Problems of Rural-Urban Migration: Some Suggestions for Investigation

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THE QUESTION suggested for discussion is: " Under what circumstances are governments that succeed in creating new employment opportunities liable to find urban employment and unemployment increasing together, each new urban job attracting more than one new migrant from the country? " Rather than attempt to answer it directly, I propose to consider the problems of urban drift as these relate to agricultural conditions in developing countries, in the hope that they may have some bearing on the question.

Problems of measurement

It is probably still true, as it was when the ILO published its study *Why labour leaves the land* [2] in 1960, to say that in discussing the problem of urban drift one of the difficulties is to assess its magnitude. Open unemployment may not be so much in evidence as underemployment, caused by the movement of rural migrants into seasonal or casual jobs, at very low levels of productivity, which depress the level of earnings in the services sector and in the urban sectors generally. The condition is recognisable. If five people are needed to carry two small suitcases and five more to call a taxi; if cigarettes are sold in the streets by the piece, not the packet; then disguised unemployment exists, and is not much disguised. But because this sort of employment cannot be classified, there would appear to be no way of measuring the relationship between its increase and the growth of employment opportunities created by the government. The question as posed above relates the phenomenon to

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[2] ILO: *Why labour leaves the land*, Studies and Reports, New Series, No. 59 (Geneva, 1960).

modern development planning, but urban drift is just as likely to occur as a result of large-scale unproductive public expenditure, as in the classic cases of Calcutta, Naples after the Second World War and London before the railway age.

As to the conditions in which this type of movement is likely to occur, the assumption that the general cause of rural-urban migration is disparity in earnings between urban occupations and agriculture is obviously not a sufficient explanation, since in the more advanced countries labour leaves agriculture for urban employment at standard wages, without causing an increase in urban unemployment or underemployment. In economic terms, urban drift must be interpreted as the result of agricultural unemployment, which induces rural workers to move, in the hope of finding employment at any level of earnings, since the chances of finding employment in large towns are higher than on the land. However, some authorities have claimed that labour moves to towns as a " socio-psychological necessity "; and there are cases where this kind of explanation seems plausible. It may well be that social attitudes are changing. Another factor is, of course, the low cost of public road transport, which enables rural people to travel long distances. Possibly some further investigations of the causes of drift have been made in recent case studies; otherwise, there seems a need for further inquiry.

The essential difference between what may be called normal outward movement and urban drift is that, whereas the former tends to raise rural wages to the level of urban wages, the latter tends to reduce urban earnings to the level of rural earnings. In the case of an advanced economy in full employment, the movement of labour out of agriculture will not cause agricultural wage rates to rise to the level of urban wages, because farmers can reduce their demand for labour by the use of machinery; and they can amalgamate, as they are now doing in the United Kingdom, and transport labourers from one farm to another, as the need arises. None the less, as the limits of mechanisation are reached agricultural wages will tend to rise. In urban drift, labour movement is excessive in relation to urban employment opportunities; but is not sufficient to cause a shortage of labour on the land, and therefore does not result in a rise in rural earnings or wages. If disparity in earnings were the main cause of rural-urban migration, then it might be expected that the rate of movement would rise if the disparity widened as a result of falling incomes in agriculture, irrespective of any increase in urban employment. In sudden disasters of drought and famine, migration does in fact increase in volume, simply because rural people go to the towns in search of food relief, as they did in 1958-61 in Syria and Iraq, and in India in the recent food crisis. But gradual long-term falls in the level of farm incomes per head, resulting from falling labour productivity, or falling prices, do not appear to result in increased movement in the absence of increased urban employment opportunities.

Now that the coverage of labour force statistics is so much wider than it was ten years ago, it might be possible to investigate rates of rural-urban migration in relation to worsening agricultural labour conditions.

The concept of the surplus

Does this mean that we have to return to the concept of " the surplus "? Because the concept is now so horribly muddled, it is difficult to use it at all without attempting to clear up the various issues confused in it. One way of doing this is to distinguish between what I may call the hydrocephalic or modern economists' surplus, which is a concept of underemployment and wastage of labour, and the hydra-headed surplus, which is related to land areas, and is a subject for town planners, geographers, ecologists, and old-fashioned economists. Both are often confused, and both are relevant to our subject. But they can and should be distinguished.

The first concept I call hydrocephalic because it results in watery thinking: a common condition has been swollen into a precise magnitude. The common condition is underemployment in agriculture, which in the form of seasonal idleness is found in most types of farming—perhaps in all except highly diversified crop production and dairy farming. At high rural living standards, seasonal unemployment is not an evil; those American and Canadian farmers who winter on the coast probably do not have much to complain of. At low rural living standards, it can exist as a result of low intensity of cultivation, even when there is no shortage of land in relation to farm population. Iraq presents a standard example, because in that country there is no shortage of land or water, yet labour requirements in agriculture are highly seasonal, because on most of the land only one crop is grown in two years, and there is no summer cropping on the greater part of the land. At the peak period, the harvest season on the small area under cotton, when according to labour force theory the male agricultural labour force should be fully employed, the men sit drinking coffee and watch the women and children picking the crop. The reasons and remedies for this situation I have discussed at length elsewhere [1]; all that need be said in the present context is that a larger labour force could be more fully employed at higher levels of output and income per worker, given certain technically and financially feasible improvements in irrigation. The point is that in this case there is no need to estimate underemployment, or to discuss the need for transferring the surplus to other occupations. Labour is in fact moving out of agriculture at a high rate.

The other condition is that of agricultural over-population, in which there is an excess of labour in relation to the area of cultivated land,

[1] *Land reform in principle and practice* (Oxford, Clarendon Press, 1969), Chapter IV.

which is assumed to be limited, and in practice usually is limited. This condition is recognisable as Malthusian over-population, i.e. as falling output per head over a period in which population increases faster than agricultural production. As is well known, this condition existed in the United Arab Republic between the two wars, when there was no increase in national income and incomes per head fell, while agricultural output per unit of labour fell continuously (according to Professor Hansen's estimate, by about 1.5 per cent per annum between 1913 and 1933).[1] This condition was difficult to remedy, because both the extension of the area in cultivation and intensification on the area already cultivated were limited by shortage of water. There is a still graver form of over-population, in which over-cultivation destroys the fertility of the soil, which is recognised by geographers and ecologists, though economists are generally unaware of it; I shall return to this later.

In practice, the conditions of underemployment and over-population usually exist together, and in making estimates of the size of the surplus it is hard to distinguish between labour which is seasonally unemployed and labour which is redundant, i.e. the true surplus which could leave agriculture without reducing production, because other workers could work more. It is often difficult to estimate the size of the agricultural labour force itself with any precision, and even more difficult to estimate labour requirements in agriculture. For these reasons it is possible to find wide discrepancies in estimates of the size of the surplus. For example, in the United Arab Republic an official plan estimate for 1960 puts the size of the true surplus at 25 per cent of the total male labour force, or 1.1 million out of a total 4.4 million. Professor Hansen, however, on the basis of lower estimates of the size of the male labour force, and investigations of seasonal labour requirements, concludes that, although there is open unemployment and much seasonal unemployment, there is no true surplus, because the permanent labour force is fully employed in the peak seasons and marginal productivity of labour is higher than zero.[2] Without making rigid assumptions about the length of the peak period and the elasticity of substitution of family labour, it is difficult to accept this conclusion. On the puzzle of zero productivity, there is nothing more that need be said, after Professor Myrdal's analysis.[3]

However, there is yet another difficulty, that the numbers of redundant labourers can be estimated only in relation to given types of farming, technology and structure, a methodological approach which Myrdal stigmatises as static in character, and so misleading in a develop-

[1] Bent Hansen and G. Marzouk: *Development and economic policy in the UAR (Egypt)* (Amsterdam, 1965).

[2] Ibid., pp. 60-64.

[3] Gunnar Myrdal: *Asian drama. An inquiry into the poverty of nations* (New York, Pantheon, 1968), Vol. III, Appendix 6: " Appraisal of concept and theory of underemployment ".

ment context. But unfortunately the assumption is by no means unrealistic in contexts of non-development. Moreover, the assumptions can be varied, to take account of changes. It is quite possible to estimate labour requirements on various hypotheses, though this method too can be misapplied.

In view of all these difficulties in quantifying the surplus, it is not surprising to find that some economists, particularly the untravelled, have rejected the concept altogether. Professor Myrdal, reaching what he describes as " an escapist solution "—recognition that the concept of underemployment is dependent on assumptions about policy—seems to lift it into an area of high subjectivity. Surely, it may be said, the condition is real, and can be diagnosed whether or not the government recognises it? The point is that for economists it is not real, unless it can be measured. Myrdal's solution reveals a profound understanding of the psychology of planners. The estimate made by Professor Vicinelli [1] of the labour surplus remaining in Southern Italy, to be absorbed into employment in 1965-70, represents a valid use of the concept, because it is related to a policy target. But if Danilo Dolci says the same thing—that the South is still poor—in more eloquent words, the planners cannot conceptualise. In the 1930s, when employment as a goal loomed as large as development does today, it was considered " emotive " to talk of agrarian poverty, farm distress, starving peasants; but to put these words into figures and estimate the percentage of surplus labour to two places of decimals seemed to make action necessary. The surplus, it was clear, had to be removed.

And it has proved impossible to remove it, in India and in other developing countries where higher rates of industrialisation have failed to increase demand for labour at sufficiently high rates. In South Asian conditions, " the whole idea of ' a removal ' is unrealistic ", as Myrdal says. It was worse than unrealistic, it was uneconomic, because belief in the practicability of rapid large-scale transfer led to the assumption that nothing need or could be done to raise farm labour or land productivity until the surplus had been removed, so that agriculture was treated as a buffer sector, to which little capital was allocated and in which even less was invested.

Governments which took a pessimistic view of the prospects of the surplus, and believed that some of it could be absorbed in agriculture if investment in agriculture could be increased, have in some cases at least achieved higher rates of growth. According to Professor Hansen, the United Arab Republic has thrown the switch to slowly rising labour productivity, with a slowly increasing agricultural labour force—rather

[1] United Nations European Study Group: *Rural social development*. Report of a United Nations European Study Group on rural social development within the framework of development in Southern Italy. Naples and Metaponto, 29 March-7 April 1965 (Oxford, Truex Press, 1965).

an achievement as compared with the Malthusian past. In two countries which had much excess agricultural manpower in the mid-fifties, there have been massive transfers of labour. In Italy the farm labour force fell from 8.3 million in 1951 to 5 million in 1964, and its share in the total labour force declined from 42 to 23 per cent. (The Vanoni plan had aimed at reduction to 33 per cent.) This change has considerably reduced the volume of unemployment in the South, although there is some surplus labour still. In Japan the rate of change has been phenomenal: the agricultural labour force has fallen from its post-war swollen total of 18 million in 1954 (45 per cent of the total labour force) to 10 million in 1967 (20 per cent) so that the farm labour situation has been reversed from over-all surplus to shortage of younger workers. How the " Big Change ", in Myrdal's phrase, was achieved in these two countries would be an interesting subject for analysis; the important point, in the present context, is that it was not achieved by neglecting agricultural investment. It may be objected that Italy and Japan are advanced countries and so are not relevant here; but fifteen years ago they were not, and the problems of surplus rural labour then appeared extremely grave. If there is any doubt on this point, a reference to *Why labour leaves the land* will show how little confidence the governments felt in the prospects of solution. Of course these big shifts in the distribution of population have given rise to new problems. Urban congestion in Japan has reached phenomenal intensity. New " socio-psychological necessities " make themselves felt. These aspects of occupational shift, however, must be left to the town planners and sociologists.

Resources for agriculture

Let us leave the cloud-capped towers and return to the unconsidered earth. My original estimates of over-population in Eastern Europe were land-based, because when the peasants used to say " we are too many ", they meant in relation to the land, not in relation to some assumption about policy. When the economists began conceptualising, they forgot all about land, though now that the problem of growing population on limited land areas becomes increasingly acute they will have to begin to think about it. The problem of narrowing the food gap in the developing world is still serious, as the Food and Agriculture Organisation's report *State of food and agriculture, 1969* reminds us. The main objective of agricultural policy in this world must be to raise output per acre and per man; and where the prospects of occupational change are small, these objectives must be combined with the objective of increasing labour force utilisation. Where land areas per head are small and becoming smaller, this is an extremely difficult thing to do. I want to emphasise this point, because it is one which the conceptualists tend to overlook.

Land areas really are relevant, as an eminent ecologist has recently shown.[1]

To fill the gap between the rate of growth of population and the rate of growth of food production means that more resources must be allocated to agriculture. More land, in the first place, a point which can be made by reference to Latin America. Mexico between 1950 and 1960 had the highest rate of increase in agricultural production in the world: it doubled agricultural production, by various means. Of these the most important was an enormous increase in the arable area, which added some 13 million hectares to the 10 million already cultivated. Food production per head of population increased by 50 per cent and there was some rise in labour productivity in agriculture, though the labour force figures are too uncertain to risk an estimate. Brazil in the same period increased agricultural production by 50 per cent, and the arable area increased at the same rate, about 10 million hectares being added to the 20 million already cultivated. Food production per head of population increased by only 10 per cent; there was some rise in agricultural labour productivity, probably not much. But in countries with no reserves of cultivable land this sort of increase cannot be made; the fact that India cannot add much to its arable area means that increased production is dependent on intensification by increased investment of capital, on acres which are already overcrowded, and where the farm population is still increasing. Yields must be raised, and can be raised, by the application of the results of the laboratory revolution—the seeds, fertilisers and pesticides propagated by the so-called Package Programme (the Intensive Agricultural Districts Programme) in India. There can be a breakthrough, but, as Michael Lipton puts it, it can only be " a breakthrough onto a plateau ". On about two-thirds of the cultivated land of India, owing to high climatic risks, yields cannot be stabilised without irrigation.[2]

This is also pre-eminently true of the Middle East region, where land without water is a meaningless abstraction. The prospects of higher yields, which will raise output per man, and of double-cropping, which can double labour requirements, basically depend on increasing the water supply, both in areas already irrigated and on new land. No doubt African agriculture is similarly dependent on fuller use of the water resource base, the pre-condition of fuller use of the labour force in many developing countries.

How much would it cost India to make fuller use of its water resource base and get, let us say, another 100 million acres under regular irrigation? When it is recalled that the estimated cost of the High Dam at

[1] Frank Fraser Darling: *Wilderness and plenty*, 1969 Reith Lectures (London, BBC Publications, 1970).

[2] See John W. Mellor and others: *Developing rural India : plan and practice* (Ithaca (New York), Cornell University Press, 1968), pp. 346-350.

Aswan was £500 million, and that it will add only 1 million acres to the 6 million now cultivated in the UAR (though it will also supply electrical power for industrialisation) it is obvious that a breakthrough will cost more than can be contemplated on the basis of India's own resources. These things being so, it was by no means unrealistic to think that the first thing to do was to get labour off the land. Anyone who looks at villages in Eastern Uttar Pradesh would come to the same conclusion: the tiny areas of land per head, the carefully consolidated tiny holdings, the poor thin crops. Compare these villages with those of Punjab, where there is twice as much land per head, a much larger proportion of land under irrigation, and much greater opportunities of employment in industry and building. Not surprisingly, the Package Programme there did produce a big increase in yields.

So while the result of rationalising the concept of underemployment is to show that planning policy should aim at increasing employment in agriculture, a reconsideration of the old concept of over-population shows that it is still important to think in terms of transfer of labour to other sectors at the same time. Whatever can be done in India by increased investment to raise yields per acre and incomes per head in agriculture, there will still be that terrible fringe of destitution in the villages, comprising the submerged section of the farm population which will not benefit by the rise in average incomes, because it is unemployed or underemployed.

The relevance of structural change

At this point the question of the relevance of structural change arises. Is it the way out of the problem of too little land and water? The great appeal of structural change, of course, is that it appears to offer a freedom of manœuvre to planning authorities which in the economic sphere they do not possess. Higher incomes, security, equality and fuller employment are the benefits to be expected: and if they can be quickly and cheaply conferred, how attractive the prospect appears. Unfortunately, the whole subject of land reform has now been inflated by propaganda to an extent that precludes analysis of results and comparison of experience. Demolishing the myths may mean undermining the faith, and that I should not wish to do.

Still, so far as labour utilisation is concerned, it must be said that the negligible and in some cases even negative effects of recent reforms suggest that the role of structural change in this aspect should not be exaggerated. Some distributive and collectivist reforms have reduced production and so reduced employment. Some tenancy legislation has led to eviction of cultivators. Some reform agencies have failed to calculate labour requirements in relation to the size of the holdings distributed,

so that many of the new farms were too small to support the family, with the result that the recipients made off for the shanty towns of Rome or Caracas at the first opportunity.[1]

It is of course true that land reform, by setting up a structure in which land ownership is more equally distributed, can provide a substitute for unemployment relief and old-age pensions, and will result in fuller employment, in favourable soil, climate and market conditions, which allow production to be intensified. In less favourable conditions, it will simply convert open unemployment into disguised unemployment. Unless the rise in land productivity can be sustained, small farms cannot continue to support or employ the farm family, as numbers increase and farms are subdivided. What happens in the long run can be seen in Yugoslavia, which has redistributed its land rather too often. In 1960, out of a total number of 2.6 million individual peasant holdings, 1 million had excess manpower, according to the Agricultural Census of that year. In old-established structures of this kind, accelerated industrialisation is likely to result in pendulum movement or part-time farming, as in Japan, the Federal Republic of Germany, Yugoslavia and Poland, where the surplus can be seen commuting in trains and buses between farm and factory. They are making the best of two bad jobs, which is certainly preferable to urban drift.

Judging by what I have seen in recent years in developing countries, whether structural change can lead to any significant degree of fuller employment depends on whether or not redistribution of land can be accompanied or followed by greatly increased inputs of land, i.e. an extension of the area in cultivation and an increase in farm sizes, or of capital, i.e. intensification of land use amounting to a change in the type of farming. Increase in these inputs depends on general agricultural policy rather than on the structural change itself. The real value of land reform, its true significance, is that by revealing the limits of structural change it throws into high relief the environmental obstacles to agricultural development; it leads into, and not out of, the problems of improving land use.

For this reason, if the role of structural change is to be investigated, it would be more instructive to deal with actual rather than hypothetical or conceptual results. Since international convention requires that remarks on this subject should never end on the down-beat, might I suggest that the employment potential of land settlement schemes is generally far greater than that of land reform? This type of structural change, less glamorised by propaganda, is often neglected. But in Africa it is of great importance and comparison of experience would be of real value.

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[1] See further my *Land reform in principle and practice*, op cit., in particular " Conclusion: the relation to development reconsidered ".

Conclusion: prospects for increasing employment

These reflections seem to be heading for a pessimistic conclusion, so far as the prospects for increasing employment in agriculture are concerned. This was not my intention, because there are in fact types of investment which are needed to raise agricultural production and in which there is a high employment potential. These are related to the environmental obstacles which land reform throws into high relief. They include shortage of land, and its generally essential complement, water, climatic risks, soil erosion, the destruction of land fertility through salinisation, regional maldistribution of farm population, distance from markets. To overcome these obstacles to better land use will require other kinds of land policy, if land reform is to result in any significant increase in production and utilisation of labour. I shall give a few illustrations of the way in which these policies might increase employment.

First, in the improvement of the infrastructure, there is high immediate employment potential in the construction of water control and storage projects and the building of canals. If land has become saline through the rise of the water table, as has happened in India and Iraq, then the only remedy is to drain it, and in draining there is considerable employment potential, as in land reclamation generally.

Measures to control soil erosion do not result in increased employment, since they usually require the withdrawal of land from cultivation. The worst form that over-population can take is over-cultivation resulting in the destruction of soil fertility. According to a recent survey of land use in Iran, land must be withdrawn from cultivation in the mountain valleys, on ecological grounds. The survey concludes that the only remedies are either migration to the towns, or employment in food-processing factories to handle increased fruit and vegetable production. Soil destruction has also occurred in Brazil, as a result of bad farming, not of pressure of population; land reclamation is necessary.

Measures to remedy maldistribution of population, which in some countries is quite as great an obstacle to increasing production as maldistribution of land, have a high employment potential. Resettlement will require new roads and new urban centres, both of which will increase demand for labour.

Second, there is some employment potential in the improvement of the superstructure. Distance from markets and lack of marketing facilities is a limiting factor, particularly noticeable in the oil-producing countries, where the increase of urban demand for food increases the import of canned goods, with which home production cannot compete. There is also some employment potential in industries supplying agricultural requirements, fertilisers, building materials, irrigation equipment and so on.

Projects designed to improve infrastructure and superstructure are likely to be costly and long term, and will require expert technical assist-

ance and appraisal. They are a long way removed from the pathetic kinds of community development that I have seen. But there is no reason why such projects should not be linked with genuine community development and land reform, provided that they are technically well planned and use a pay-roll. Unemployed peasants could be mobilised to reclaim land, dig canals and drains, terrace land, undertake afforestation, at low cost, provided that they could eventually benefit by a grant of land.[1] But this kind of antecedent integration will require a much more practical and technical approach than has characterised recent reforms. That is one reason why I should like to see a survey of settlement projects that have been planned on these lines.

The question remains of how such agricultural employment prospects are to be investigated. Clearly they should not be approached with a bag of exploded concepts or a sheaf of questionnaires. The dire results of the questionnaire method in the investigations of land reform by the international agencies—not that it is their fault—should by now have discredited this method of approach. Case studies are the best method, of course, but they take time and require field work.

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[1] See André Tiano: *Le développement économique du Maghreb* (Paris, 1963).