PROCEEDINGS

OF THE

FOURTH INTERNATIONAL CONFERENCE

OF

AGRICULTURAL ECONOMISTS

HELD AT

ST. ANDREWS

SCOTLAND

30 AUGUST TO 6 SEPTEMBER 1936

LONDON

OXFORD UNIVERSITY PRESS

HUMPHREY MILFORD

1937

PART-TIME HOLDINGS FOR URBAN WORKERS

FIRST OPENING PAPER

H. KRAUSE
Berlin, Germany

IN modern European and American civilization technical development has in the main been applied to industrial production and, in spite of the reduction of working hours, has increased to an unprecedented extent the production and consumption of industrial goods and thereby the standards of living.

The great expansion and simultaneous specialization of industrial production has unhappily also caused the development of an industrial proletariat, the economic significance of which was already apparent in times of prosperity; but the social significance became especially evident in times of economic stress and necessitated numerous political measures.

Thus in many countries social policy gained supremacy over economic policy and initiated measures of planning by means of which various sections of economy are in increasing measure treated only as branches of a more or less isolated national economic system.

This viewpoint of national economy attributed the great crisis-susceptibility of great parts of the economic system to the relatively great decline of the rural population and attributed the growth of radical political tendencies to the increasingly sharp distinction between the work and the private life of the man in the street; this again as a consequence of industrial specialization.

Therefore, to lead back a portion of the industrial population to agriculture seemed to offer a solution to the problem. For in agriculture, professional life and private life have by far the closest connexion. Simultaneously, it was hoped to render the whole economic system decidedly more crisis-proof by this expansion of the agricultural population.

Agriculture, being an organic type of production, is far less suited to modern technical methods than industrial production, for in agriculture not man, but nature, with its cycles of season, climate, &c., is the real creative force. Nevertheless, during the last generation, the output per unit of labour has been materially increased in agriculture under the influence of modern technical developments,

thanks to the application of the results of scientific research. Even though this increase may be less than that in industrial production, the scope for consumption of agricultural produce is also very much more limited. Higher total income of the population benefits primarily industries and not agriculture, for which an increase of the scope of marketable production is mainly dependent on a growth of the population.

The increased agricultural output per unit of labour coupled with the comparatively low increase of *per capita* food-consumption caused a relative decline of the agricultural section of the population, a decline which is all the greater as the possibility of mechanization and thereby the increase of production per unit of labour increases without restriction in agriculture.

In U.S.A., for example, the proportion of agricultural population has dropped during the last 100 years from 75 to 25 per cent. of the total population, and, in spite of this decrease, official circles of U.S.A. are convinced that 60 per cent. of the present number of farmers would suffice to ensure the food supplies of the population, i.e. only one in eight Americans would be needed for food production.

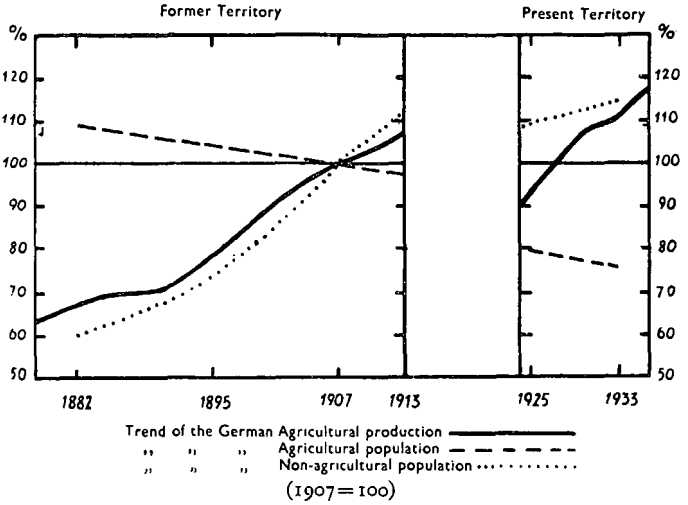
Even in a country like Germany with a system of land tenure which is comparatively rigid compared to that of U.S.A., agricultural production has been approximately doubled in the last fifty years, whilst in the same period the agricultural population has declined.

The scope of mechanization is most limited where the physical conditions are especially unfavourable, i.e. in mountainous areas and—or where—because of a surplus rural population the low wage standard renders extensive use of machinery uneconomic. In over-populated rural areas the holdings are small in size, the labour supply per unit of land is high, and the outlay of labour per unit of production is also high. Unless the incomes of farmers of such areas are sustained by an artificially supported price level, unless the rural population can supplement its agricultural income by subsidiary industrial earnings, these regions are characterized by a low standard of living.

But in areas where the physical and economic conditions present no great obstacles to agricultural mechanization, the utilization of an optimal machine equipment usually determines the minimum size of the farms; to this level the smaller holdings must be enlarged if they are to remain fit to compete. This applies particularly to the temperate zones inhabited by the white race.

In the old-settled areas the development takes a middle course between these two alternatives owing to the greater lack of elasticity of the agrarian system. For example, in Germany the number of

peasant holdings suitable for use of machinery is steadily increasing at the cost of both smallholdings and large farms. In these machine-using peasant holdings the advantages of the family labour system seem to combine with the advantages of the use of technical equipment in what I would like to call an optimal compromise. This shift in the distribution of agricultural holdings is not accompanied by any material change in the total number of farms. If this development is maintained in Germany, a material increase of agricultural popula-



GRAPH 1. TRENDS OF GERMAN AGRICULTURAL PRODUCTION, TOTAL POPULATION, AND AGRICULTURAL POPULATION

tion is not to be expected even in the event of a total disappearance of large farms and of a further general spread of more intensive farming systems. The opposite would seem more probable.

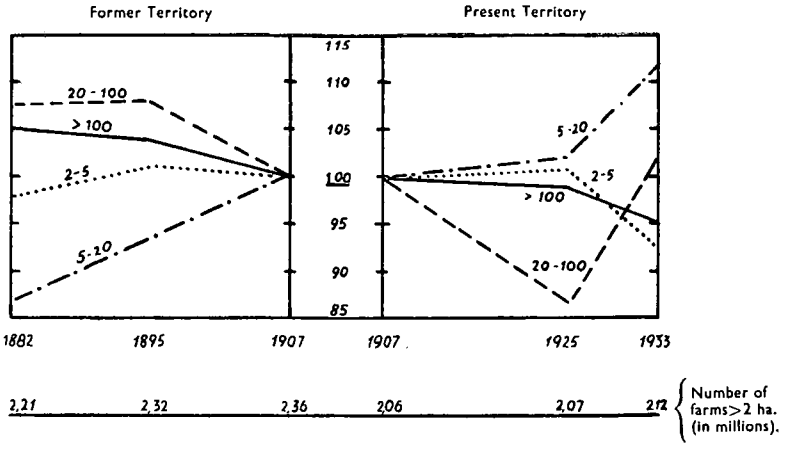
The plan to check the mass-congregation of industrial workers and to diminish the susceptibility to crises in industries by bringing back a part of the industrial population into agriculture is therefore in practice not feasible. It would only be possible by forcibly preventing all technical progress in agricultural production, which in turn could only be accomplished by heavily encumbering all other branches of economy.

The fact remains, however, that the re-establishment of a connexion between the 'man in the street' and the land is one of the surest safeguards against loss of personality and against susceptibility to mass instincts.

If this is not possible by approach from the angle of economic life, it may still be approached from the angle of private life. In other

words, the private life of the individual industrial worker can be placed on a broader and surer basis by means of a garden allotment, which would also give him the possibility of a subsidiary income capable of being increased in times of stress.

A glance at economic history will show that there is nothing new in supplementing an income derived from handicrafts or industry by agricultural activity on a piece of land owned or rented. On the contrary it is an old-established form of land settlement which existed before the Industrial Age for wide sections of the population in all



GRAPH 2. INCREASE AND DECREASE OF NUMBER OF FARMS IN VARIOUS GROUPS SINCE 1882. (UNIT OF SIZE IS HECTARE)

small and medium-sized towns. It was indeed the form of settlement of 'citizens' as distinct from 'peasants', and by its close connexion with nature it constituted one of the principal bases of national culture.

Where similar conditions are still to be found at the present day, they are in most cases remnants of this old social structure. All that is new is the growing importance that is again being attached to the link between industrial work and agriculture or gardening and the movement to foster it. The development of modern industrial methods supports this. The progressive reduction of hours of work leaves more time available for agriculture and gardening as a subsidiary occupation. The work in the factory now involves much less physical exertion than it did one or two generations ago. Often it requires the use of only a limited series of movements, but much brain work. Therefore to keep in good health the worker needs supplementary physical exercise in the form of sport or other activities. Added to this the great progress made in means of trans-

port during the last fifty years has done much to extend the radius within which the people employed in a factory can live. In other ways, too, modern invention has created a closer connexion between town and country.

The development of the life of the village as a social partner with equal rights in the modern State promises to bear valuable fruit in many respects. Besides an extension of the 'residential radius', the use of electricity for power and the great progress made in means of transport of goods allows much more decentralization of industry than was possible in the age of the steam-engine.

For the workman himself the use of a plot of land means, for the most part, cheaper food. In general, very little is known as to how much these costs can be lowered or what area is necessary to produce say 50 per cent. of the household supply. Graph 3 is reprinted from a valuable German publication and gives some figures about the amount of land of different fertility, which is necessary to provide the half or the total of the household supplies.

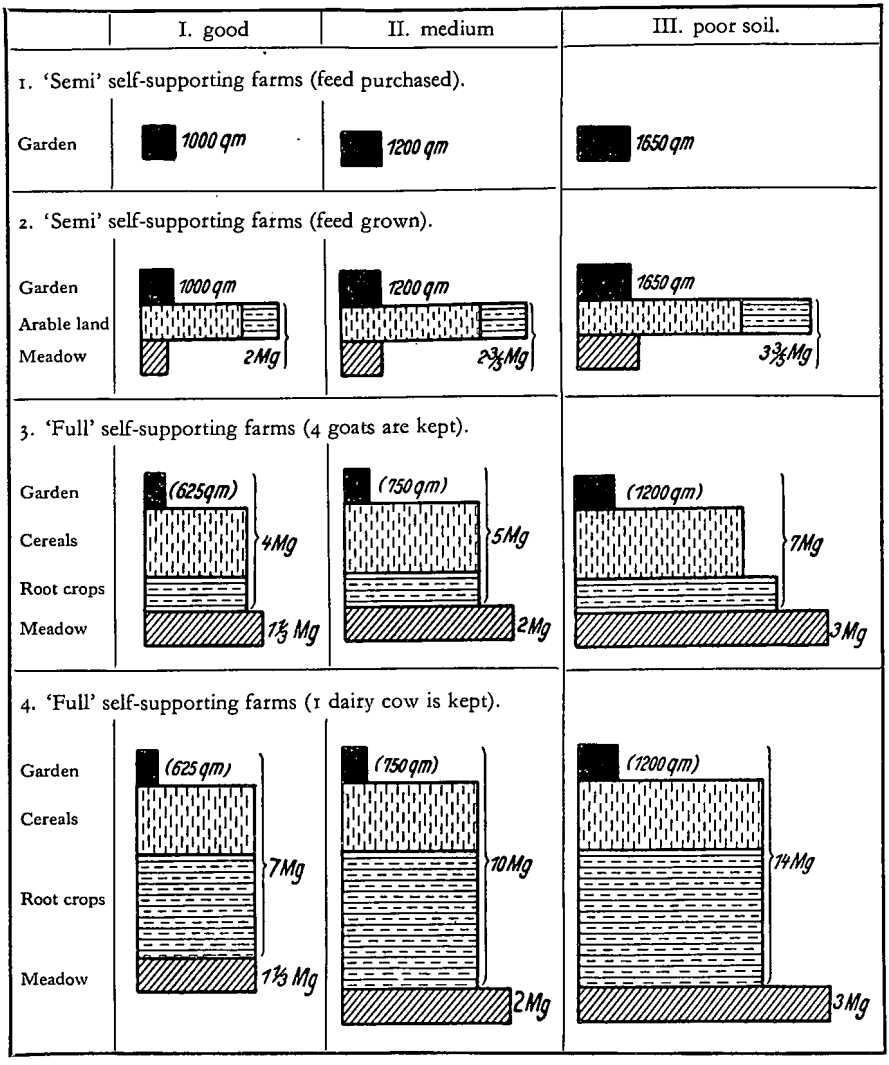
Besides lowering the expense of food there will also be a more sufficient supply, especially for the low-paid groups. Not only will larger quantities be consumed, but the food will be richer in vitamins, because of the much larger consumption of fruit and vegetables produced at home. How important this enrichment is, is shown for instance in a recent English study by J. B. Orr, *Food, Health, and Income*, and in a publication of the International Labour Office, *Workers' Nutrition and Social Policy*, which show unfavourable results for the lower-paid groups.

Further important points are the workers' increased capacity to resist depressions by means of the many possible ways of dividing up the agricultural and industrial work among the family according to age and sex, and also to the nature of the industrial work, the question of cheaper and healthier living conditions, the utilization of spare time, and the visible investment even of small sums in the improvement of the homestead.

Moral and spiritual factors must be allowed equal weight with material ones, if full value is to be given to the scheme. One of the results of all these factors is the increased number of children of those families who cultivate a piece of land. This is the case in *all* classes of professions as was shown recently by the German Statistical Office which investigated this question. Graph No. 4 shows a few figures based upon this material.

For the national economy as a whole this increase in the proportion of the population having a stake in the country is an effective

GRAPH 3. AREA REQUIRED FOR PART-TIME FARMS OF VARIOUS TYPES[1]



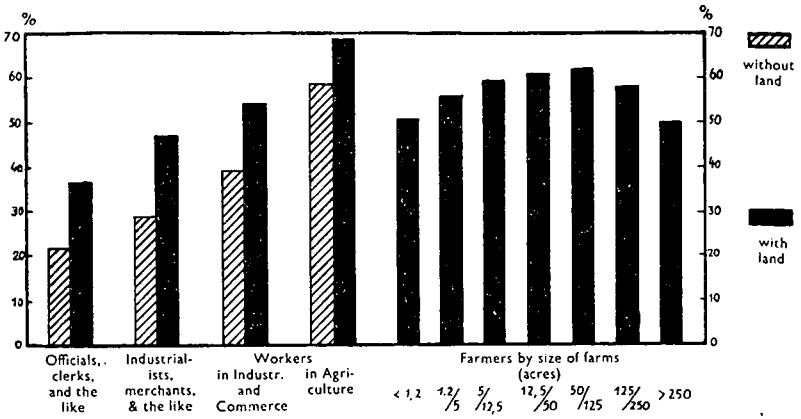
Cases 1 and 2 are those of 'semi' self-supporting farms, which provide fruit, vegetables, potatoes, eggs, milk, and meat for a family with 2–3 children. In both cases there are 1 goat, 1 pig, and 6 hens. The difference between the two cases is that in case no. 1 feed is purchased and in no. 2 it is grown.

Cases 3 and 4 are those of 'full' self-supporting farms, which provide not only the above food but also bread, grain, and fat. In case no. 3 the farm is stocked with 4 goats, and in case no. 4 one cow replaces the goats.

1,000 qm. = 1,200 sq. yards; 1 Mg. = 2,500 qm. = 3,000 sq. yards; 4 Mg. = 1 ha. = 2½ acres.

[1] Taken from: G. Laupheimer und M. Högel-Wertenson: *Die Vorstädtische Kleinsiedlung in der Mark Brandenburg und in der Grenzmark*, Publication of 'Deutsches Forschungsinstitut für Agrar- und Siedlungswesen', Berlin 1935, Verlag Paul Parey.

means of bringing people back to the land without hampering the technical development of purely agricultural undertakings. Further, areas which would otherwise be depopulated can in this way be settled with a semi-rural and a semi-industrial population. Often the



GRAPH 4. NUMBER OF CHILDREN AND USE OF LAND. Percentage of families in which 4 or more children have been born among married couples forming a household for 20 years and more.

existence of a stable group of skilled workers is associated with some highly developed special industry. The highly skilled Württemberg industry, for instance, depends partly on the body of skilled workers who have a fixed rural domicile.

The capacity to resist a depression or to recover from its effects, which has been mentioned above as a special advantage for the worker himself, is naturally also an advantage for the economic system as a whole. Even where family ties form the only link between some of the industrial workers and the rural population, a link which usually gives them a claim to be 'supported' in periods of depression (as in Japan for instance), the effects of unemployment are not nearly as severe as in countries where there is no such connecting link.

Further, the great spiritual advantages of having a direct stake in the country, significant as they are for the individual, are of greatest value also to the community and the State. For, in addition to the purely agricultural part, a further section of the population as the result of tilling the soil becomes more closely united to the real essence of the State and Nation. The new generation is gradually becoming aware that the organic unity of the family is the primordial nucleus of the State itself.

An inquiry into the disadvantages of the scheme under consideration is of course as necessary as a consideration of the advantages.

For instance, the place of gainful employment will often be at a distance from the home, which means expense and lost time. Then there is the danger of overwork where the area is larger than the family can cultivate with moderate exertion. Further, the choice of a workplace is narrowed by the greater immobility of the worker's household. Sometimes too this immobility may compel a man to accept work that keeps him away from home throughout the week, which is naturally to the detriment of family life, and often results in placing too much responsibility on the wife's shoulders.

A closer connexion of a greater part of industrial labour and part-time farming or gardening may slow down the adjustment between labour supply and demand. There are cases, for instance, in poor mountain regions, where agriculture can be carried on only in connexion with industrial work, and, if in addition this industrial production is confined to a single branch and the work comes to a standstill, the result is usually distress for the whole region, since the population cannot be transferred to other branches of production.

In addition to these risks there is also the possibility of a detrimental effect on the established agricultural market, especially if these subsistence holdings produce much more than is needed for home consumption, and the surplus is marketed. A further important point is that, although the intensity of the system of cultivation usually increases, technically the extension of these subsistence holdings must in itself be regarded as a retrograde step for the agricultural and horticultural production of a country as a whole, since the amount of work required per unit of production is increased. The question arises, however, how this work is to be evaluated. Is it to be placed on the same footing as work in the principal industrial occupation, or as recreation, or as something between the two?

According to circumstances, bound to vary within wide limits, advantages or disadvantages may prevail. But whatever those local and other differences may be, the advantage involved in establishing a more intimate relation of the industrial worker to the soil can have its full effect on social development only if the worker finds a solid basis for earning a livelihood in his main occupation. It would be unreasonable to expect that part-time farming or gardening could provide a complete solution for all the economic problems arising out of unemployment. It has often been emphasized that an area of 5 or 10 acres is not enough for a farmer to make ends meet. How then can a family of unemployed persons make a livelihood out of $\frac{1}{4}$ acre (in Europe)?

Nevertheless, it would be a mistake to minimize the value of the food that can be produced on such a small area if skilfully handled and also to minimize the great social and moral advantages which may be derived from part-time farming or gardening. Such a misconception would be especially unfortunate in times of depression and in a rapidly changing world like ours.

Unfortunately the inquiries made into the problems of the rural industrial workers and its manifold ramifications have been only partial. There are various reasons why the systematic social and economic study of this group has been neglected. In the first place, during the second half of the nineteenth century and even up to the War, there was sufficient ground for believing that the group as a whole represented only a gradually disappearing remnant in the social community.

It was believed then that, just as in agriculture wages in the form of land were gradually being replaced, first by wages in the form of products, and then by cash wages, so too, sooner or later, with each new upward movement of industry, the industrial worker who still cultivated land would finally migrate to the towns.

But in addition the neglect of this occupational group by scientific approach may be partly due to the fact that these families with their small agricultural properties, plots or gardens, on the one side, and the great variety of their principal occupations on the other, are very difficult to deal with statistically and to classify clearly. Just because the structure of the group is characterized by its multiformity, its members are, so to speak, neither fish, flesh, nor fowl. From the agricultural standpoint, their holdings are not really agricultural undertakings in the proper sense of the term, and, in particular, they do not produce for the market. Sociologically, too, these families cannot be regarded as purely rural.

For these and many other reasons agricultural science tends to regard the industrial worker on the land as a foreign group among the true rural population. Owing to the lack of fundamental research into the historical development of this occupational group, both in general and with special reference to different industries, regions, and peoples, and also to different periods of modern industrial development, there is much lost ground to recover. Such research should be organized on a broad basis, and it would be especially welcome if economic historians would contribute to it. On this basis, social and economic science could then describe and investigate in detail the structure of the industrial working class with reference to its connexion with the land in the recent past.

Especially, comparison might be made between representative areas or between industries where the proportion of landless workers is high and those where it is low. This would add to the value of the material as a whole and increase its usefulness for the purpose of practical economic policy, most important in the near future.