INDIAN ANTECEDENTS OF DISGUISED UNEMPLOYMENT AND SURPLUS LABOUR

J. Krishnamurty*

Taking into account the Mertonian sociological perspective of multiple discoveries done by persons working independently of one another, and also that many ideas in social sciences are developed by looking at observable phenomena and adapting and refining terms in general use, this paper highlights the pioneering contributions by Indian economists to the subject of disguised unemployment and surplus labour, which anticipated some of the ideas of development economists of the 1950s.

I. INTRODUCTION

The Golden Jubilee of the Indian Society of Labour Economics is a good occasion to reflect upon some of the major contributions of earlier generations of professional Indian economists working on labour and employment problems. From the beginning of the twentieth century, if not earlier, problems relating to labour and employment engaged the attention of Indian economists. Indian economists before Independence produced a considerable body of work on such subjects as wages, working conditions, industrial welfare, labour recruitment, as well as employment and unemployment.

One of the first Indians to obtain a Ph.D. in economics was Rajani Kanta Das who obtained his degree from the University of Wisconsin, Madison in the US in 1917, working with John R. Commons, a famous labour economist. His own work on factory labour, working conditions, wages and earnings, women labour, child labour and other related issues was prolific and he contributed significantly, as an official of the International Labour Office, to the work of the Royal Commission on Labour in India in the early 1930s. Das’s first major published work (see Das, 1923) was based upon a study he did for the US Department of Labour. It was a pioneering study which objectively analysed the problems of Indian migrants on the west coast of the US.

Even before 1920, the problems of education and skill development engaged the attention of Indian economists. Professor V.G. Kale (1918) was one of the earliest to use the term “economics of education” and point to the need to invest more in education and human resource development. Radhakamal Mukherjee, one of the founders of this Society, wrote extensively on labour and employment. He was the author of a major work on the Indian working class (Mukherjee, 1945), and another on Asian migration (Mukherjee, 1936). Many who made major contributions to the subject later became Conference Presidents of the Society, including such luminaries as V.K.R.V. Rao, P.S. Lokanathan and A.K. Dasgupta.

In this lecture we look at the writings of Indian economists on a specific issue, viz., surplus labour and disguised unemployment, and attempt to establish that they anticipated some of the ideas of development economists of the 1950s. This should not come as a great surprise. After all they lived and worked in India where economic development (or the lack of it) was the major question facing economists and indeed others in public life.

While Indian contributions were important, we should not jump to the conclusion that Indians had anticipated all the problems of development economics or had ready answers to all

The idea of multiple independent discoveries by persons working independently of each other has been developed by the American sociologist Robert K. Merton, and its important implication is that one should not be surprised to find different people working in very different environments coming up with the same idea roughly around the same time (Merton, 1973). In the social sciences there is the further point that many of our ideas are developed by looking at observable phenomena and adapting and refining terms in general use. This makes novelty difficult to identify. We need, therefore, to assess Indian contributions with this perspective, but still give credit where it is due.

II. SURPLUS LABOUR AND DISGUISED UNEMPLOYMENT

A central element in the theories of development economists of the 1950s and the 1960s was the view that surplus labour or disguised unemployment existed in agriculture and that it could be tapped to facilitate development. One of the leading proponents of this view was Ragnar Nurkse, who argued that disguised unemployment represented a potential saving (Nurkse, 1953). This potential saving could be realized if the disguisedly unemployed could be transferred from agriculture to the non-agricultural sector, without an increase in their consumption and of those left behind, and without a decline in agricultural output. William Arthur Lewis later argued that this surplus meant that industrialization could proceed drawing upon the “unlimited supply of labour” available from the agricultural sector (Lewis, 1954).

We attempt to show, in the course of this lecture, that several of these ideas were current in some form in India in the period up to the early 1950s and that in general Indian economists were independently developing their own ideas on this issue. In important respects they anticipated some of the work done later in the West.

1. Early Origins

The notion of surplus labour is an old one and springs from the common observation that agriculture in many less-developed and overpopulated countries appears to have more persons engaged in agriculture than are strictly required. It would be very hard to give it a precise date. One would have to go far back in time to find the first agricultural head of household who discovered that he could do without the labour of one (or more) of his family members. What we attempt below is to locate the earliest instances where the concepts of surplus labour and disguised unemployment were used in a development context. It should be noted that other, more or less equivalent, terms have also been used in the past, such as “idle labour,” “agrarian excess population,” “under-employment” or “surplus population.”

Writing in 1975 about disguised unemployment, Amartya Sen noted with evident surprise, that “the concept of ‘disguised unemployment’ was not developed in the context of Mexican peasants or Indian hawkers, but in relation to members of the British working class” (Sen, 1975, p. 4). This undoubtedly the case provided we are referring to the specific term, disguised unemployment. However, if we are talking of the general idea of surplus labour in agriculture, rather than the specific term, disguised unemployment, there is ample evidence that it had a much earlier origin.

In India, we may attribute the introduction of the concept of “idle” labour to Sir James Caird, who had been a member of the Indian Famine Commission which reported in 1880. He had been chosen on the basis of his expert knowledge of British agriculture. He toured the country extensively and naturally compared what he saw with his own experience in Britain. He observed that, when one applied the man-land ratios obtaining in Britain, there were far too many persons employed in Indian agriculture. Caird (1884, p.225) put it later in the following way:
A square mile of land in England cultivated highly gives employment to 50 persons, in the proportions 25 men, young and old, and 25 women and boys. If four times that number, or 200, were allowed for each square mile of cultivated land in India, it would take up only one-third of the population.

The Famine Commission in 1880, of which Caird was a member, argued that: 
..the numbers that have no other employment other than agriculture, are in large parts of the country, greatly in excess of what is really required for the thorough cultivation of the land. So far as this is the case, the result must be that the part of the population which is in excess of the requirements of agriculture eats up the profits that would otherwise spring from the industry of the community. It is not surprising that in a country thus situated, material progress is slow (HMSO, 1880, Section I, Para 103, italics added)

Again:
.. at the root of much of the poverty of the people of India, and of the risks to which they are exposed in seasons of scarcity lies the unfortunate circumstance that agriculture forms almost the sole occupation of the mass of the population and that no remedy for present evils can be complete which does not include the introduction of a diversity of occupations, through which the surplus population may be drawn from agricultural pursuits and led to find the means of subsistence in manufactures or some such employments. (HMSO, 1880, Para 175).

From these quotes, it is clear that the Famine Commission not only grasped the fact that there was surplus population in agriculture, but also that it ate into the profits of the community, i.e. economic surplus. This view was reiterated in slightly different ways by a number of Indian economists like Kale (1909, p. 49) and Mukherjee (1916, p. 369).

2. Ambedkar's Contribution
Perhaps the clearest identification of the phenomenon of surplus labour was that of Ambedkar in 1918. He began by acknowledging that Caird had first introduced the concept. He then argued that:

A large agricultural population with the lowest proportion of land in actual cultivation [compared to other countries] means that a large part of the agricultural population is superfluous and idle (Ambedkar, 1918, p. 473).

Along similar lines to the Famine Commission, Ambedkar realised that there was a need to transfer surplus labour from agriculture to non-agriculture.

If we succeed in sponging off this labour in non-agricultural channels of production, we will at one stroke lessen the pressure and destroy the premium that at present weighs heavily on land in India. Besides, this labour when productively employed will cease to live by predation as it does today, and will not only earn its keep but will give us surplus; and more surplus means more capital. In short, strange as it may seem, industrialisation of India is the soundest remedy for the agricultural problems of India (Ambedkar, 1918, p. 477).

Ambedkar realised that not only would a shift of labour reduce agriculture's burden, but it would generate economic surplus and lead to capital formation. This certainly reads like many of the arguments made in the 1950s for a balanced pattern of growth involving the transfer of labour from agriculture to non-agriculture. However, one should note that Ambedkar did not argue in terms of the effects of the transfer of family members on potential savings. He put it
somewhat differently, arguing that those leaving agriculture would “cease to live by predation.” Additionally they would not only earn their subsistence in non-agriculture, but yield a surplus which would go into capital formation. He also believed that the transfer would not adversely affect agricultural output, since surplus labour was “superfluous” and “idle.”

Perhaps due to the focus of the paper on consolidation of small holdings, there was no discussion of how industrialisation would be promoted and financed. While Ambedkar did not outline a development strategy in this paper, he drew sharp attention to the futility of programmes for tackling excessive fragmentation and sub-division of land, in the absence of policies to reduce the pressure on land.

In a recent study, Sukhadeo Thorat has shown that Ambedkar, who was a member of the Planning Committee of the Government of India over the period 1942 to 1946, continued to hold the view that industrialisation was needed to tackle the problem of surplus labour and it had to be accompanied by investment in agriculture2 (see Thorat, 2006). Ambedkar, perhaps influenced by the work of Radhakamal Mukherjee, argued in 1943:

India is caught between two sides of a pincer, the one side of which is progressive increase of population and the other is a progressive increase in the deterioration of the soil. The result is that at the end of a decade we are left with a negative balance between population and production and a constant squeezing of the standard of living…The population pressure is giving rise to an army of landless and dispersed peasants as well. It can be stopped when agriculture is made profitable. Nothing can open possibilities of making agriculture profitable except a serious drive in favour of industrialisation. For it is industrialisation alone which can drain away the excess of population, which was exerting such enormous pressure on land, into gainful employment other than agriculture (Quoted in Thorat and Aryama, 2007, p.30).

3. Das and “Under-employment”

The related concept of “under-employment” probably first appeared in India, probably in 1925, in the course of a discussion of Indian economic statistics in a paper by Das (1925). This was written in the form of comments on the suggestions of the Indian Economic Enquiry Committee of that year. He defined under-employment as:

...forced leisure in the case of all persons who employ themselves in industrial enterprises. Among these men might be included cultivators, stock-breeders, artisans, hawkers, peddlers and small shop-keepers...Some knowledge on the number of days in which cultivators, artisans and other classes of independent workers remain idle will throw considerable light on the economic condition of the country and help in shaping the policy of the national economy” (Das, 1925, p. 6).

Das restricted under-employment to the self-employed and he pinpointed the problem of surplus labour time, referring to the number of days on which self-employed persons were idle. With considerable foresight, he went on to stress that measurement would be “one of the most difficult tasks to undertake.” He recommended intensive surveys, special investigations and a production census.

4. Concept of Disguised Unemployment

As we have shown, the concept of surplus labour had already been developed to describe a phenomenon that was plain to see in India: namely, too many people cultivating too little land. This was seen as eroding potential economic surplus and thereby reducing economic growth, although the actual process by which this labour would be transferred to non-agriculture,
involving the question of how to freeze consumption levels among transferred persons as well as those left behind, was not addressed.

There is general agreement that the term, disguised unemployment, was first used by Joan Robinson in 1937. According to her, “it is natural to describe the adoption of inferior occupations by dismissed workers [during the Depression] as disguised unemployment” (Robinson, 1937, p.62). While Robinson introduced the term in the specific context of the Depression in western economies, it is generally believed that Rosenstein-Rodan was the first person to apply it to the problem of development. In his landmark paper, he states:

The assumptions in the case under discussion are: there exists an “agrarian excess population” in Eastern and South-Eastern Europe amounting to 20-25 million people out of a total population of 100-110 million, i.e. that about 25 per cent of the population is totally or partially (“disguised unemployment”) unemployed (Rosenstein-Rodan, 1943, p.202).

While the term was used within quotation marks, he did not say anything about its provenance. Several authors credited Rosenstein-Rodan with the first use of the term “disguised unemployment” in the context of an under-developed economy. According to Wellisz (1968, p.25), “The term ‘disguised unemployment’ is used for the first time in a ‘structural’ sense in a famous article by Paul N Rosenstein-Rodan...” Again, Eckaus (1989) suggested that it was Rosenstein-Rodan who incorporated Joan Robinson’s concept into development economics.

Rosenstein-Rodan himself was modest about his contribution. In a mimeo, he equated disguised unemployment with surplus population and agrarian excess population:

The concept of “agrarian excess” or “surplus population” or of “disguised unemployment in agriculture” has, in contrast [to “optimum population”] a precise meaning, and has only emerged in the late 1920’s. Since the 1940’s, it has been made one of the cornerstones of the theory of development of under-developed countries (Rosenstein-Rodan, 1956, p. 1).

5. Rao’s Contribution

In the course of my research on the contribution of Indian economists prior to Independence, I came upon an article by V.K.R.V. Rao, in which he used the concept of disguised unemployment (Rao, 1938). I believe this was its first use in a development context. He openly acknowledged that Joan Robinson introduced it in the context of depression in developed countries, and then proceeded to apply it to India.

Rao defined unemployment thus:

[The] loss of employment of workers who were previously employed and inability to obtain employment by these and others who might not have been previously employed but who now seek for employment at existing levels of wages or slightly lower levels (Rao, 1938, p. 628).

In the Indian context, Rao distinguished between four kinds of unemployment: first, frictional unemployment, which was not much of problem in India; second, cyclical unemployment, which existed but was not serious: third, seasonal unemployment, which was a major problem, especially in agriculture where it was difficult to spread work opportunities over the year; and, fourth, disguised unemployment, involving “the diversion of labour from more productive to less productive occupations.” Disguised unemployment was, in his view, prevalent in India due to the decline of handicrafts which had led to many persons seeking less productive work elsewhere in the economy.
Rao estimated that 48 million out of the 91 million persons working in India were seasonally employed. He did not estimate the magnitude of disguised unemployment, but asserted that it was large and growing. In this context he made the statement below:

It is a well known fact that there are on the land a number of people who do not really contribute to the production of agricultural output and that if they give up agriculture, output would remain much the same. They are the disguised unemployed of India, and their numbers are large enough to constitute a major problem in India’s economy (Rao, 1938, p.631, italics added).

It is quite remarkable how, in the quotation above, Rao anticipated later definitions of disguised unemployment. He clearly made the point that the withdrawal of the labour of the disguisedly unemployed would not affect agricultural output. He also defined disguised unemployment precisely in relation to the going wage. The disguised unemployed were those who “seek for employment at existing levels of wages or slightly lower levels.” This is an important point for unemployment has to be defined in relation to some wage rate as otherwise its magnitude would vary depending on the wage rate assumed.

Looking again at Joan Robinson’s discussion of disguised unemployment one can see why Rao was drawn to the concept. According to her, “it was natural to describe the adoption of inferior occupations by dismissed workers as disguised unemployment.” Rao was viewing the situation in India under colonial rule where workers in handicrafts had lost their jobs and were, in the absence of a better alternative, taking to agriculture. This led him to describe such persons as the disguisedly unemployed. However, later in his paper, he moved to a more general view that all those in agriculture who could be removed from it without affecting its output, were disguisedly unemployed.

In the discussion that followed Rao’s presentation at the Indian Economic Conference in 1938, Dr. P.S. Lokanathan picked up this point.

Not all the surplus labour on land was the result of the displaced workers from other occupations taking to agriculture. A good deal of it was due to the increased population’s inability to find alternative occupations of a more remunerative character (Indian Economic Journal, 1938, p. 676).

He linked disguised unemployment to population growth and low productivity and argued that the solution lay in raising productivity.

Professor H. L. Dey, in his comments, noted that even at the prevailing level of wages there was considerable unemployment. He went on to argue that given how low wages were, it was not “employment in the real sense of the word.” Anticipating the modern income concept of work, and linking unemployment to poverty, Dey argued:

The average earnings of our people being what they are, a large majority of them are suffering from disguised unemployment—that is, they are doing work which brings them much less than they are worth and much less than the minimum necessary for civilized existence (Indian Economic Journal, 1938, p. 678).

Development economists have failed to give Rao credit for applying, for the first time, the concept of disguised unemployment in the context of development. While Rao was not the first economist to identify the existence of surplus labour in agriculture, he was the first to state clearly that: (i) surplus workers were those willing to work elsewhere at more or less the going wage; and (ii) their removal would not reduce agricultural output.

In the period before Independence, Western economists were generally aware of work done in India, but I suspect they did not expect Indian economists to make original contributions
to economic thinking. Even H. W. Arndt summarily dismissed the Indian contribution to development economics before 1945 (see Arndt, 1972, pp. 21-22). It is, therefore, not surprising that this major contribution which appeared in an Indian journal was missed.

What is really surprising is that Dr. Rao had also forgotten about his 1938 paper. In a later paper (Rao, 1953), he asserted that a UN Committee of Experts was the first to link unemployment with development. In this regard, he not only ignored his own earlier work in 1938, but that of several others, including Ambedkar (1918), Warriner (1939), Rosenstein-Rodan (1943) and Singh (1945).

According to the UN Committee of Experts:

In the under-developed countries, the lack of capital equipment is crucial factor in large-scale underemployment which is reflected in the fact that a part of the population could be diverted from agricultural occupations without any decrease in agricultural output. The only remedy for this form of disguised unemployment is economic development, which constitutes the major problem of the world. (United Nations, 1949, p. 12)

As Rao pointed out, this Committee did not really address the problem of underemployment and underdevelopment. This was taken up by another committee of experts “on unemployment and under-employment in underdeveloped countries and the national and international measures required to reduce such unemployment and under-employment.”

The new committee of experts comprised of international economists, George Hakim, Alberto Baltra Cortez, D. R. Gadgil, T. W. Schultz and W. Arthur Lewis. According to Toye and Toye (2003), Lewis heavily influenced the final draft of the report. This perhaps led to Lewis’s interest in disguised unemployment and unlimited supplies of labour available to the modern industrial sector. But the report itself did not say much on employment; it focused on the requirements of economic development and argued that employment problems would be resolved once rapid development was under way (see UN, 1951).

Based on this work, Lewis went on to develop, in his famous 1954 paper, a model where economic growth, involving capitalist accumulation, led to the growth of industrial employment at a constant real wage and the release of labour from agriculture took place without a reduction in agricultural output.

6. Dasgupta’s Anticipation of Arthur Lewis’s Work

Nurkse (1953) and Lewis (1954) made a great impact in India. Some Indian economists attempted to measure disguised unemployment and surplus labour, but perhaps more important, there was an active debate on the validity of these concepts. Unfortunately, much of this work is not widely known today.

An extraordinary development is the recent realisation that A. K. Dasgupta had anticipated Lewis’s (1954) view on development being constrained, not by effective demand or labour supply, but by the need for complementary capital. This has been described, by Partha Dasgupta and by Amartya Sen, as an example of Merton’s ‘multiples’, i.e. cases where the same idea was developed independently by several persons (see Dasgupta, Partha, 2003; Sen, 1994).

It appears that the ideas presented by A.K. Dasgupta had first been aired in a series of lectures given in Lucknow University in 1949, and some of his thoughts on the non-generality of Keynes’s General Theory can be traced back to 1942 (see Dasgupta, 1954).

According to A.K. Dasgupta:

The limiting factor in the growth of employment in an economy such as ours is not so much the shortage of money as a shortage of real capital. With existing capital equipment,
even if we have full employment in the Keynesian sense, a large volume of unemployment will still remain in the physical sense. When capital equipment is low and population large, marginal productivity comes down to the level of marginal disutility of labour at a stage where unemployment persists in the physical sense, though not in the ‘involuntary’ sense. Our economists, misappropriating a term that Mrs. Robinson uses in another context..., often call it ‘disguised unemployment.’ In fact, however, it is a phenomenon which is not connected in any way with a fall in effective demand, nor does it go along with excess capacity in capital resources. It is there because the maximum capacity of capital equipment is inadequate to fully employ labour. (Dasgupta, 2003, p. 2921, reprint of Dasgupta, 1954).

I have quoted this passage in full so as to clarify Dasgupta’s contribution. Among the important points he made, Dasgupta did not assume that due to surplus labour in agriculture the marginal productivity of labour would fall to zero. In this respect his position differed from that of both Nurkse (1953) and Lewis (1954) who talked of zero marginal product of labour in agriculture. According to Dasgupta, the marginal product would come down to equal the marginal disutility of labour, which presumably was positive. He was also clearly unhappy with the use of the term ‘disguised unemployment’ which related to a fall in effective demand and excess capacity in capital, in situations where there was a shortage of capital in relation to the available supply of labour.

7. More Recent Indian Contributions

There continued to be a number of important Indian contributions to the debate on disguised unemployment. While a discussion of these contributions would take me beyond the scope of this lecture, I would mention that the issues raised in this debate covered a wide canvas, relating, inter alia, to: questions of the existence or otherwise of disguised unemployment, its size and measurement, distinctions between labour time and labourers, the role of institutional factors in determining labour supply, the constraints on expansion of employment set by a “wage goods gap,” the size of the potential saving, and the extent to which it could be mobilized, alternative ways in which the transfer of labour could take place and their implications, and the importance of income and recognition aspects of employment.

III. CONCLUSION

We may conclude by observing that Indian economists before Independence, living in a country where economic development was not being promoted by the colonial government, saw that the answer to Indian’s economic problems lay in the diversification of economic activities. This was necessary not only as a means of averting the impacts of famine; it was also the route to raising living standards which were generally accepted to be very low.

Having identified the existence of surplus labour or disguised unemployment on farms, the proposed solution was to transfer surplus labour to industry, thereby reducing the burden on agriculture and providing a means for surplus creation and capital formation. The discussion was not couched in terms of potential saving and the question of restricting consumption to existing levels was not raised. However, the assumption that transfer would not reduce agricultural or farm output was explicitly made by Rao.

Unlike the proponents of balanced growth, Nurkse and Rosenstein-Rodan, Indian economists do not appear to have foreseen problems on the demand side. They appear to have felt that improvements in efficiency and productivity and reorganization of the economic sectors would
increase purchasing power in the hands of the people. The Reconstruction Plan, developed in 1943-44, put it in the following way:

The ultimate objective of all planning must be to raise the standard of living of the people as a whole and to ensure employment for all. To that end, the purchasing power of the people must be increased by improvement in the efficiency and consequently the productivity of labour on the one hand, and simultaneous development and reorganisation of agriculture, industries and services on the other (Quoted by Thorat, 2006, p. 38).

Apart from this, Indian economists believed that well-conceived tariffs and subsidies would increase demand for Indian production. They also believed that more public investment in social and economic infrastructure and facilities would help to draw in private investment.7

Notes
1. Ambirajan (1999) also regards this as an anticipation of later work by other economists on surplus labour.
2. I am indebted to Professor Sukhadeo Thorat for drawing my attention to this.
3. He was referring to UN (1949).
4. John Toye and Richard Toye give in their 2003 paper an excellent account of the developments within the UN on the issue of employment and development.
5. A good bibliography and discussion of the concept of disguised unemployment is available in Robinson (1969). Also see Bhagwati and Chakravarty (1969) for an extended discussion of the Indian literature on surplus labour.
6. Some of the major Indian contributions include Vakil and Brahmananda (1956), Chandavarkar (1957), Raj (1957), Sen (1966) and Sen (1975).

References
Caird, James (1884), India, the Land and the People, Cassel and Company, London.
Das, Rajani Kanta (1923), Hindustani Workers on the Pacific Coast, W de Gruyter, Berlin.
—— (1936), Le Migrazione Asiatiche (Migrant Asia), Tipographia I Falli, Rome.
—— (1945), The Indian Working Class, Hind Kitabs, Bombay.
Warriner, Doreen (1939), Economics of Peasant Farming, Oxford University Press, Oxford.