small.<sup>2</sup> There are entire districts and communes where more than one-half of the holdings are operated by part-time farmers or *ouvriers-paysans*, and up to two-thirds of workers there possess smaller or larger plots of land for part-time cultivation. Their share in the total local areas may be much larger than in the case of the Federal Republic of Germany. According to the latest research, a considerable proportion of them are commercial producers.

Of the other Continents I may only mention that in several African countries, as, for instance, Nigeria and both Congos, the mixed agricultural and non-agricultural households are very widespread, amounting sometimes to 20 per cent. or more of rural households and to one-half or more of town workers in suburban areas where the man works in the enterprise and the woman cultivates the field.

Thus, in one way or another, from direct or combined sources, we arrive at the conclusion that both in developing and in highly industrialized countries there are considerable population strata of mixed agricultural-non-agricultural occupation. The statistical sources give some global information about their numerical strength. We possess much less information about their relative production and productivity, about their role as producers, suppliers of labour, and consumers, and their potential as a market.

### *Their Productivity*

There is a widespread opinion, mainly in socialist countries, where the point is raised and discussed almost solely from this angle, that these people are among the worst agriculturalists and the worst industrial workers. This opinion is primarily based on *a priori* reasoning that a long cumulative working day cannot but imply a low labour intensity, poor attention, and lack of concentration on work owing

<sup>1</sup> From a F.A.O. Report to the Government of Poland.

<sup>2</sup> S. Krašovec, *Metodološki problemi utvrđivanja broja radnika-seljaka iz naše statičke gradje*. A report to the meeting of the Yugoslav Statistical Association in Zagreb, Feb. 1963.

to exhaustion and general tiredness, mainly in the last hours of the day. A further negative factor may be the lack of interest in an increase in either agricultural or industrial productivity since the aggregate income practically equals or even surpasses the average income of other people. Some surveys carried out in the countries mentioned above confirm to a great extent these widespread impressions and apprehensions. They should, however, not be generalized. First, the owner may have a large family with sufficient surplus manpower for his land. Secondly, modern mechanization and transport, provided the country enjoys a short working day or week, reduce the physical exhaustion to a minimum, changing it in the case of 'holiday' farming even to relaxation and recreation. This is mainly true of specialized part-time farms without cattle, for whom in developed countries there is a great deal of easily accessible instruction, literature, and extension services, directed to small scale production, as well as relatively cheap modern small machines (electric or gasoline driven) which substantially alleviate toil.

However, this speaks only of physical intensity, not of productivity. Some research does indeed confirm the criticism about productivity in agriculture as it applies to Europe. In Western Europe, the majority of part-time farms (we do not think here of those artificially created in Germany) are orientated towards autarchic self-consumption or partial subsistence, regardless of real costs, as it appears essential to escape monetary expenses for food or to save at least the marketing and transportation part in the price of food. Therefore, for these farmers high economic efficiency and competitive costs of agricultural production alone are for them not essential nor a problem, nor a goal.<sup>1</sup> Sometimes, as is experienced mainly in some socialist countries, they are even discouraged by the taxation system and government policies from any increase in productivity and from commercial production. Accordingly, they do not worry much about the adequacy of soil, climate, and market conditions, and are more-or-less everywhere of the same type of mainly subsistence production; differences between them may be related only to their acreage. The situation can vary according to the type of available industry; timber, construction, processing, &c., can be more favourably combined with the seasonal character of agricultural work than industries with stabilized employment; also the situation may vary as local reasons for taking additional non-agricultural employment vary, e.g. whether part-time

<sup>1</sup> Dr. Th. Schaper, 'Nebenerwerbssiedlung heute', published in the *Schriftenreihe*, &c. No. 29, p. 65 ff.; Zöllner, 'Größe und Verteilung des landwirtschaftlichen Nebenerwerbsbetriebs', published in *Raumforschung und Raumordnung*, 1955, pp. 203-9.

farming is mainly desired as a source of money or as an alleviation in subsistence.<sup>1</sup>

However, the smaller the acreage, the more intensive is the cultivation: without cattle, limited to potatoes, vegetables, bread grains, and with increasing concentration on horticulture. Draft power is their greatest problem. If the man wants to acquire draft cattle, he must have, in order to produce food for himself on 1 ha., an additional 1.50 ha. for feeding the cattle (according to European standards).<sup>2</sup> It is better for him to be equipped with small machines and to remain within 0.5 to 1 ha. or, according to Dr. Röhm, 0.5 to 1.5 ha. This circumstance encourages people to invest in motorization and mechanization, in most cases thanks to savings from non-agricultural income. So the situation has developed to a point where part-timers in some countries, as in Germany, are often better equipped than the marginal full-time peasantry. However, their mechanical efficiency is lower than that of large-scale farms, as is confirmed both in German and U.S. research.<sup>3</sup> Only recently has more small machinery for very small holdings become available. This loss in efficiency is more than offset again by the gain in non-agricultural work—no matter at how low a wage rate.

As I have indicated, cattle appear on acreages above 1.30 ha. requiring not only more land because of feed but also more care. Therefore, other intensive cultures must be reduced because of lack of time and manpower. There are also commercial and semi-commercial part-time farms, but mainly in more developed regions and with more advanced populations. This is specifically so in the U.S.A. with tobacco, fruit, and vegetables, which require good marketing conditions. In the U.S.A. also the acreage is much larger, in some instances 90 acres on the average, increasing even to 150 and more, with investment in land, cattle, and machinery ranging from \$10,000 to \$20,000, in distances of 5 to 15, often 20, and even up to 50 miles from the non-agricultural employment.<sup>4</sup>

We cannot endorse the opinion that the part-time farmer is always below the marginal demand of the market and that he produces for the market only by underselling. An advanced part-time farmer may devote himself to special cultures. He sometimes invests more than a marginal full-timer (part of his non-agricultural income), and can take more risks, relying on non-farm income. He may find time to

<sup>1</sup> Zöllner, op. cit.

<sup>2</sup> F. Kuhnen, *Der Charakter des landwirtschaftlichen Nebenerwerbsbetriebs in Württemberg-Baden, 1953*; Th. Schaper, op cit.

<sup>3</sup> Martin and Southern, op. cit.

<sup>4</sup> Ibid.

study and to improve his qualification, whilst the full-time farmer in his full-day field work has neither the time nor the means to increase his agricultural knowledge, or to acquire qualified non-agricultural work; so he cannot as easily increase his savings for capital accumulation. In so far as he works at all outside agriculture he takes the cheapest non-agricultural seasonal or occasional work.<sup>1</sup> However, in spite of these advantages in relation to marginal full-timers, it can hardly be said that a part-time farmer is competitive with large-scale and modernized agricultural production even at retail selling prices.

The complaints about poor intensity of part-timers' work in non-agricultural industries may have some foundation. The stimulation of efficiency by differential wages cannot always help. In countries with a high level of social insurances but a low level of industrial wages, many small peasants or half-peasants or family-aids work in industry only in order to be entitled to social benefits, such as health insurance, child allowances, old-age pensions and, in some socialist countries, cheaper consumer goods, paid vacations, &c. No premium for better production can match the combined social benefits and additional income from the work in the field; therefore the man may be satisfied with the lowest wage of non-skilled work. In spite of all this, however, it may be incorrect to say that the part-time farmer is, as a rule, a worse worker in industry or, on the other hand, that his work in factories, which employ mainly part-time farmers or their family members shows that the intensity and attendance is today quite normal—given modern working conditions.<sup>2</sup> Interviews which I had with managers employing part-time farmers in the United States of America convinced me that the work of part-time farmers in factories does not differ in intensity and quality from that of the remaining workers. Interviews carried out by a group of research workers, including myself, in developed regions of socialist Yugoslavia found that only in some instances were workers from farms generally accused of frequent or seasonal absences, or lack of interest, whilst in some local branches of industries such as mining, iron and steel plants, and even some textile plants, the *ouvriers-paysans* were

<sup>1</sup> Helmut Scholz, *Untersuchung zum Problem der landwirtschaftlichen Grenzbetriebe*, Bonn, 1957.

<sup>2</sup> Douglas and Mackie, op. cit. Here the efficiency of the part-time farmer in non-agricultural jobs is considered to be the same as that of other workers, if not even higher; if, however, it is lower, then the reduction of wages is greater than for other workers. See for Germany: Wagener, Diehl, Thorm, *Verbreitung, Situation und Bedeutung der landbesitz. Industriearbeiter im Einflußbereich verschiedenartiger Industrien*. Published by the Institut für Agrarpolitik und Sozialökonomik des Landbaus (Professor Dr. O. Schiller) and the Institut für Wirtschaftslehre des Landbaus (Professor Dr. Baur) of the Agricultural Hochschule in Stuttgart-Hohenheim, 1959.

considered better manpower, stronger physically and possessing greater resistance, with higher standards of work and greater discipline than the urban workers—particularly the youngsters. In short the peasants were often considered the only manpower on which the management could rely for stability and the recruitment of labour among the rising generation.

*Income and Purchasing Power of Part-time Farmers*

The next point is one of substantial importance for developing countries but it is normally neglected. This is the purchasing power of this class as a factor in demand. Little research on the national (macro-economic) level has been done on this, except perhaps in Japan and published mostly only in Japanese, and we can more or less only guess about the aggregate income of the individual and the total income of the whole stratum.

The classical view maintains that these people are among the poorest, with a harder life and very low standard of living. This may have been true in the past, and even nowadays in some circumstances of great backwardness, high agrarian overpopulation pressing for rural exodus, little and poorly equipped industry in distant towns, large proportions of home industry, low national productivity of labour, long working days—legally or illegally—or poor labour movements and legislation. In the history of capitalist development we remember on the one hand the opposition of the industrial workers to the under-selling of manpower on the part of peasants, and on the other hand the tendency of many industries to settle down in the country, because of cheaper manpower, consisting of workers for the most part tied to their plots of land. The trade unions mobilized strong resistance against this kind of exploitation, and their struggle for higher wages induced industry to make greater use of labour-saving devices and to encourage technical progress. On the other hand, the fact remains that in the past century this cheap village manpower enabled many industries to start. Even today in a number of newly established independent states and in many economically under-developed socialist countries—operating on a combined planning and market basis—a large proportion of industries can exist and compete thanks only to this extensive semi-peasant manpower, which works below the normal pay or is the only manpower which can live on a very low level of legally established minimum wages. A shortage of manpower does not change this situation.

Under the above-mentioned conditions of full employment, of the short working day in industry, of widespread general education,

modern transport and well-developed, cheap, small-scale mechanization in agriculture, the two occupations together give a combined income which is much higher than that of a marginal full-time farmer in the smallest acreage group. When many members of the family also work the income obtained is considerably higher than the local income of an average qualified worker. The part-time farmer lives better and has a higher aggregate income, though his income per ha. in agriculture is relatively low, as too is his salary from non-agricultural work. This high aggregate income, under modern technological and social conditions, with a number of savings, such as in expenditure on housing, vegetables, poultry, &c., which otherwise constitute 60 to 70 per cent. of a worker's family budget, makes these strata relatively stable, and almost permanent—at least in their aggregate number, if not individually—in many regions on the way to economic development, and under certain circumstances even in some developed countries.

This is largely confirmed by both German and U.S. research as well as by research in some socialist countries. While a German full-time farmer receives on the average 1,022 marks from non-agricultural sources (including social allowances, pensions, &c.), a marginal farmer 1,220 marks (while his agricultural income averages 4,000 marks), a part-time farmer receives 5,600 marks.<sup>1</sup> Though the level of wages of a peasant worker is lower, it still means more than he receives in agriculture. The higher his education the higher is his non-agricultural income. A U.S. study from Texas estimates \$0.39 per hour on farm and \$1.39 per hour on non-farm work.<sup>2</sup> However, the total income, in the opinion of both U.S. and German and some other occasional researchers, is definitely higher on the part-time farm than on the marginal full-time farm, and also higher than the income of a pure industrial worker and employee.<sup>3</sup>

A similar situation is found in developing socialist countries. In Poland, part-time farming became widespread after 1945 owing to a great lack of manpower, in contrast to pre-war unemployment. The income of a part-time farmer on up to 3 ha. is higher from non-

<sup>1</sup> Scholz, op. cit.

<sup>2</sup> Martin and Southern, op. cit.

<sup>3</sup> H. Priebe, *Die Arbeitskräfte und Sozialprobleme der westdeutschen Landwirtschaft im Hinblick auf die Bildung einer europäischen Agrargemeinschaft*. Bonn 1953. Scholz, op. cit., pp. 5 and 8 F. Kuhnert, 'Die landwirtschaftlich-industrielle Einkommen-Verflechtung,' published in *Agrarwirtschaft*, 1955. For the U.S.A. see Martin and Southern, op. cit., and Douglas and Mackie, op. cit. For Tennessee it is admitted in the study that the total income of the part-time farmer is in some instances higher than that of the full-timer, and in many farms not lower than that of the full-timer; in Texas, according to the study, the total income of the part-time farmer is found to be substantially above those of other farm families.

agricultural sources than from agriculture, but even in full farms of 7-14 ha. a considerable part (between a quarter and a third) of income is derived from non-agricultural sources. Thanks to his non-agricultural income, a part-time farmer lives better than a peasant farmer; the former consumes twice as much meat, less flour, less potatoes, more butter and cream, more bacon, fruit and vegetables, milk and rolls, buys more and is closer to a city standard of consumption than a full-time farmer.<sup>1</sup> This may be equally true in other areas, for example, in the more fully developed parts of Yugoslavia. A survey of a region of former vineyard workers, classically the poorest section of agricultural labour, who have benefited from a land reform with small plots of land and vineyards, showed an obvious rise in the living standard with electrification, radio sets, bicycles, better tools, and the disappearance of alcoholism and crime. Particularly the part-time farmers around cities and industrial settlements with good round-city transport, who make some profit out of differential land rent, are, indeed, the wealthiest part of the working population, but also keen and hard workers. They constitute a good and reliable market for less essential goods, even for semi-luxury goods. They are among the most regular weekend customers of inns and restaurants, pastry shops, &c. However, not feeling their position to be very stable, they do not invest much in pure agriculture. The situation in Eastern Germany and some other socialist countries is likely to be similar.

These considerations bring us to a further point, which is largely forgotten or underestimated—the national-economic implications of this increased *per caput* income when the population total contains a large proportion of this group, such as up to half the agricultural holdings or from a quarter to a third of the total population. The income of the family is particularly high when young people are employed in shops and town services easily reached by modern transportation, though individually they receive minimum wages. A large increase of total farm income means a considerable increase in the buying power of the region. Without many new homes, and even in an industry with a high degree of instability of employment, the population obtains industrial skills and urban psychology. By and large it abandons the peasant way of life, and receives a higher income. Since housing and food are self-supplied, a considerable part of the total income can be devoted to industrial consumer goods and savings. In contrast with marginal full-time farmers, who are

<sup>1</sup> Ryszard Bryk, *Ekonomiczno-społeczna sytuacja chłopów-robotników w rejonie śródkowozachodnim. Zeszyty naukowe Szkoły Głównej Planowania i Statystyki*, Warszawa 1959, zeszyt XII.



very negligible buyers and who remain largely subsistence producers, and in contrast with urban workers and employees who, in so far as their salary levels are low, spend the greater part of their incomes on food and housing, these strata may become the largest consumers of industrial goods above the most urgent necessities of life. If they were excluded by administrative measures either from industry or from agriculture the market would drop considerably.

*Their Present and Future Weight in Economic Development*

This twofold occupation was generally considered a 'predominantly low-income occupation, resulting . . . from an association between two low-income occupations: low-income agriculture and low-income industry. Each developed country has passed in one or other way through this stage, which is nothing new in history. It is said that "in colonial times . . . nearly every American was half-agriculturist and half non-agriculturist".<sup>1</sup> The same is true of the transitional stage in the central European region. In south-east Europe and in the Danubian countries a large number of industries could not have been established and could not live even now without counting on low-paid workers who receive the other part of their income from small plots of land. Particularly in a rapidly developing country they are an unavoidable phenomenon which alleviates the burden of development. This is true not only of the present post-war period but to a great extent also of any rapid development in the past, as it was a hundred years ago in Germany or in the U.S.A. If the country is capitalistic, peasant workers are under certain circumstances bitterly attacked by labour unions for their underselling of labour and for not participating in the class struggle and strikes, &c. Sometimes, on the other hand, in some European countries as, for example in post-war France, they are attacked by farmers' unions for underselling farm products and creating unfair competition. In modern socialist countries with less fully developed industries they are accused of keeping a large total of land under primitive cultivation and sometimes uncultivated and, further, of unnecessarily increasing the number of workers in factories, on account of the poor quality of their work and lack of discipline. But in spite of all discussions, objections, and measures against them, they have survived both in capitalist and socialist, less-developed countries, and continue to exist as a population stratum and as a labour force. In Yugoslavia where the official policy does not favour them, increasingly

<sup>1</sup> Douglas and Mackie, op. cit.

numerous and strong views have been expressed recently to the effect that government policy should do everything to alleviate the economic situation of these people, by means of tax exemptions for agriculture, &c., since they are the working population, and their institution as peasant-workers is the most realistic temporary solution for many difficulties accompanying the process of further industrialization, such as inflationary prices with lower real wages. They are partly free from expenses for food and housing, and they ease balance of payment problems by reducing the need for food imports or foreign aid.

Experience shows that in a rapidly developing country with low productivity and low-income levels both in agriculture and industry the existence of these strata of the population in increasing proportions is an unavoidable economic phenomenon, no matter whether we like it or not, whether we suppress it or encourage it. This double occupation, which incidentally helps to save a large part of the very high costs of urbanization, makes the take-off easier, and the capital accumulation and the building of industries less painful and heavy for a great number of working masses. It helps them to survive the shortcomings of development more easily, and contributes substantially to increasing the demand for products of growing industries. Because of low wages paid by a not very competitive industry and an inefficient agriculture, the market of pure industrial workers does not suffice. Such a situation may continue until industry and agriculture, protected or not, reach the average level of world productivity and afford sufficient income to allow a fair standard of living from a single occupation, while the concentration and modernization of agricultural holdings renders food production cheaper and a supply from the market more convenient. Then the existence of these mixed strata is no longer economically justified, and they tend to disappear. The actual trend in Switzerland described so dramatically by Mr. Rubattel is the best confirmation for that. I fully agree with what our colleague Professor Rolfes from Germany has said about the reason for this at the end of his brilliant and concise lecture on the development of agricultural accessorial holdings.<sup>2</sup> In rapidly developing countries part-time farming is, therefore, an historical fact of relatively long duration. It is true that it is based on low capital and labour orientated investment in industry which cannot immediately raise the wages and income to the national or international average, but it is

<sup>1</sup> Douglas and Mackie, op. cit.

<sup>2</sup> Rolfes, *Die Entwicklung der nebenberuflichen Landbewirtschaftung und ihre Erscheinungsformen*, Hanover, 1959. Riemann, 'Größe und Verbleib aufgelöster landwirtsch. Betriebe' published in *Berichte über die Landwirtschaft*, 1962.

the first to engage the immediate surplus of labour; it creates a greater market for industrial development and renders possible an increase of savings within the nation. We do not believe by any means that it precludes a parallel or even primary investment in heavy industry. Furthermore, we are not considering here the specific conditions of a colonial or former colonial country with their particular type of investments.

Let us now pass to perspectives of part-time farming in the developed countries with highly efficient and large-scale agricultural and industrial production, full employment and high *per caput* incomes. We should consider it in the light of the historical experience of a few decades in the immediate past. This experience is very different and will be classified accordingly.

Most particular is the case of Japan. This is a highly developed and at the same time classical country of high population pressure which, nevertheless, has attained agricultural self-sufficiency in the past ten years. In addition to what was said before on the exceptionally high share of part-time farms in the total number of agricultural holdings, I stress that only 11.2 per cent. of total agricultural holdings cover their family budget with sales from agricultural production alone; even among these 11.2 per cent. there are 3.4 per cent. holdings with mixed incomes. The peculiar fact of the high percentage of mixed income in Japan is due to the parcelling out of land in small holdings by the post-war land reform, to the spreading of small, labour-orientated industry all over the countryside (facilitated by widespread agricultural mechanization), a high degree of literacy and education among the rural population, and a widespread network of modern transport services. It is also explained by the pressure of industry on wages in the effort to reconquer the world market under post-war conditions. There are strong views, however, among economists and politicians in Japan that the land of part-time farmers is not cultivated in the best way and that improvements could be made by increasing the average size of holdings and concentrating the holder fully on pure agriculture. This can only be a long-term process. It would require a specific investigation to find whether a similar way, *mutatis mutandis*, is likely to be successful in some other relatively overpopulated countries of South-east Asia with ancient civilizations.

On the Federal Republic of Germany we have two observations to make. First, as to the number of part-time holdings and their lands; these figures do not yet mean that all this land is cultivated, because some is held as a safeguard for bad times and is not regularly or fully utilized. Secondly, there is a special case of the settlement of post-war

refugees who, because of lack of land, were given only small areas around cities for partial occupation, in a political desire to keep them in closer contact with agriculture. These settlements were established with government support and special legislation; they possess attractive modern and well furnished homes with some land ranging from 0.50 to 1.50 or more ha., and enjoy the advantage of being in the vicinity of towns. This cultivation supplements their main non-agricultural incomes and enables them to maintain very decent standards of life. A similar experiment, but on a lower scale, was made during the depression in the thirties in the United Kingdom, with about 3,000 holdings which, following the satisfactory results obtained, survived the depression. They seem, however, to be much closer to horticulture than to part-time farming in developing regions.

Otherwise, and looking to the rest of Germany, to the U.S.A., and to other well industrialized European regions such as France and Switzerland, I must align myself with research workers who stress that, in the factual historical experience of their countries, part-time farming as a mass phenomenon is only a temporary, transitional institution. How this 'transition' can also be assisted and promoted in a developed country with less industrialized regions is illustrated by the remarkable story of the so-called Rural Development area in the South of the United States; here, many poor districts with high rural exodus and constant loss of manpower were able, within only ten years, to transform the region by a combined effort consisting of such measures as rural electrification, irrigation, soil conservation, and the establishment of small-scale labour-employing industries—all this mostly with their own resources and on a co-operative basis with relatively little governmental support. In this way a twofold employment, agricultural and non-agricultural, was developed for a very large part of the population, increasing the interior market and creating a new infra-structure and tertiary occupations.

In the U.S.A. the industrial regions have passed from an agricultural stage to an urban industrial stage 'in much the same manner as the South is doing now', with 'part-time farming as an important aspect of this transition, and non-agricultural wages . . . high and steady enough to discourage the continued engaging of rural non-agricultural workers in part-time farming. The final outcome of this development was the passing of urban-fringe land into full residential use.'<sup>1</sup> The same may be true *mutatis mutandis* of Germany and other continental European regions. Though slow, this process goes

<sup>1</sup> Douglas and Mackie, *op. cit.*

on automatically. Small, inefficient marginal full-time farms first become part-time farms.<sup>1</sup> This is an intermediate stage of the migration from agriculture into non-agriculture. The additional non-agricultural job is not paid sufficiently, and for this reason, as well as to provide for any eventual unemployment and for traditional reasons, the farmer wants to keep part of his land and becomes a part-time farmer. As soon as the general pressure of labour movements and the passing to a higher level of industrialization enables wages and salaries to rise, he reduces his part-time farm to a garden, selling the relative surplus of his land or keeping it uncultivated as a safeguard against depression or inflation. On a certain higher level of industrialization and income, the economy and employment could do without part-time farming. It becomes a relative burden for the individual, and is abandoned, at least in the second generation.<sup>2</sup>

This development cannot stop at the present level. The more the margin of farm acreage is likely to rise, the more will part-time farming expand in agricultural environments with the same effect as in the past, though with a much smaller number of holdings. If and inasmuch as part-time farming is an unavoidable accompaniment of low-stage development or is 'positively associated with the take-off stage', it is, to quote the study on Tennessee,<sup>3</sup> 'negatively associated with continuous industrial development and high steady wage rates'. The industrial sector may receive 'the addition of high-capital investment, high-wage investment to the low-capital investment, labour oriented', while in agriculture there is need for a passage 'from small, relatively inefficient, low-capital-investment farms to larger, more efficient units making greater use of advanced farming techniques', which a part-timer cannot afford. Economic policy may, therefore, help the part-timers, either to obtain higher wages or to become independent of non-agricultural income.

It is possible, however, that the progress of mechanization will bring with it the possibility of easier cultivation with less toil, and the elimination of animal power on substantially smaller plots—from 0.5 to 1 ha. It depends, however, on the national level of incomes and prices and on credit and taxation whether the owner will still feel encouraged to produce for either self consumption or the market. Very likely, production will be confined to specialized cultures not adapted to or not requiring mass production but

<sup>1</sup> Scholz, *op. cit.*, and Zöllner, *op. cit.*

<sup>2</sup> Schapcr, *op. cit.*, Rolfes, *op. cit.*, and Riemann, *op. cit.*

<sup>3</sup> As quoted in Douglas and Mackie, *op. cit.*, pp. 20-21.

offering a worthwhile gain:<sup>1</sup> such as vegetable production or poultry farming, possibly combined with small processing workshops and on a co-operative basis. Land which is otherwise not adequate for large production could be reasonably utilized in this way.

All that is said here about developed countries is true of normal times, without war and depression. During the great depression of the thirties, there were in many industrialized countries, including the U.S.A., movements 'back to the farm' and 'back to the land', rural homesteads calling for government support in buying, investing, resettling, &c. Action plans for the acquisition of land and financing had been compiled in Germany on the eve of Hitler's taking power, or soon after. During World War I and World War II and immediately afterwards, not only were such plans made but a number of small and neglected plots were kept as safeguards;<sup>2</sup> or, being free, became cultivated for consumption by the farmer. No matter how many solutions of this kind help individuals in times of depression, nationally they prolong the depression by increasing agricultural over-production which, on the other hand, forces thousands of farmers to abandon their land. However, even after the war and depression, people used to keep small plots of land, though uncultivated, as safeguards or for recreation and sport. But this was not a mass phenomenon.

This keeping uncultivated 'safeguard' land acquires the economic function of pure treasure, and is a demonstration of mistrust in economic stability. It is up to individual governments to tolerate or forbid the holding of such safety plots which occasionally amount to large totals, and only sometimes are rented to other people for cultivation, and sometimes, in the vicinity of towns, are kept for use in rent speculation. Conservative parties support the existence of safeguard plots to maintain the friendly attitude of some workers and to keep them away from the Labour Movement. In other countries the taxation system or administrative legislation made this impossible. This is true of Yugoslavia and some other socialist countries striving for higher agricultural production. In Holland, for example, part-time farmers are practically forced to decide either for agriculture or for non-agriculture. They can hardly sit on the fence. However, so long as there are agricultural surpluses on the world market, keeping the land out of cultivation is likely to be tolerated and even desirable, except in countries where imports of food are not welcome for

<sup>1</sup> Schaper, *op. cit.*, pp. 71 ff.

<sup>2</sup> Röhm and Schaper, *op. cit.* The other characteristic of part-time farms reported by Schaper is *die Pufferzone der Konjunktur*.

balance-of-payment reasons. No objection whatsoever is made to the more-or-less primitive cultivation of very small garden-like plots around cities, in suburbs, in mountainous and forest-like environments which cannot be merged in larger units and cannot be mechanically cultivated as modern undertakings, while their cultivation offers to urban owners both recreation and a small improvement in their family budgets. However, this is not part-time farming.

Conservative people advocate, for political and population purposes, the advancement and support of part-time farmers and even their settlement, in order to strengthen the small property and peasant element, self-sufficiency in food, which helps to withstand unemployment and depression. Furthermore, they wish in this way to promote the deconcentration of large towns and to strengthen the rural population. To them the economic price and the question of who would pay for support is not very relevant. There are, however, very interesting recent suggestions in Scandinavia for either support or artificial settlement of part-time farmer-craftsmen in order to prevent a complete rural exodus from some areas.<sup>1</sup>

Most economists in their theories of economic development, so far as they touch this problem, do not consider it either necessary or fitting for industry, after it has reached an advanced stage, to live on cheap labour, immobilized by land property. It is doubtful, too, whether there is any point in maintaining a political orientation towards a population, such as part-time farmers tied to small plots and living in permanent uncertainty between insufficient land and insufficient industry, with all kinds of psychological and physical problems concerned with greater toil and lower productivity and less free time, in comparison with a population stabilized in a single occupation in a highly developed region.

J. ASHTON, *University of Newcastle-on-Tyne, U.K.*

Personal preoccupations have prevented my giving to Professor Krašovec's paper as much attention as I would have liked or as it deserves. My comments must of necessity be brief, and I apologize for this.

Professor Krašovec has given us an important paper and we must all welcome the detailed and systematic approach he has made to his subject in which there are many points of detail which would justify elaboration and discussion. I should like to confine my remarks to three points. First, to augment the information presented by Pro-

<sup>1</sup> Sven Holmström, 'Deltidsjordbrukets möjligheter och problem—en principdiskussion', published in *Nordisk lantbruksekonomisk Tidskrift*, Stockholm 1963, Häfte 1.

fessor Krašovec, we have a good deal of evidence from the United Kingdom on the incidence of part-time farming, as well as some indication of the social and economic background of part-time farmers. Much of this material has been published, and will be known to some of you. I will not, therefore, repeat it, except to say that approximatively one half of all agricultural holdings in the United Kingdom, are occupied by part-time farmers. My second point concerns the economic performance of these part-time farmers, and, here again, I shall draw on United Kingdom experience. There part-time farmers account for approximatively 10 per cent. of all agricultural output. We can reasonably infer that, at maximum, their agricultural contribution to national income will be a corresponding proportion of the contribution made by the whole of agriculture. Agriculture, in fact, contributes about 4 per cent. to the G.N.P. We, therefore, have a situation where half of our farm occupiers appear to contribute only 0.4 per cent. of gross national product while the other half contributes about 3.6 per cent. This clearly reflects a remarkably low comparative productivity by the part-time farmer. Although Professor Krašovec acknowledges this aspect, there is an important implication which he does not bring out. I refer to the effect of these part-time farmers on agricultural policies, which are geared all too often to providing prices suitable for the small scale of operation found in the part-time sector. I will not develop this point further, other than to say that part-time farms viewed in this light may well be a social luxury which few countries can afford as a permanent feature of their agriculture.

I come to my third point. As Professor Krašovec has emphasized, part-time farming is a phenomenon which can be found in one form or another in all stages of economic development. It is not a static phenomenon, but one which changes in form with economic change. It may represent a very low level of activity by the aged, the inactive, or those not well equipped to work either within, or outside, agriculture. At the other end of the spectrum, it would be fair to include what are in effect large-scale part-time farming operations, which are to be found increasingly in agriculture where capital has been liberally substituted for labour. But in the long term, it is the relative levels of income in agriculture and in the rest of economy which determines the extent of part-time farming of all kinds. I would suggest that as agricultural systems become more developed economically, so will part-time farming be relegated to a very minor role in agricultural matters, even though it may well provide rural residential and recreational opportunities on a wide scale.



J. MARULL, *Instituto Interamericano de Ciencias Agrícolas, Costa Rica, C.A.*

Anyone trying to analyse in broad terms the characteristics of part-time farming or venturing to forecast its evolution is immediately confronted with several obstacles. As Professor Krašovec points out, there is no generally accepted definition. The variability is such that he practically gives up any hope of ever attaining a workable conception. I wish he wouldn't.

It is true that in the continuous range from full-time farming at one extreme to full-time non-farming at the other, the span has been divided arbitrarily at different points, depending on the areas and authors involved. Even in the U.S.A., where those limits set by the Bureau of the Census are widely used, frequent departures from them are found in the literature. Owing to these obstacles, the number of part-time farmers cannot be reliably established. I said farmers because Professor Krašovec has chosen to discuss his subject from the occupational standpoint. Yet the comparability of information on this matter is also affected by an admixture of ideas that are hardly inter-changeable. Sources of family income, degree of commitment of the operator to farming as an occupation, and uses of farm land are treated somewhat indistinctly. Not infrequently one finds also the idea of part-time management added to the confusion. Such a variant appears in several of the fourteen papers touching on this subject in relation to Latin America that I could find published in the last decade. None of them contained any numerical data, thus bearing out Professor Krašovec when he deplores the lack of information from that area.

A major cause of such scarcity is probably the simple fact that part-time farming nowadays is largely absent from the Latin American scene. Except for some sectors around the larger industrial cities of Mexico and for a small area in the Brazilian state of Santa Catharina, no substantial part-time farming belts are noticeable on the fringes of large urban-industrial complexes, such as Buenos Aires, São Paulo, Santiago, Lima, or Bogota. The real extent of part-time farming there, if any, is difficult to measure unless special studies are conducted. Censuses ignore it or leave a no-man's-land between urban properties and those below the minimum size for farms. It is precisely in this stratum that part-time farmers might be found.

Although non-farm employment opportunities to supplement farm income seem slight at present, they are likely to increase rapidly in the future. Under the Alliance for Progress Treaty of 1961, Latin

American countries are planning to carry out profound economic and social changes within a decade. Vigorous governmental efforts supplemented by U.S. financial and technical assistance in the fields of education, tax reform, and land reform, are likely to modify markedly the prevailing latifundia-minifundia complex. Nowadays, some 100,000 very large farms coexist with approximately 3.6 million under-sized units whose operators find off-farm agricultural employment in the latifundia. As these large estates become broken up under the impact of land reform and other programmes, such off-farm agricultural opportunities will tend to decrease. Some surplus labour will undoubtedly be absorbed by an intensification of farm practices, but part of it will find its outlet in non-farm occupations. If the governments should decide to take advantage of this relatively cheap displaced labour by utilizing it in local public works to foster agricultural development, both investment in needed infrastructure as well as income to replace that previously earned within the latifundia would have been achieved.

As industrialization proceeds in the developing countries, more and more alternative non-farm employment opportunities are likely to lead to increasing numbers of part-time farmers. Professor Krašovec tells us that part-time farming is merely a transitional stage on the historical road towards the single occupational status typical of the areas more highly developed. Yet these mixed occupations still constitute large groups in advanced countries, such as West Germany, Japan, and Switzerland. Furthermore, they are increasing even in the United States. Apparently, part-time farming is not only here to stay for a long time but is also destined to see its ranks enlarged by a steady contribution from the developing countries.

Clearly such large groups are by no means homogeneous. In this connexion I would like to refer to a study of Fuguitt on the typology of part-time farming published in the *Rural Sociology Journal* of 1961. In Wisconsin, he found twenty-four statistically significant different types when only the variables of occupational ratio, seasonal concentration of work, farmers' background, and future occupational intentions were considered. Unless a workable typology is evolved to handle this heterogeneous group of farmers, it would be difficult to conduct meaningful research into the real characteristics and relationships of part-time farming in the various ecological and institutional environments. It would render equally uncertain any assessment of its role in a given stage of social and economic development. At best, we would be just enacting the disturbing experience that Professor Krašovec must have gone through while preparing

his analysis on the productivity and economic importance of part-time farming.

SVEN HOLMSTROM, *Agricultural Economics Research Institute, Stockholm, Sweden*

With Professor Krašovec's, paper as a background, I will make some comments on the problems of part-time farming in a country with high-labour income, and overfull employment. In such a country looked upon from a purely economic angle, each agricultural unit which does not have full competitive ability as a full-time farm seems to be doomed to failure. The problem presents itself quite differently, however, if regarded from a family economy point of view, and if the agricultural sector is regarded as a part of the total economy. For example, a man who invests \$10,000 or \$15,000 in a summer house, and also puts in twenty-five days of work a year to maintain it, has solved only his summer-residence problem. By making the same investment and the same labour input in a part-time farm, he not only solves the same problem but, in addition, he increases his family income. He gets more money and the same degree of pleasure. From this point of view it is, without any doubt, an economic question, and it should be treated as such. Nevertheless, there is a danger that a large number of part-time farms, under certain conditions, may become an impediment to efforts to create viable full-time farms. For that reason, they may also lead to problems of agricultural policy. There are regions in many other parts of my country, where for various reasons the creation of commercial farms may be difficult or impossible. In such cases, there is no conflict with farm rationalization, and the combination of part-time farming with work in other occupations should be accepted. In any case, the situation exists and will probably continue for many years.

I think we should not recommend part-time farming if we had to organize agriculture on virgin land. In an existing situation, however, we have to take account of the investments already made under other economic conditions, especially in the buildings. In many cases the farmhouses can be modernized at quite a low cost, and their alternative value is low. We are always having to revise existing patterns. One important advantage, clearly indicated in Swedish investigations, is that the wife can contribute to the income by creating work without leaving the farm. It is also important to stress the fact that technology has a tendency progressively to alter the required area of cultivated land. And, in any country where people have reached such a standing that they can spend an important part of their

earnings on things which are not necessary for daily life, it is just as important for service functions to be efficiently organized as it is to have high efficiency in the production of goods.

The economic calculation ought to be widened. We need more team-work between, for instance, farm management, social economics, and sociology. We need better knowledge of the economy of the total community, as has been emphasized earlier in this conference. This is of first importance at a time when large structural changes are taking place in rural districts all over the world. I confess that it is not easy to embrace all these factors in the same equation but, in any case, we have taken a step forward as soon as we have been able to increase our consciousness of the joint economic problems.

KEITH O. CAMPBELL, *University of Sydney, Australia*

Professor Krašovec in his survey paid very little attention to one form of part-time farming which makes its appearance in at least some of the relatively advanced agricultural countries. I refer to the acquisition of farms by urban businessmen and professional workers, a phenomenon of some importance in Australia. Professor Ashton referred briefly to this type of part-time farming in the course of his remarks. It may be arguable whether this category of farmer should be classified as part-time farmers, but it falls within at least some of the definitions of part-time farming which Professor Krašovec has given us. Such farmers cannot usually be classed as absentee owners. On the other hand, they do not show up in the usual statistics of part-time farmers.

The acquisition of farms in the circumstances to which I refer is not motivated primarily by the desire of these people to live in a rural environment or by a desire for recreation, but rather by investment considerations. The possibility of long-term capital appreciation (particularly in so far as this is enhanced by the application of new technology) is of considerable importance. However, in Australia I think the dominant incentive for the acquisition of farms by high-income earners in urban areas is the taxation concessions granted by the Government in respect of farm development and investment in association with a progressive system of income taxation. Under these conditions it may be economic for urban people with high incomes to invest in farming to an extent which would not be profitable on ordinary economic criteria. The activities of this class of part-time farmer represent a useful means of transferring urban capital to rural areas and of encouraging rural development which is capital-demanding. Far from being inefficient, these part-time farmers in my

experience are, if anything, more anxious to take advantage of the full benefits of modern agricultural technology than the majority of established farmers. On the other hand, it could be argued that from a national standpoint some of the capital invested in farming by these urban people might be better channelled to other forms of investment. If the farmers to whom I refer are accepted as part-time farmers, then clearly it is not correct to describe part-time farming as a temporary transitional phenomenon in the process of economic development.

TADASHI WATANABE, *Hokkaido University, Sapporo, Japan*

As mentioned by Professor Krašovec most farmers in the southern areas of Japan are part-time farmers, while those in the northern areas have to hire seasonal labour from the south. As a Japanese, I appreciate the remarks which have been made on our agricultural and industrial development. As a cosmopolitan, my special interest is in enlarging farm size and in intensifying special productive enterprises. In the past the United States used negro slaves imported from Africa on their plantations, nowadays they are using Mexican labourers for sugar-beet growing. I have noticed similar conditions in France where Spanish and Italian workers are employed for special production lines, such as mushroom growing and rice cultivation.

AGOSTINI DANILO, *University of Padua, Italy*

First, in the light of Italian experience, I think it would be desirable to have more general agreement about what we mean by part-time farming. This would permit us to make comparisons both at the international level and within a single country. I believe that the definition of part-time farming as a 'regular twofold occupation of the head of the family' is the best on which to base discussion. While part-time farming thus defined exists throughout Italy, it is useful to distinguish between old and new group patterns. I agree that our new pattern of part-time farming as a mass phenomenon is only temporary, but in a period of transition, it can raise many problems. We in Italy have developed large numbers of part-time farmers in recent years owing to our rapid economic development. As a result a significant percentage of farm land belongs to people who have two sources of income. This phenomenon is likely to continue for a long time when the economy of a country is dynamic and needs many structural adjustments.

A most important implication is that, if one takes a decision on land policy such as land consolidation, or improved production and marketing efficiency, this category of farmer is less responsive to the programme. And when full-time farmers become part-time farmers, they shift to another production function. What is more important, their intensity of production changes according to the new situation of labour supply in the family or according to personal attitudes. Livestock production, for instance, is one of the first to be reduced or abandoned.

Such modifications can create considerable changes in a short time in the supply of some farm products, and raise difficulties when the part-time farmers involved constitute a high percentage of the total farmers of a country.

T. KEMPINSKI, *Manchester University, U.K.*

I should like to emphasize the relevance of part-time farming to the proper assessment of the disparity between agricultural and industrial incomes. Obviously, the non-agricultural incomes of part-time farmers should be included in estimating their incomes per head. Yet, because of the insufficiency of statistical data, I suspect that many of these people are treated as full-time farmers in national computations of the agricultural and non-agricultural incomes. Such a procedure may exaggerate the gap between the agricultural and non-agricultural income per head, and perhaps lead to the government's support to agriculture being larger than the real situation requires. May I add that in under-developed countries most peasants who are not usually considered as part-time farmers do engage in non-farm work which cannot easily be quantified. This was emphasized by Professor Arthur Lewis in his *Theory of Economic Growth*; where he instanced the peasants' building and repairing their own houses &c. If this kind of investment were quantified, the peasants' income per head might prove to be significantly higher than it now appears.

E. DETTWILER, *Secretariat des Paysans Suisses, Brugg, Switzerland*

You have heard that in Switzerland part-time agricultural activity, so-called part-time farming, is very important. The country is highly industrialized, and the agricultural population amounts to only about 10 per cent. of the total. Of this, about two-fifths are part-time farmers. Because of the progressive economic development of the

country, industry has greatly reduced the number of these part-time farmers during the last decade. But there will always be newcomers to this kind of farming in Switzerland, because we have many small farms which may at present provide full employment and an adequate livelihood for the farmer and his family. Even these farms will not produce sufficient income to meet the needs of the next generation; technical developments and increases in productivity leave no room for marginal farmers. For this reason we shall always have too large a number of part-time farmers. Nevertheless, I do not entirely agree that part-time farmers are to be regarded as a burden on society. As an example, just let us consider our mountain farmers, who work in the winter as ski-instructors, run the ski-lifts, help clear the streets of snow, and prepare meals in the hotels. All these men would not be available to do this if they were to go into industry. In other words, these men are essential during that short period of the season when tourism is at its height, which is precisely when they cannot do any of their own work on the farms since it is at the back end of the year. This kind of part-time farmer should not be regarded as a burden on society.

R. M. REESER, *Ohio State University, Columbus, U.S.A.*

Professor Krašovec's paper represents, I believe, a case of an outsider looking in—which is a justifiable position and a necessary one. I wish to present the viewpoint of an insider looking around and out. In other words, I am myself a part-time farmer, and have been one for a decade or so, in fact until my recent overseas assignment, and I expect to resume part-time farming on my return to America. As such, I take exception to the implications that part-time farmers are poor farmers or are unproductive in non-farming activities.

Research in Ohio and elsewhere indicates that the productivity of part-time farmers *per unit of resource input* is comparable (and in some cases very favourably comparable) with the productivity of full-time farmers. Part-time farming has been with us for a long time, in many countries and in many different types of situation. In view of the viability and of the indications of recent increase, I think we as economists should be very careful about any broad spectrum criticism of its productivity. It seems to me that the regulations in some countries which were mentioned in the paper and which would prohibit part-time farming should be very seriously examined. Should we as policy-makers prohibit something which economic principles and rules themselves do not prohibit?

ULF RENBORG, *Agricultural College, Uppsala, Sweden*

I share most of Professor Krašovec's viewpoints, especially those expressed at the end of his paper. However, I want to indicate another opinion on one point. He says that in spite of the advantages in relation to marginal full-timers, it can hardly be said that the part-time farmer is very competitive compared with large-scale and modernized agricultural production even at retail selling prices. I think that part-time farms are competitive even compared with these groups of farms given one specific condition, viz. so long as the part-time farmers use fixed resources that are available on the farm and which cannot be used in other ways. This means that the part-time farm is a good way of using up such resources as, on the micro-level, buildings, and, on the macro level, a labour force consisting of older people, and people only partly able to work. The competitive power of these part-time farmers will decrease considerably, if they try to invest by way of replacing the fixed resources. If they do this they will soon be forced out of business. These farms disappear when the fixed resources are exhausted. Nevertheless, we shall always have part-time farmers, of course, as new full-time farmers become marginal and are forced to accept part-time jobs so as to obtain reasonable incomes.

STANE KRAŠOVEC (*in reply*)

While insisting on the basic ideas of my paper, I agree with Professor Ashton that many details would require further elaboration. After making the first draft last year, I have read additional literature and have visited many non-European countries, so that if I were to rewrite this paper, many points could be improved or further elaborated. As many speakers have emphasized, it is difficult to study this problem because of statistical complexities and because of the scarcity and dispersion of literature. I must pay tribute to the Institute of World Economy in Kiel, whose catalogue is excellent, and I think unique, on this subject. I wish also to thank Professor Schneider, Director of the Institute and the librarians for all the assistance they have given me. I must also thank the United States Department of Agriculture for helping me to study the part-time farming areas of the U.S.A. Furthermore, I thank Professor Ohkawa and the Director of the Agricultural Statistics Department in Tokyo, Mr. Koga, for their advice and information on Japan.