International Labour Review, Vol. 122, No. 2, March-April 1983

Determinants of manpower underutilisation and availability

E. KLEIN*

Introduction

The study of employment problems entails the consideration of a variety of issues which have a direct influence on policy making.

One of these issues is whether one of the factors of production, namely labour, is being fully utilised and under what conditions. Analysis of this aspect leads to the definition of unemployment and underemployment as different manifestations of manpower underutilisation.

A second issue relates to the impact that any underutilisation of manpower may have on society as a whole and on the individual. As regards its effects on society, the macro level, underutilisation is a clear-cut problem inasmuch as certain sections of the population are not contributing their full production potential to national development. From this angle, therefore, any underutilisation of manpower is the subject of policies [1] aimed at achieving the full integration of these people into the production process. As for its effects on the individual, the micro level, attention focuses more on people's well-being and the full utilisation of their labour power is regarded as a means of enabling them to earn an income capable of procuring a reasonable standard of living. What is important at this level, then, is to analyse the personal characteristics that prevent someone from obtaining a higher income (supply) and the employment conditions that are responsible for his low income (demand). Studies of this nature produce recommendations for policies aimed at improving personal aptitudes and/or conditions of employment.

In this article we shall analyse the concept of manpower underutilisation from the standpoint of society as a whole, focusing on manpower availability mainly in the traditional sectors and particularly in the traditional rural

* ILO Regional Employment Programme for America and the Caribbean (PREALC). This study was carried out at the Institute of International Studies at the University of California, Berkeley. The author expresses his thanks to the Institute and to A. Foxley and E. Brú for their assistance as well as to his PREALC colleagues for their comments on a preliminary version of the article. As not all their suggestions have been incorporated, responsibility for the views expressed rests solely with the author.

sector, and thus attempt to establish the supply-side determinants of manpower underutilisation.

Our principal hypothesis is that a conceptual distinction must be made between underutilisation of manpower and its availability since, because of the manner of working and the way of life in the traditional sectors, underutilisation is analytically different from availability. The concepts of underutilisation and availability will therefore be examined in detail. The following section will discuss two closely inter-related aspects of underutilisation: the concept itself and the operational problems to which its use gives rise. Next we shall analyse the variables which determine manpower availability in the traditional sectors. The final section discusses the importance of this conceptual distinction for drawing up policies designed to improve both the utilisation and the availability of manpower.

A. Underutilisation: concept and methodology [2]

The starting-point for any conventional analysis of employment problems, and particularly underutilisaton, is to be found in the manpower supply and demand variables applicable to any given situation, comparison of which makes it possible to identify variations in manpower utilisation and underutilisation in different sectors.

This approach is fully applicable to the realities of the labour market in the modern sector. But the same cannot be said with regard to analysis of the traditional sectors since, in order to permit comparison, a number of assumptions are made which are not always valid for these sectors. Since these assumptions relate to both the conceptual and the methodological aspect of the problem, this section deals with both aspects together.

It is assumed that the supply of manpower, measured at a given point of time, can be extrapolated over a longer period. Indeed, in order to be able to make comparisons between manpower demand and supply, the latter has to be quantified on the basis of information derived from censuses or surveys which include data on the actual or desired participation of individuals in the labour market. It is evident that, in a market characterised by seasonal fluctuations, information based on a unit of time loses its validity when extrapolated since the assumption is that both the demand and the supply are static (in terms of volume).

The second problem is that there can be participation in the labour process in units of time smaller than one day, as is the case with family members working on a casual basis for a few hours or certain days in conjunction with other activities; this often happens with schoolchildren in families running production undertakings in both the rural and the urban informal sectors, or with housewives who combine household chores with work in the family business. Attempts to tackle this problem are made in investigations aimed at ascertaining the total number of hours worked in a

week, but while they certainly help to clarify somewhat the question of part-time and casual work (not without difficulty, however), they do not solve the intrinsic problem of the static nature of the information obtained.

It is assumed that the distinction between work and/or productive labour and/or idleness is clear. This assumption is realistic as far as the modern sectors are concerned. People work away from home in a place specifically designed for such purposes; they usually receive a wage for the services performed, and generally speaking their jobs are defined in accordance with formal standards to which they have to adapt.

As far as the traditional sectors are concerned, the problem has to be broken down into objective and subjective aspects. The objective aspects have to do with the investigator's identification of a job as productive or otherwise. Two examples will illustrate the difficulty of doing this. Let us suppose that a self-employed carpenter is sitting at home with no work to do but has to remain there in case possible clients come looking for him; how is this waiting time to be classified? It cannot be regarded as productive work, but at the same time it seems reasonable to suppose that the carpenter is underemployed in the sense that he is *available* to do some other type of work. This is a case of what we might call *enforced idleness* (a topic we shall deal with later on).

The second example was observed during interviews concerning the use of time by peasants in the traditional sector in the central valley of Chile.[3] On being asked what he had done the previous day, a Sunday, a small farmer replied that he had spent six hours clearing a patch of shrubs which did not belong to him; since he had not been hired to do this work, he had naturally not been paid for it. His reasons for doing the work were to open up the view onto the valley from his house and get rid of the mice which were infesting the place and threatened to eat the maize he had harvested. This last reason could give grounds for considering that the clearing of the patch was, in a way, productive work but of a sort that is very difficult to quantify. This example suggests that there are a number of activities in the traditional sectors which consume time but do not fall into the productive/non-productive categories.[4] They tend rather to promote well-being.

From the subjective viewpoint, work is perceived in very different ways. Usually, wives and children in the small farming sector do not consider themselves to be active despite the fact that they perform a multitude of productive activities,[5] because they are not paid a wage or do not receive any other income from the work done.

However, there are more complex factors governing the perception of work. An example given by Hatch well illustrates the objective and subjective aspects of the problem.[6] The agricultural work involved in the cultivation of maize on the northern coast of Peru lasts 212 days. Of these, 32 are spent acting as human scarecrows, which is to say simply being present in the sown fields and preventing the birds from eating the maize before it is

harvested. On ten of these days the peasant also does weeding jobs but on the remaining 22 his *sole* task is to scare away the birds. Yet although the typical small farmer does not regard this as constituting real work, it is interesting to note that he is prepared to pay someone else to do it when he does not have the time himself.

It is assumed that hours of work are standardised (qualitatively and quantitatively) and that the units of time are therefore homogeneous. This concept also has its origin in the modern urban sector where, as a rule, the notion of the working day is useful for assessing the productive contribution of individuals. However, in the urban informal sector in general the self-employed work more than eight hours a day and those in commerce seven days a week.[7] Consequently the working hours in the two sectors are not comparable in terms of hours per day or days per week.

The time-use study carried out in the central valley of Chile provided information on the hours worked at different times of the year. The vast majority of those questioned stated that during the three months' harvesting period they worked 14 hours a day six days a week. On the other hand, in a typical winter month (July), they worked only four hours a day four days a week.

If we use the conventional approach to underutilisation we would find that during the month of July these people were underemployed for 67 per cent of their available time since they were working only 16 hours out of a "normal" total of 48 (six eight-hour days). The conventional approach, however, does not take into account "overemployment" during the harvesting months, which would be significant in that these people were overemployed to the tune of 432 hours or nine weeks net. Therefore, if the hours worked are calculated as an annual average, the peasant could work just over 13 weeks at the winter rate without being underemployed.

These examples based on empirical information reveal the problems that result from using the concept of working days and hours, since in reality these time units are not homogeneous and not comparable. Methodologically, the problem could be solved by analysing manpower underutilisation on an annual basis. But this still implies that hours of work are relatively homogeneous from the standpoint of the intensity of work–a point which it is essential to consider if we want to investigate underutilisation or unutilised capacity.

Just as the working day is not a homogeneous unit, neither is the working hour, since both the effort required and the intensity of work can differ a great deal. As we have already pointed out, peasants combine periods of activity requiring a great deal of effort with periods of lighter work.[8] Therefore, hours of work in the traditional agricultural sector are just as poor an indicator of manpower underutilisation because of the variable intensity with which the different tasks have to be performed. From this it can be deduced that time units, whether in the form of hours or days of work, are

too heterogeneous to be aggregated statistically and are therefore an inadequate indication of manpower underutilisation.

It is assumed that the conventional classifications are universal. A point to be considered here is the relevance of investigating whether a person is seeking employment (the necessary condition for being considered unemployed) in agriculture. Since this is a sector where there are "dead" periods in which there is practically no demand, there is no reason why he should look for work when he knows there is none available. Reference is then made to the concept of "seasonal" or "hidden" unemployment, or a worker is classified as inactive because he is not seeking employment. But to classify such a person as inactive is not really relevant from the point of view of utilisation of human resources inasmuch as conventionally the inactive person is not regarded as underemployed. The same thing occurs when a self-employed worker in the urban sector is asked if he is looking for employment. It is surely somewhat pointless to ask such a question of people working in informal labour markets since the concept of job search implies that there is a demand for manpower which is channelled through the formal labour market. In most of the developing regions, however, a large part of the economically active population in the urban sector works outside this market and therefore the concept as such is inapplicable.

Consequently, as far as analysing underutilisation is concerned, it is difficult to separate the methodological problems from the conceptual ones since very often the problem in measuring a phenomenon arises precisely from the fact that the concept itself has been ill-defined and does not fit the realities of the situation.

B. Availability in the traditional sectors

In this section we shall analyse the factors which, on the supply side, affect the availability of manpower. In so doing we shall seek to inter-relate availability and the structural context of underdevelopment. We take as our starting-point the idea that an increase in aggregate demand will not always produce a lessening of underutilisation and a rise in availability, since manpower may be *underutilised but not available*. Hence the importance of studying the factors which prevent manpower from being available and hence from performing income-generating work. Hitherto studies have tended to put all the emphasis on insufficient demand for manpower without having probed as deeply into the determinants of supply. As a result, the recommendations made for improving the conditions of employment and incomes of the population located in the traditional sectors generally only indicate the conditions necessary for production units to operate, assuming that if there is a high degree of underutilisation, as appears to be the case in the traditional sectors, a simple increase in the demand for manpower will absorb that underutilisation. The assumption on which this notion is based is that there is "idleness" and that it is involuntary. In this section we shall

discuss whether underutilisation is always tantamount in fact to idleness and then whether the distinction between voluntary and involuntary idleness is of any relevance for understanding manpower underutilisation in these sectors.

The term "underutilisation" has been used in different senses and generally involves four different aspects. The first has to do with the time people spend on work, the second with their labour productivity (from which income is derived), the third with recognition of the fact that a specific activity constitutes "employment" and the fourth with the will to work.[9] As regards manpower availability in the context of underutilisation, three of these aspects have to be considered, but at different analytical levels, since the second–productivity–introduces problems of a different order depending on one's starting-point. Indeed, when a worker's productivity is said to be low it is being compared with an exogenous standard in such a way that the degree of underutilisation will depend on the requirements of the standard. This in its turn will be based on other realities which are used as approximations to what is potentially obtainable. But it has no relation to the real possibility the worker has of improving his productivity, and the point we wish to emphasise is precisely that analysis should focus on effective availability, which is the only way of enabling income to be increased. More serious is the case where productivity is measured in terms of income (assuming that poverty is attributable to low productivity). This approach presents two problems. Firstly, it confuses poverty with underutilisation which, although they can be related, are analytically two different things. Secondly, it implies accepting that there is a single, direct and known correlation between a person's productivity and his income, which is also incorrect since it ignores institutional and political factors affecting the determination of incomes. This point has been extensively developed by the group of sociologists who support the hypothesis of the segmentation of labour markets and, of course, those who adopt an analytical approach based on the concept of class conflict.

An important distinction which has to be made in regard to availability is between the *immediately available* manpower reserve and the *potential* manpower reserve.[10] The first concept refers to people who are working fewer hours than they could during a certain period of time. This concept therefore embraces the three criteria of time, recognition and will. The second refers to people who could make a greater productive contribution than in a specific occupation or those who could be integrated into the labour force. In these cases we are concerned with the will to work. However, the important thing is that in both cases we are dealing with people who are not available at present but who would be if certain circumstances were altered. In this sense those in the second case constitute a *potential* reserve, which should not be confused with the concept of so-called "voluntary" unemployment castigated by Standing.[11]

We shall now look, therefore, at the different types of availability and the sort of variables that are appropriate for analysing them.

1. Immediate availability

With regard to the immediately available manpower reserve we have to take account of the following factors:

Working days on farms or in undertakings. The first point that has to be considered with respect to underutilisation is that the hours worked during the day can vary; one must take overemployment into account as well as underemployment and try to obtain an idea of the average number of hours worked. But if one is interested in assessing manpower availability, any day worked on the farm or in an undertaking, independently of the number of hours worked, has to be deducted from the time a person is actually available. For example, let us take the case of someone working on his farm four hours a day and effectively "resting" the remainder of the time. He is clearly underemployed by reference to the standard of the eight-hour day but at the same time we have to consider that it is very probable that he is not available for work during the other half of the day. There can be many reasons for this. Firstly, he may have to do other jobs of a type which we shall discuss below. Secondly, even where there may be a demand, he may be unable to reach the place of work because of mobility problems, for example. It is our view, then, that in the case of employment in the traditional sectors it is very common to find that a person is underemployed but not available for other work; or that if he is available, it is only subject to certain restrictions and conditions.[12] It could be argued that if there were a demand for labour people would find a way to accept the employment offered, and consequently that everything depends on the going wage rate. In actual fact, this argument is debatable, firstly, because where labour markets are segmented and/or imperfect the rate is purely nominal; secondly, because within the reasonable limits of wage variations labour supply is not very elastic; and finally, because if the analysis is made in the abstract, one arrives at the conclusion that if wages were absurdly high the supply would be total and if they were extremely low it would be zero. Obviously, the explanatory and analytical value of this conclusion is nil.

If one agrees that it is important to distinguish between manpower underutilisation and availability for the purposes of drawing up policies aimed at the full utilisation of human resources, it has to be borne in mind that the mere adding up of hours not worked on various days in order to convert them into available man-days is a futile exercise. In fact, concepts such as equivalent unemployment disregard the realities in order to give an idea of the scale of underutilisation, but by equating the latter with availability they give a false picture of the nature of both phenomena.[13]

Working on related tasks. It should be borne in mind that besides the tasks conventionally designated as productive and which are usually taken into account in analysing underutilisation, there are others. The majority of these result from the fact that the traditional sectors lack a certain basic

infrastructure which is common in the urban environment; this deficiency has a considerable effect on the availability of manpower. For example, low-grade housing needs constant repair and maintenance. Food preparation consumes a great deal of time. Dasgupta, on the basis of various studies on time use in Africa and Asia, considers that in some places women spend around 34 hours a week on housework and in the kitchen.[14] In a village in Tanzania, out of a total of 3,067 hours worked in the year, women spend an average of 730 just fetching water. Collecting firewood, which is mainly done by children, accounts for approximately one hour a day. Because of the lack of public transport peasants working outside their farms spend a great deal of time walking to their place of work or in search of employment. In short, people living in poor areas have to spend a considerable amount of time doing things that, while not "productive", are absolutely essential. Although such occupations are normally of no significance in urban areas, in the countryside they mean that the availability of manpower in terms of hours or days is less than it would be if circumstances were different. It would be interesting if studies on time use in rural areas of Latin America were also available so that one might gauge the importance of these activities.

Secondly, there are the additional jobs associated with production such as purchasing various inputs, marketing products, and so on. In particular, the formalities that peasants have to go through with the bureaucracy in the towns or cities are very time-consuming. Hatch found that in the community he studied the peasants had to wait two weeks for the loan needed to buy seed. It is obvious that they were underutilised during this time, but they were not available for work elsewhere either since the loan could arrive at any moment.

Other activities and factors. Apart from social and religious activities which a number of surveys suggest have some effects on the way families living in the traditional sectors spend their time, and education, which also occupies a considerable proportion of the time, health appears to be a factor calling for special consideration. The first aspect of this question is of a qualitative nature and concerns nutritional levels and their relation to the amount of effort put into each job. Some studies on India suggest that nutritional levels are higher in periods of low activity (as for example following the harvest because there is an abundance of food) and low at the precise moment when greater efforts are needed. Etienne even notes that some weeding jobs that are necessary for increasing output are not done because the workers are too weak at the relevant time.[15]

The second aspect concerns the number of days workers are sick. Hatch described a case in which peasants, who had to stand up to their knees in water for 16 hours at a stretch in order to irrigate their land, spent some of the following days recovering from the health problems arising out of these working conditions. Cleave found that the heads of families in a village in Uganda were sick for 20 days a year on average,[16] while in the United

Republic of Cameroon it was found that men were sick for 10 per cent of their available time over a period of ten months.[17] Unfortunately, there are no published studies on the problem in Latin America, but some field visits and informal interviews with peasants suggest that this aspect is an important one, particularly during the winter and following certain activities.

Up to now our analysis has sought to show that underutilisation and availability are not equivalent and that, for reasons of a structural nature as well as the effects of poverty and underdevelopment in general, manpower may be simultaneously underutilised and would not be available for other work even if the demand for it existed.

2. The potential reserve

A similar phenomenon occurs with respect to the potential manpower reserve, although for different reasons. The most obvious cases are women and schoolchildren who are members of the families of small farmers or informal-sector workers and participate from time to time when they are able to combine household tasks or studies with productive work in and around the home. But the same does not happen with the families of heads of households who do not live at the place of work, as is the case with wage earners, since wage-earning employment calls for full-time attendance at the workplace and does not have the flexibility which an intermittent supply of manpower requires (except where complete cycles are concerned, such as harvesting). In this sense, then, the undertakings in the traditional sector permit a better utilisation of the manpower reserve.

A second type of case relates to the social stratification and degree of prestige of various occupations. Ahmed found that in Bangladesh some small peasant landowners were not prepared to do casual labour because they considered that this was the province of a lower social class; they therefore remained "voluntarily unemployed". Mitchell, in a study on peasants in Costa Rica, found that the casual wage earner is the second lowest category (just above the itinerant labourer) in terms of prestige. This factor may very well reduce the real level of availability of manpower because peasants in the better-regarded occupational strata are perhaps not disposed to work in occupations with lower social prestige.[18]

C. Policy implications

The distinction between manpower underutilisation and availability is important when it comes to defining policies, since their impact will differ from case to case in relation to people's final income. Clearly, one of the ways of improving income is to increase the availability of manpower in such a way that additional income-generating work can be performed. But policies aimed at decreasing underutilisation without taking availability into consideration will not necessarily have a direct effect on people's incomes.

Consequently, what we are proposing is that policies and the measures adopted to implement them should be directed not solely at decreasing underutilisation, as is conventionally the case, but also at increasing manpower availability.

1. Policies to increase availability

In this article we have stressed that manpower availability, and therefore the possibility of obtaining a higher income, is less than the levels of underutilisation measured in the conventional way, and thus it can be inferred that policies should also be aimed at increasing availability, thereby improving the possibilities of raising incomes.[19]

These policies can be grouped into two main categories. Firstly, there are the policies not directly related to the production process but rather to the parallel processes which consume time in the traditional sectors. Secondly, there are those relating to the production process itself and aimed at reducing the duration of certain activities and thereby increasing manpower availability.

Changes in the distribution of time use. This category includes all the policies–conventionally referred to as "social" policies–that release manpower which at present spends part of its time on tasks that could be curtailed or practically eliminated. Particular importance attaches to health and nutrition as well as to infrastructure investments, especially in water supply, electricity and roads. The common feature of these policies is that they can serve to draw human resources into the production process with a view to raising incomes and affect not only immediately available manpower but also the potential reserve.

Well-fed people can work better and do jobs which, although they increase output, are at present not done for the simple reason that the people's level of nutrition does not permit them to expend the necessary effort. If they fall sick less often they will have more days at their disposal to generate income. In addition, the level of income is often directly related to the number of hours a day or week a person can work.

Infrastructure works can also have a significant effect on manpower availability. Better rural roads make it possible for people to travel more quickly to their place of work. If there were a public water supply system, peasants and their families would not have to spend so long obtaining this essential resource. Electric light prolongs the hours in which peasants can do jobs in the home that otherwise would have to be done in daylight, using up hours that could be devoted to participating in production.

In short, all these policies have the effect of enabling time spent on absolutely necessary activities to be cut down, as is the case with infrastructure works, or simply of increasing the overall amount of time available for productive work, as is the case with health and nutrition policies. They are

based on the premise that underutilisation measured in conventional terms is not equivalent to periods of idleness or availability because during these periods people are doing other essential jobs which do not have to be done in the modern sector yet form part of the way of life in the traditional sectors.

Changes in the distribution of time use in the production process. These policies fall into two general categories. First, there are those which are directly related to seasonal variations in the use of the labour factor and which are particularly applicable to the traditional agricultural sector. The second category relates more to processes associated with production but which are not an actual part of it. Both have different effects on manpower availability.

The first category covers policies designed to shorten the length of a normal agricultural cycle or to enable the land to be worked with some degree of independence of the climatic factors determining the rhythm of the cycle. In general, these policies are of a technological character and the clearest example is that of irrigation, which in many places enables the cycle to be shortened and opens up the possibility of obtaining a second harvest. This is an example of a policy which not only increases the availability of manpower but also that of the land factor, thus also stimulating demand.

Some policies have important effects on specific jobs performed throughout the agricultural cycle. There are also technological instruments which in general are linked with the inputs necessary for production. Weed-killers are an example. These shorten the time spent on weeding so that what can take a week to do by hand takes only a day with chemical weed-killers and a spray, thus releasing manpower for the other five days.

The second category of policies relates more to the parallel processes connected with production, such as the purchasing of inputs, marketing, relations with the State in connection with technical assistance and, in general, relations with the urban sector in the case of rural workers and with officialdom in the case of workers in the urban informal sector. The time these people spend on such tasks can be substantial, thus reducing the possibilities of doing income-generating work. For a worker in the urban informal sector, for example in trade, the hours or days spent in putting through an application for permission to set up a business or obtain a street trading permit represent a net loss of income.

In general, the policies aimed at increasing availability are based on the hypothesis that people in the traditional sector apportion their time in a way that does not permit them to make the most profitable use of their production capacity, thus leaving them with low incomes. However, it has to be emphasised that this apportionment of time does not mean that they are idle, but that they are spending time on tasks which, while essential, do not generate income. The underlying idea is that this time can be shortened and in some cases even eliminated, thus permitting greater manpower availability.

2. Policies to reduce underutilisation

The conventional approach to improving the employment situation is to draw up policies aimed at reducing underutilisation. However, where the availability issue has been ignored, there are grounds for thinking that the result has been the opposite.

A good example is the use of tractors for preparing the soil on small farms. Let us take the case of a peasant who spends eight hours ploughing 1 hectare of land using animal power. His additional availability that day is zero and his productivity is low since, because of the rudimentary technology used, his output is small in relation to the time he spends working. If he uses a tractor, he will take only two hours to do the same work. The object in introducing the tractor is obviously to increase his productivity, which effectively happens since he obtains the same output with a lower input of labour. But what about his income? The result would depend on what happens with respect to his availability. In fact, if the peasant has to be on his farm for two hours, he will probably not be available on the day in question for work elsewhere and if, because of the conditions on his farm (e.g. size: he only has 1 hectare of land) he cannot do additional productive work on it, the introduction of the tractor has increased the underutilisation of his manpower and his income remains constant because the output is the same.[20]

There are a number of observations that can be made in this respect. Firstly, the fact that he has increased his underutilisation (measured in conventional terms of hours) is pointless since he has not increased either his availability or his output and thus his income has not altered. In other words, the very notion of underutilisation is irrelevant for policy purposes and becomes a barren concept since the fact that he has "increased" his underutilisation is of no importance in this context. Secondly, it must be pointed out that some policies can increase productivity but not necessarily income. Consequently, policies of this type, if they are not accompanied by an increase in the net availability of manpower, which in its turn is reflected in the performance of income-generating work, will also have no effect on the utilisation of human resources or people's income. A third interesting observation is that the same policy applied in another context has a different effect, precisely because it alters availability. For example, a peasant who farms 6 hectares will be able to do the same amount of work in a day and a half instead of six, which will leave him four days free for other work and, where the demand conditions are favourable, enable him to increase his income.

In conclusion, what we wish to point out is that policies defined solely in terms of underutilisation of manpower will not necessarily bear fruit. Concentration on underutilisation without due regard to availability, which is a different issue, could mean that the approach adopted will prove sterile.

Notes

[1] Except for frictional underutilisation. Other forms of underutilisation will be discussed later in the article.

[2] A useful discussion of this theme can be found in G. Standing: *Labour force participation and development* (Geneva, ILO, 1978).

[3] This field study, to which reference will also be made later on, was carried out by PREALC as part of the testing of a questionnaire in a study on time use in the rural sector.

[4] There are grounds for thinking that they exist in the modern sector as well but, since they are very exceptional, they can safely be ignored without altering the substance of the analysis.

[5] See, for example, M. León de Leal: *Mujer y capitalismo agrario.* Estudio de cuatro regiones colombianas (Bogotá, ACEP, 1980).

[6] J. K. Hatch: *The corn farmers of Motupe: A study of traditional farming practices in northern coastal Peru* (Wisconsin, Land Tenure Center, 1976).

[7] V. E. Tokman: *Una exploración de la naturaleza de las interrelaciones entre los sectores informal y formal*, serie Monografías sobre empleo, 2 (Santiago de Chile, PREALC, 1977).

[8] See also B. Dasgupta: *Village society and labour use* (New Delhi, Oxford University Press, 1977).

[9] A. Sen: *Employment, technology and development* (Oxford, Clarendon Press, 1975); I. Ahmed: "Unemployment and underemployment in Bangladesh agriculture", in *World Development* (Elmsford, World Development Publishers), Nov.-Dec. 1978; Ch. C. Kao, K. R. Anschel and C. K. Eicher: "Disguised unemployment in agriculture: A survey", in C. K. Eicher and L. Witt (eds.): *Agriculture in economic development* (New York, McGraw-Hill, 1964).

[10] Ahmed, op. cit.

[11] G. Standing: "The notion of voluntary unemployment", in *International Labour Review*, Sep.-Oct. 1981, pp. 563-579.

[12] Unfortunately, we do not yet have generalised empirical information enabling us to gauge the scale of the problem and what exactly the existing restrictions are. As a hypothesis, it could be argued that both will depend on the type of agriculture and the characteristics of the family structure prevailing in the region.

[13] Assuming, on the one hand, that the hours not worked can be added up and, on the other hand, that these statistical abstractions represent people available on the labour market.

[14] Dasgupta, op. cit.

[15] G. Etienne: *Studies in Indian agriculture: The art of the possible* (California, University of California Press, 1968).

[16] J. H. Cleave: *African farmers: Labor use in the development of small-holder agriculture* (New York, Praeger, 1974).

[17] Dasgupta, op. cit.

[18] A. S. Mitchell: "Prestige among peasants: A multi-dimensional analysis of preference data", in *American Journal of Sociology* (Chicago, University of Chicago Press), Nov. 1977, pp. 632-652.

[19] Whether or not these possibilities can be realised will depend of course on the demand factors.

[20] Actually, his income could even drop if he has to rent the tractor.