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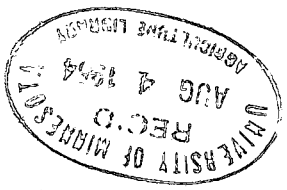
The Problem of Surplus Agricultural Population



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By J. D. BLACK

Dr. J. D. Black, Professor of Agricultural Economics at Harvard University, probes analytically into the theoretical basis of the problem.

IT has been reported that on one occasion a certain American agricultural economist undertook to explain to Mr. Alexander Legge,[1] then Chairman of the Federal Farm Board, that really there is no such thing as a surplus of a farm product; that all that is needed is to get the price down where the market will 'clear' and the 'surplus' will disappear. Mr. Legge is reported to have stared at the economist for a space and then to have ejaculated, 'Well, I'll be damned!' I am sure that he would have been similarly moved to expletives if some one had said to him that India really has no surplus agricultural population; that all that is needed is to put everybody at work by giving them a larger fraction of the land now being farmed by others.

So far as I have extended my observations, no single agricultural economist in the United States refrained during the 1920's from undertaking his own definition of the 'surplus' of agricultural products. No doubt equal versatility will appear in the definitions of the 'surplus agricultural population' that this initial number of the *International Journal of Agrarian Affairs* will stimulate. I never intended to induce any such travail when I introduced my ideas relative to the man-land ratio into the fecund soil of the Fifth International Conference of Agricultural Economists at Macdonald College in August 1938.

In fact, I do not remember even using the term surplus in my discussion of Secretary Wilson's paper. I spoke instead of a relatively 'high ratio of population to the land' as a necessary condition of peasant farming. It was Secretary Wilson who spoke of 'over-population', calling it a disease of peasant farming, and others who were anathematizing a surplus.

* * * *

One phase of the general body of thought suggested by the term surplus when applied to population has received much discussion in the United States. It has been a favourite programme of one or more schools of agricultural reformers in the United States to

[1] President of the International Harvester Company before and after his assignment with the Farm Board; founder of the Farm Foundation of Chicago, Illinois.

reduce the number of farmers and farm workers, and usually along with this the amount of 'submarginal' land in agricultural use. At the height of the agitation for 'surplus removal', Mr. Wheeler McMillen, now editor of the *Farm Journal*, wrote a whole book under the title *Too Many Farmers*.[1] Dr. Rexford G. Tugwell in a paper before the American Farm Economic Association in December 1933 wrote as follows:

'In fact, we had too many commercial farmers before the depression. Three-fourths of our farmers already produce all that we can consume domestically; the remaining quarter on small unproductive farms produce relatively little. If full use were made of what is already known of the technique of farm production we could probably raise all the farm products we need with half our present farmers, or 12½ per cent. of our total working population.'[2]

Dr. J. S. Davis has always included this as an important part of his discussion of agricultural reform, and has recently returned to the subject in an article in the *Harvard Business Review*, Winter 1939, in which he speaks of 'surplus farmers' as a 'delicate subject' and apparently too little discussed (p. 135). Dr. Mordecai Ezekiel, at the Macdonald College Conference, as earlier and since, stressed the need for full industrial recovery as a means of absorbing the present excess of agricultural workers, and for sustained industrial production to provide jobs for the future excess of rural births. Furthermore, with increasing real income, a larger proportion of consumption and production will consist of non-agricultural goods and services, requiring more workers to produce them. Hence the need for large city-ward migration.[3]

No one who has attended Dr. O. E. Baker's missionary efforts to maintain our national birth-rate in the last ten years would accuse him of being biased in favour of urban ways of living. Nevertheless, one finds him writing recently as follows:

'Approximately half the farmers in 1929, a good year, produced less than $1,000 worth of products, including those consumed by the farm families. This less productive half of the farms produced only about 11 per cent. of the products "sold or traded", to use the census phrase. Probably the more productive half of the farms in a few years could be brought to the point of

[1] New York, Morrow & Company, 1929.
[2] *Journal of Farm Economics*, vol. xvi, pp. 64–5.
[3] See his article on 'Population and Unemployment' in *The Annals*, November 1936, pp. 230–42.

producing this remaining 11 per cent. if prices of farm products afforded encouragement.'[1]

The United States, however, has not been entirely free from exposure to ideas somewhat the contrary of the foregoing. The group that fostered the 'subsistence homestead' movement included several who would go as far as to try to hold on the land a considerably larger share than formerly of the sons and daughters of rural households. Some of them say that the commercialization of farming has been overdone, that to-day much economic energy is wasted in producing farm products to sell to obtain cash with which to buy goods and services that the farm family could produce at less real cost at home. The extreme form of this doctrine is expounded in Ralph Borsodi's *Flight from the City*;[2] the *reductio ad absurdum* form of it in Dr. Alvin Johnson's fulmination about Happy Valley in the *Yale Review*, Summer 1933. That the gentle haven of Secretary M. L. Wilson's mind still harbours notions of this general sort was made evident at the last Conference. And some may remember that the writer served on the Advisory Board of the Subsistence Homestead undertaking which Secretary Ickes and the Comptroller General choked to death. Just the exact nature of these notions has never been made clear. The writer will return to them later in this article.

In the meantime, perhaps an episode in 1932 will be of interest. In the National Land Use Planning Committee organization that Dr. Gray had set up in the spring of 1932, drawing in the leading workers in this field from all departments of government and from the state agencies, Committee No. XI on 'The Direction and Control of Land Settlement', of which the writer was chairman, was assigned the task of exploring the possibilities of aiding the unemployed by settling them on the land. An inquiry sent out to twenty committee members and others, including leading specialists on labour and unemployment, elicited about a fifty-fifty vote on the question whether or not, in the next decade or so, more of the population would need to make its living in considerable part from the land. Would such a vote be much more conclusive to-day?

Another body of thinking on the problem of population surplus

[1] *Graphic Summary of the Number, Size and Type of Farm, and Value of Products*, U.S.D.A. Miscellaneous Publication No. 266, 1937, pp. 4–5. The estimate of one-half is too high; of 11 per cent., too low.

[2] New York and London, Harper & Bros., 1933.

of course emanates from the specialists who deal with population matters 'scientifically'. They say, some of them, that the population ratio is beyond the 'optimum point' in most countries, and that birth-rates should further decline. But another group asserts that the population of the United States and most of the western world has already declined past the point of safety and that we must soon bestir ourselves mightily.

It is soon evident as one explores the literature that three different standards are in mind in determining how much agricultural population is a surplus. The simplest and most obvious of these is the *normal* for the industry. Thus, if fewer people have been migrating to the cities than has been usual, or more have been migrating back, then the additional farm population resulting is called a surplus. Thus the two millions of farm boys and girls said to be dammed up on the farms of the United States because of the stoppage of the usual flow to the cities are surplus agricultural population.

A second and more involved standard is the population in agriculture which is able to obtain the same returns from its labour and content of living as comparable social classes obtain in other industries in (*a*) the same region, (*b*) the same country conceived as a whole, or (*c*) the same world or some part of it. Thus one might say that Alabama has a surplus agricultural population only if its farm people are unable to live as well as comparable social classes in its own cities; or that a surplus exists if they are not able to live as well as comparable city groups generally in the United States; or that Italy in general has a surplus population because its people do not live as well as those of the United States.

Loose or indefinite as such a standard is, no doubt it is the one most commonly in mind in discussions of this subject. It parallels exactly the most common use of the term surplus when applied to farm products. However the Congress of the United States may have had to define such a standard in writing an Agricultural Adjustment Act to be administered, what it was seeking was a set of prices and incomes for farmers that would enable them to live as well as other folks. This is what certain farm groups are aiming at, but with rear sights too high, in their legislative demands for prices fixed at 'cost of production'. It will never be possible to determine such a standard with scientific precision. The producer's conception of a fair price for milk, remarked a milk administrator

recently, is always one more cent per quart; the consumer's conception, one cent less.

The third possible standard is the population that obtains the optimum return for its effort—the population just large enough so that, if there were 5 per cent. fewer or more people in an area or country, the average return for all would be perceptibly less than now. This is even more difficult to establish than the last one. Returns *per capita* in the United States have been higher each succeeding census; but at any one of these censuses probably since at least 1880 a smaller population with an equivalent supply of capital goods and skill would have had a larger *per-capita* return. The supply of equipment and skill and organization has increased more rapidly per worker than the supply of natural resources per worker has declined. No doubt something like this has occurred in most countries of the world that have experienced an 'industrial revolution', or an agricultural one, for that matter. Conceivably, the countries with lowest net gains in numbers, or even with declines, will show the largest increase in *per-capita* returns in the coming decades. Equally conceivably, however, without the stimulus of growing numbers and with the probable deadening effect of an ageing population, the rate of improvement in the arts will slacken, and little or no increase in *per-capita* returns appear in the countries so affected. In application, therefore, population changes and changes in the arts cannot be treated as independent variables.

Any analysis in terms of the optimum also has the further difficulty customarily belaboured of defining the nature of the return, whether as income in dollars or pounds, as income in satisfactions, as welfare (somehow defined), as quality of person, &c. Professor A. B. Wolfe may insist, as in his *Annals* article, that the concept has no usefulness except in terms of what is essentially money income;[1] but others, even economists, may recognize various orders of value that cannot be converted to dollars or pounds, or lack real meaning if so converted. Our public parks might mostly be converted into 'productive' crop land, pasture land, and forest; but would the *per-capita* return really be increased? One might try his hand at reducing all the values in the use of parks to a dollar basis, but it would be a waste of effort and fail.

Obviously there is no purpose in choosing between these

[1] 'The Theory of Optimum Population', November 1936, pp. 243–9.

standards or measures of the surplus in the agricultural population. Each has its particular uses and meanings. The important thing is always to make clear which one is in mind at the time. Equally obviously no one of them can be applied with any exactitude. But we must not let this difficulty lead us into discarding the concept. The sun is the same distance from the earth whether the astronomer does a poor or good job of measuring it. In some valid meaning of the words, India has a surplus agricultural population, you may be assured; likewise it has a larger surplus than has Italy or Spain.

* * * *

The concept of an agricultural population surplus in terms of temporary abnormalities needs considering more carefully because of its close relation to matters of current agricultural policy. It is no idle jest that some economists may hold that this is the only sense in which population surpluses can exist. On the average, over a run of years, they maintain, the annual flow from country to city is so large, and even the counter-movement, that the two rates of *per-capita* return must be very closely the same. When some serious disturbance hits agriculture, as during and immediately following the World War, several years may be required for the ensuing adjustment. The demand for the farm products of the area may fall off, so that an actual sustained decrease in production and population is needed. A few years of more rapid migration than usual will turn the trick. In the short run of the few years 1921–4 the rural districts were indeed unusually overpopulated, and any true comparison of *per-capita* returns would have shown this. But by 1925–9 the disparity was non-existent; and thus in all similar periods. Then with very great unemployment in the cities from 1930 to 1934, the cityward migration fell away to a fraction of its usual volume. Even a poor income on the land, the statement commonly runs, is better than no job at all, or only an occasional one, in the city.

Then why do not the usual statistics on *per-capita* agricultural and urban incomes show them to be the same? The difficulty, it is claimed, is with the statistics—they misrepresent the situation. The writer has always conceded this; in fact insisted upon it. It is particularly true of those that are presented in terms of some 25 or more per cent. of the nation's population living on farms receiving

10 per cent. or less of the national income.[1] But it is to be doubted if the amount of misrepresentation in the statistics wholly or even very largely makes up the difference in the incomes commonly reported.

It is true that the revisions of indices of prices received and paid by United States farmers that the Bureau of Agricultural Economics has been issuing from time to time since 1933, based upon additional data that have been collected, are whittling down the price disparities, upon which the agricultural reform movement of the 1920's was based, until they are about to vanish almost entirely. But, after all, this is only a price comparison on the 1910–14 base. Suppose farm buying power in the United States was as high in 1925–9 as ever before in history, as now seems to be true; did not real wages and salaries of a majority of urban working groups double or nearly so between 1910–14 and 1925–9? Did not the capital value of much urban enterprise similarly expand because of increased earnings on old investments, or the increased labour cost of new investments? Probably, however, the developments of the depression period since, including the vast amount of unemployment, have in effect cancelled out some of the relative gains of the urban groups in 1920–9, especially those of labour.

The view that agricultural population surpluses are largely if not wholly occasional is held in varying degrees and shades, and it will be worth our while to examine these a bit carefully. My former professor of sociology, E. A. Ross of Wisconsin, used to stress the point that it is not the 'lure' of the city that attracts boys and girls; it is superior economic opportunities instead. The lure merely determines which ones will go. This might carry the implication that the play of economic forces keeps economic advantage about even in city and country; but Professor Ross was always strenuous in insisting that farmers generally were an oppressed group. Dr. E. G. Nourse's position can be read dimly between the lines of the final version of one of the chapters which he wrote in the final Brookings Institution volume on the A.A.A.[2] (It was more apparent

[1] See Chapter I in his *Agricultural Reform in the United States*; also his article, 'The Agricultural Situation, January, 1933', in the *Review of Economic Statistics* of 15 February 1933; also the article by H. C. Taylor and Jacob Perlman in the *Journal of Land and Public Utility Economics*, under the title 'The Share of Agriculture in the National Income', May 1927.

[2] E. S. Nourse, J. S. Davis, and J. D. Black, *Three Years of the Agricultural Adjustment Administration*, Chapter XV. See particularly pp. 476–7.

in an earlier version.) It is that only the 'submarginal' farmers fail to keep in proper adjustment most of the time. The commercial part of agriculture can be expected to keep itself in good adjustment except in emergencies. 'If it (A.A.A. policy) be to see that the nation's agricultural supplies are produced economically and efficiently and that those who produce them receive the going rate of return in labour and capital, this defines a problem which could and should be met by use of actual adjustment and not involve permanent agricultural subsidies.' It can be assumed that the 'actual adjustment' of which Nourse speaks must include population adjustment as well as output adjustment. That Dr. J. S. Davis looks upon the present surplus of farm population as a temporary condition that will adjust itself in good time if left alone is evident from his most recent utterances on the subject of agricultural policy, from which I quote the following statements:[1]

'There is no prospect that such a large farm population as we now have can earn a satisfactory living from agriculture.'

'The annual drift from farming into other occupations, partly offset by a return movement to the farm, indicates that this surplus, like others, normally finds ways of being absorbed.'

'Any such true balance (between industry and agriculture) . . . is not a static proportionality, but a shifting one, in which social forces are inexorably reducing the proportion in agriculture.'

'But governmental efforts to resist these forces obstruct the attainment of a new equilibrium without restoring conditions satisfactory to farmers.'

In line with these statements he now concludes that 'in retrospect the period of 1924–9 seems to have been reasonably "normal" for agriculture', and that agriculture was merely 'lagging somewhat behind' in making adjustments to changing conditions.

The writer's opinion always has been that even if farm population numbers do presently swing back to a normal after a disturbance, this normal represents a generally prevailing higher ratio of population to natural resources and capital goods than is found in urban production, and hence a lower *per-capita* return; that partly as a matter of historical carry-over from past conditions and partly as a matter of continuance of potent institutional holds, the rank and file of farm families are still habituated and bound to accept smaller

[1] 'Agriculture and the Nation's Business', *Harvard Business Review*, Winter 1939, pp. 129–37. (The quotations are from p. 135.) Dr. Davis employs the phrase 'surplus farmers'.

returns than do comparable urban groups; and that in very few periods in any country has the swing in population numbers proceeded far enough on the scarce side to bring over-compensation to agricultural workers. As a result, the swinging nearly all takes place on one side of the true equilibrium point of free, pure competition. This is what the writer tried to state as a reply to Dr. Nourse in his 'Supplementary Statement' in the Brookings volume.[1]

A further point that the writer has tried to make is that if these institutional holds could all be broken, less of the social product would be absorbed in the handling of farm products after they leave the farm, and less in producing and distributing urban goods and services; and in consequence farmers would receive a larger volume of real goods and services in exchange for this production. If in addition the habituations of farm folks to accept relatively low incomes were shattered and dissolved, we could have more farm families than now living on a higher plane of living—'quality' as well as 'quantity' of farm population being raised.[2]

Such a combination should not seem impossible or inconsistent. Instead, these two changes should contribute to each other. They have, in fact, done so in past decades. In spite of the institutional factors named, farm folks along with others have found their real incomes, measured in content of living, rising conspicuously in the past few decades because of the cheapening of automobiles, better roads and schools, the extension of telephone service and lighting, daily mail delivery, the radio, &c. And along with these betterments they have come to demand more in return for their efforts, and have moved more freely into other occupations when returns have subsided.

It will be apparent from this why the writer takes exception to the statement made at the conference in 1936 to the effect that farm folks must take the returns that come to them in the market place or become 'pensioners of industry'.

[1] See pp. 488–9 especially.

[2] When the writer stated this position in his *Agricultural Reform in the United States*, Dr. J. S. Davis countered with a preference for dividing the larger real income of agriculture thus to be obtained among still fewer farmers than at present. He wants 'a more limited number of higher-grade farmers'; *Quarterly Journal of Economics*, vol. xliv, p. 156. If he assumes that the processes of free economic adjustment would work to this effect, he must think that agriculture is now even more undercompensated than does the writer.

One reason for assigning heavy weight to the elements of habituation mentioned in the last section is their obvious importance in maintaining large variations in farm population density, in ratios of resources and capital goods to population, and in *per-capita* returns, between different regions of a country without nationality barriers such as the United States, as indicated in Table 1 and Chart 1. Surely the farm families of some parts of this country must be content with smaller returns than those of other sections, or perhaps are so poverty-beset as to be unable to move in some cases. Otherwise such difference could not persist until now.

TABLE 1. *Net Farm Income per Agricultural Worker by Geographic Divisions; and Amounts of Productive Agents, 1929*

Geographic divisions	*Annual net farm income**	*Arable land†*	*Value of land†*	*Value of capital goods‡*	*Value of agricultural property§*
	$	acres	$	$	$
E.S. Central	490	24	1,120	800	1,920
S. Atlantic	610	25	1,720	1,420	3,140
W.S. Central	680	41	2,280	1,030	3,310
N. England	780	22	1,940	3,390	5,330
M. Atlantic	860	32	2,220	3,730	5,950
E.N. Central	960	55	4,100	3,390	7,490
Mountain	1,350	97	4,860	3,060	7,920
W.N. Central	1,360	129	7,190	3,930	11,120
Pacific	1,370	53	6,980	2,700	9,680
U.S.	$960	58	$3,670	$2,650	$6,320

* Per agricultural worker ten years old or over as reported in the Census. Includes returns to labour.

† For number of agricultural workers ten years old and over, see Fifteenth Census, 1930, *Occupations*, Table 13. For acres of land of various classes, and values of land, see ibid., *Agriculture*, vol. ii, part i, Tables 3 and 11.

‡ Ibid., Table 11.

§ Sum of two preceding columns.

The first two divisions in the table, both in the Old South, east of the Mississippi River, have about 130 head of farm population per 1,000 acres of arable land, and a crude birth-rate of 22 per 1,000. Comparable figures for the North Central or Mid-west states are 50 and 18·6; for the Pacific states, 48 and 14·5. The farm population showed no decrease in the Old South between 1920 and 1930, a decrease of 13 per cent. in the Mid-west, and a slight increase in the Pacific states (which are still in process of development). The movement from southern farms to southern industry and to the

north is not yet heavy enough to offset the high birth-rate. The farms of the south mainly remain small-scale enterprises, growing

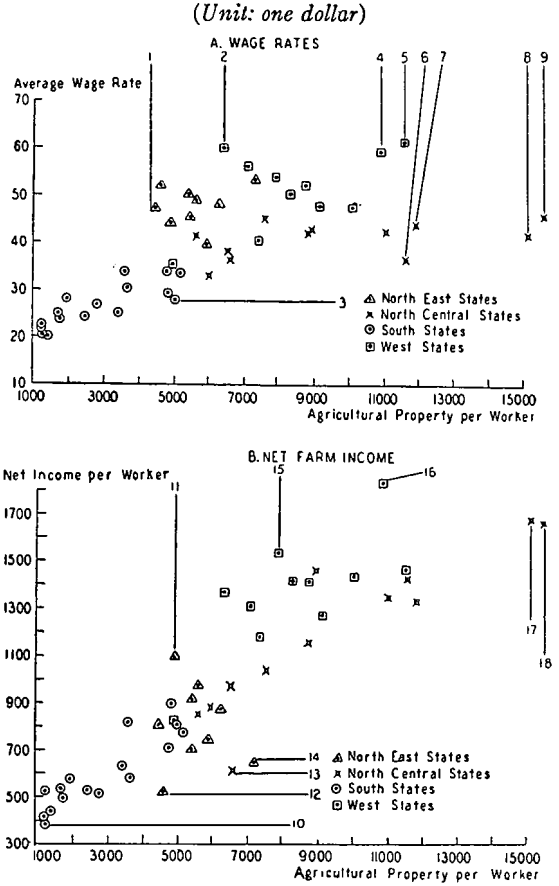

CHART 1. *Relation to Monthly Farm Wage Rates, 1925–9, and to Net Farm Incomes, 1929, of Agricultural Property per Worker, by States, 1930*[1]

intensive crops with relatively small amounts of power and machinery. They are 'peasant' farms, if you like. The Mid-west farms are tending to become larger, more mechanical, and more

[1] States are numbered as follows: 1. N.H. 2. Ariz. 3. Texas. 4. Nev. 5. Calif. 6. Kan. 7. S.D. 8. Iowa. 9. Neb. 10. S.C. 11. Me. 12. R.I. 13. Md. 14. Conn. 15. Idaho. 16. Nev. 17. Neb. 18. Iowa. The wage rates are with board and lodging furnished as perquisites.

commercial, except near cities and mines; but at only a very moderate rate in many sections. The Pacific states still have an increasing number of intensive but highly capitalized fruit, truck, and poultry farms; but this is confused in the averages with the large-scale grain farming and ranching of the semi-arid areas of these states. Migration from other areas, not always from farms, more than offsets the low birth-rate.[1]

The close correlation between net income and quantity of land and capital used per worker is so obvious and conventional an economic relationship that it needs no comment. That it is not more clean-cut than appears in the chart is to be attributed mainly to errors in the data. The net income estimates are particularly crude. The wage figures fail to include the low piecework rates for much labour in intensive crops in the north-east and Pacific states.

Surely in a free country like the United States these wide differences will level themselves out in time? The process is proceeding very slowly and probably never will give us an entirely level plain. There are parallel differences between parts of Italy, of France, of Germany, and of Great Britain. They show a strong tendency to persist. Even within a single state like Wisconsin there may be almost as wide a difference as between the south-western and east central counties.

A most interesting speculation concerning such a condition as exhibited in the chart relates to the slope of the regression line that might be derived for it. Apparently with about $10,000 of property per worker the net income per worker is about $1,400; with $2,000 of property it is $500. Thus five times as much property is associated with less than three times as much income.[2] Does this relationship have to be just so? Would it be different in another country? At another period? More important, if the groups around the $2,000 point were to obtain more capital goods and land, would their net incomes increase according to this regression line, or at some other rate?

Such considerations as these are basic to the question as to how much of the population of any of these regions is *surplus*. The optimum theorists might apply their doctrine in such a way as to

[1] More details relating to this subject will be found in articles by the author in the *Review of Economic Statistics*, May 1939, and in the *Annals*, November 1936.

[2] If the full quota of expense items could have been deducted, the ratio of the net incomes might have been appreciably different.

say that, if there is no apparent tendency for the regression distribution to sag to the right, there is no under-population anywhere in the United States. This would be scarcely valid, however—there are too many geographical variables not analysed. A more usual approach will be to compare the net incomes per worker at various points on the regression line with those of comparable social groups and to say that wherever a negative difference appears then there is

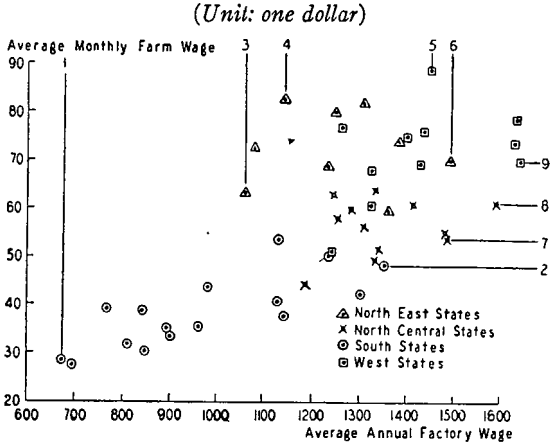

CHART 2. *Relation between Factory Wages and Farm Wage Rates without Board, by States, 1925–9*[1]

over-population, the amount of which could be roughly calculated from the chart. If comparable groups in the same states were taken, however, not much over-population might appear, as is suggested by Chart 2. Then how about comparison with agricultural incomes in the west? But we have been told often of late that our west is over-populated. Or with some urban groups in the north? But what groups?

★ ★ ★ ★

Concerning the even more pronounced differences between countries in the ratio of population to resources, nothing will be offered except some illustrative data on variations in sizes of farms

[1] States are numbered as follows: 1. S.C. 2. W. Va. 3. Me. 4. R.I. 5. Calif. 6. N.Y. 7. Ohio. 8. Mich. 9. Nev. The wage rates in this chart are those reported 'without board', that is, with the worker providing board and lodging for himself. The defects in the wage rate data are particularly apparent in this chart.

between countries and within countries. Size of farm in acres of land is of course only a very rough measure of the man-land ratio; but the differences in Table 2 are so great that the crudity of the measure loses importance. In some of the countries at the bottom of the list, much of the land in farms is not very productive. The breakdown by size groups for three of the countries in Table 3 gives more meaning to such data. If even the United States has a surplus farm population, how much of a surplus has England? Japan? It would indeed be interesting, if one had data on agricultural property and income per farm worker for a set of countries, to observe the rate at which the second changes with the first as one goes to the right on a diagram such as the lower part of Chart 1; and whether particular countries tend to be out of fit with the regression line. It would be interesting, for example, if it appeared that Denmark with a lower real[1] property ratio than the United States had fully as high real[1] incomes *per capita*. But one could not conclude much from it without a great deal of supplementary analysis.

So far as mere difference in size of farms is concerned, this can be adjusted simply by having fewer operators and more labourers. English farms do employ more labour than those of the United States—several times as much. But given a certain national population total and capital goods total, the only way to reduce the man-land ratio is to shift more of the workers to urban occupations. But carried beyond the point where real agricultural and urban incomes are equal, this process will reduce the national average income *per capita*. The final resort must be a reduction in the total population or increases in supply of agricultural capital goods (including land improvements), or both. The latter may involve a curtailment of present consumption.

Back in 1910 to 1922 the graduate students at Wisconsin, and perhaps at a few other places, spent months each year discussing the 'proper degree of intensity of cultivation'. There must have been a little discussion of it at Harvard too—at least, Professors H. C. Taylor and T. N. Carver once engaged in a controversy about it. As I have said elsewhere, such debate is futile unless one can develop controls that will change the farm population supply or the capital goods supply in agriculture.

[1] The term 'real' is intended to provide for adjustments for differences in price levels.

TABLE 2. *Average Size of Farms in Selected Countries at Most Recent Census (1929–37) and an Earlier Census, expressed in Acres*

Country	Most recent census	Earlier census
Japan*	2·7	2·5 (1903)
Greece†	9	..
Switzerland‡	15	..
France§	29	27 (1911)
Denmark‖	39	40 (1919)
England¶	82	66 (1907)
United States	158	146 (1899)
Canada**	234	124 (1901)
Ontario	119	105
Saskatchewan	408	285
Argentina††	266	..
Australia‡‡	665	..

* *Japan-Manchukuo Yearbook*, 1938, pp. 334–6. Excludes pasturage amounting to about half of tilled acres.

† *Bibliography*, No. 39, B.A.E., p. 30.

‡ *International Institute of Agriculture Yearbook*, 1934–5, p. 865.

§ *International Institute of Agriculture Yearbook*, 1935–6, p. 989, includes private forestry holdings and public lands.

‖ *Denmark*, 1937, pp. 69–70.

¶ *Great Britain Agricultural Statistics*, 1936, not including rough grazings.

** *Seventh Census of Canada*, 1931, vol. viii, pp. 4, 380, 388.

†† *Argentine Yearbook of Agriculture*, 1935, p. 486. Farms only; if ranches were included, the average might be more than a thousand.

‡‡ *International Institute of Agriculture Yearbook*, 1934–5, p. 221.

So far as any one country is concerned, relative over-population in some areas can be corrected by speeding up the migration from its farms to other areas—provided the birth-rate does not expand and take up the slack. In that case 'sanitary measures' may be needed in addition. Relative over-population in whole countries calls for similar out-migration, to which the world to-day offers little encouragement. But the time may not be more than a few decades away when several more important countries will begin to open their ports of entry to those nationalities that have acquired an ability to keep new births from crowding in and filling every gap. When such a stage in history is reached, we can expect that the great disparity in population-income balance between countries

TABLE 3. *Percentage Distribution of Total Number of Farms among Acre Size Groups in Three Countries*

JAPAN, 1935		ENGLAND, 1936		ARGENTINA, 1935	
Classification of holdings according to size (acres)	*Percentage of farm families in each size group*	*Classification of holdings according to size (acres)*	*Percentage of holdings in each size group*	*Classification of holdings according to size (acres)*	*Percentage of holdings in each size group*
Under 1·25	34·0	1–5	18·1	Below 25	6·7
1·25–2·50	34·2	5–20	24·3	25–62	19·6
2·50–5·00	22·4	20–50	19·0	63–125	17·6
5·00–7·50	5·7	50–100	16·1	126–250	20·3
7·50–12·50	2·3	100–150	8·7	251–500	23·9
12·50 and over	1·4	150–300	10·0	501–750	7·7
		300–500	2·8	751–1,625	3·6
		500–700	0·6	1,626–2,500	0·4
		700–1,000	0·3	Above 2,500	0·2
		Over 1,000	0·1		

will begin to disappear. Permitting imports of humans means sharing a nation's resources with them; permitting imports of commodities commonly means no such sharing, and increased incomes in addition. Yet in times past many nations have been more hospitable to imports of humans than of their wares. This may well prove to be true again in the future.

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Obvious as most of the discussion in this paper is, nevertheless it deals with elements in the agricultural problem that are often largely or wholly ignored. When the professed economist does this ignoring it is not unusual for his fellow social scientists to accuse him of overlooking important 'non-economic' factors. Yet we may wonder if they really are properly so designated in many cases. Most of the 'social forces' that prevent the levelling out of differences in the man-land and income ratios are non-economic only if one accepts a system of economic thought which hypothesizes nothing but free, pure competition—such perfect fluidity that the effects of dynamic factors are at once allowed for. This is a weird system of economic thought, but nevertheless unconsciously assumed by countless millions of educated persons, including no

small number of professional economists. I am not even sure that Secretary Wilson did not assume such a system in his paper at the Macdonald Conference. It is entirely proper to say, however, that other factors than conscious deliberate wealth acquisition enter into such relationships and strongly tend to perpetuate such differences. The writer would maintain that they are the most potent of the influences. The 'economic man' of his apocalypse, however, has these traits as well as a tendency to acquire material wealth purposefully.

Given an economic man in this more realistic sense, how far can we expect him ever to equalize returns between farming and urban industry and trade? The writer would say *never*, in the relatively narrow sense of material wealth and income in which economists are prone to conceive of these terms. Even Tugwell, in writing on this point in 1934, could think of this matter only in terms of a contrast between living in small communities that would 'function merely as small eddies of retreat for exceptional persons', and living and working 'in the more vigorous main stream of a highly complex civilization', which latter he defines in the next sentence to mean living in a city, or perhaps on a strictly commercial farm.[1] A contrasting point of view is that modern transportation, communication, education, recreation, sanitation, lighting, and heating, have brought, or are in process of bringing, to rural living in the United States so large a part of the culture and comforts of urban life that a combination of these with the natural advantages of life in the country will prove increasingly satisfying to a sizable fraction of our population, and that we can expect this to lead to significant effects on the location of dwellings and an increasing choice of ways of living that combine varying amounts of farming with other occupations. We shall have more year-round country homes, more summer homes, and more servicing by rural residents of summer vacationists. Such developments as shorter working hours and weeks, earlier retiring, and old-age security payments are strong influences in this direction. Some of such living will mean keeping out of the 'main stream of a highly complex civilization'. But little more than does living and working in a factory town. Much of it will offer as full and complex a life as city residence affords.

It is to be doubted if our society has taken into its consciousness

[1] *Journal of Farm Economics*, vol. xvi, p. 65.

the full meaning of these developments. Our public programmes mainly pass them by. Our public agencies are not organized to fit their activities to them. The particular areas most affected by them tend to be neglected no-man's land, politically, socially, and economically. So understood, the very badly misnamed subsistence-homestead programme acquires a real significance.