

DIMENSIONS OF UNEMPLOYMENT IN INDIA

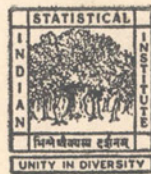
Convocation Address

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DIMENSIONS OF UNEMPLOYMENT IN INDIA¹

This is the first convocation of the Indian Statistical Institute since Prasanta Chandra Mahalanobis passed away on the 28th of June, 1972. It is impossible to express adequately our debt to him. In building up this Institute, in creating remarkable facilities for statistical training in India, in making major contributions to several academic disciplines (including statistics, economics, physics, philosophy and education, among others), in giving a new direction to planning in India, in setting up a systematic and elaborate machinery for data collection, processing and use, and in helping to create a tradition of informed discussion on public policy—Professor Mahalanobis's achievements have been staggering. It seems almost unbelievable that one man could have done so much.

I would like to devote this lecture to a problem in which Professor Mahalanobis took keen interest. Addressing the Second All-India Labour Economics Conference at Agra on the 1st of January of 1959, he stated: "To try to get rid of the fear of unemployment in ten years—this is the crucial issue in India."² He devoted much of his lecture to the problems of measurement of unemployment and underemployment in India, especially in view of the prevalence of household enterprises and of part-time work.

1. PLANNING AND UNEMPLOYMENT

Nearly fifteen years have passed since Professor Mahalanobis's address, and the fear of unemployment—far from being eliminated—is felt as strongly as ever. There are about five times as many people on the live registers of the Employment Exchanges today as when Professor Mahalanobis was speaking, and while this growth is due to a number of different factors, it is very difficult to ignore this remarkable swelling of the number of people actively looking for jobs. In addition to these registered job-seekers, there are vast numbers of unregistered ones, especially in the rural areas, with little or no gainful work, but with no opportunity of registration and systematic search for jobs. Various estimates of unemployment and severe underemployment based on data from the Census, the National Sample Surveys and other sources indicate a situation of extreme seriousness.

Some official recognition of the seriousness of the problem can be seen in various schemes for rural development initiated during the Fourth Five Year Plan,

in particular the so-called Crash Scheme for Rural Employment (CSRE), the Small Farmers' Development Agency (SFDA), the Marginal Farmers and Agricultural Labourers (MFAL), and the Drought Prone Areas Programme (DPAP). However, these programmes are quite obviously inadequate in dealing with an unemployment problem of the magnitude that we find in India today.

The Draft Fifth Five Year Plan for 1974-79, which has just been presented to the nation as a radical approach to planning in India, is characterized among other things by saying less on employment than any previous Five Year Plan. Indeed the section on "Employment" in the chapter on "Employment, Manpower and Labour Welfare" evades the main problem so systematically after paying a handsome tribute to the importance of it, that it reads almost like a piece of black humour. The chapter begins with the statement that "the importance of providing adequate and increasing employment opportunities in our development programmes cannot be over-emphasised" (12.1). It talks of "a reasonable assurance of suitable employment to every citizen." Then points out the necessity of avoiding a shortage of skills and also unemployment of talents. It sounds as if some kind of an arranged marriage is about to be organized: "...the development of an adequate and effective placement service is of vital importance for ensuring that the available employment and the most suitable incumbents are brought together as early as possible" (12.3).

In the section on "Employment", it is mentioned that "in the past, the Planning Commission used to present estimates of the backlog unemployment at the beginning of the Plan, of the estimated increase in the labour force during the Plan period and additional employment likely to be created through implementation of the Plan as formulated" (12.6). None of this is done in the Fifth Five Year Plan. Nor is anything else put in their place to indicate the overall employment situation as seen by the framers of the Plan. They note "the considerable divergence of opinion regarding appropriate definitions of yardsticks for measuring unemployment and underemployment" and "the widely differing magnitudes of unemployment worked out on the basis of various sources such as the Census, the National Sample Survey and the Employment Exchange data" (12.6), and proceeds to quote the main recommendations of the Committee of Experts on Unemployment Estimates appointed by the Planning Commission to look into this question. The decision to suppress the over-all unemployment figures seems to be based on the Expert Committee's recommendation: "Estimates of unemployment and under-employment presented in one-dimensional magnitudes are neither meaningful nor useful as indicators of the economic situation" (12.7).

We learn next that the Planning Commission is awaiting some new information from the 27th Round of the National Sample Survey and a few other sources.

Then the *Draft Plan* proceeds to confirm that "redistributive growth is a major objective of the Fifth Five Year Plan" (12.9), which is followed by some relatively vague discussion of "objectives" and "strategy", the most concrete part of which is the decision to continue and expand the old schemes of Small Farmers Development Agency (SFDA), Marginal Farmers and Agricultural Labourers (MFAL), and the Drought Prone Areas Programme (DPAP), initiated in the Fourth Five Year Plan. The section ends with some general comments on family planning, educational reform, etc., and any hope of getting an assessment of the over-all employment situation and the Planning Commission's response to it ends abruptly.

2. DIFFERENT DIMENSIONS OF UNEMPLOYMENT

I have outlined in some detail the Planning Commission's inability to tackle this problem partly because I believe this failure is going to prove extremely expensive for the country, but also because the pivot on which the Planning Commission's reasoning seems to turn is the recommendation, which we must examine, of the Expert Committee that "estimates of unemployment and underemployment presented in one-dimensional magnitudes are neither meaningful nor useful". I refrain from speculating whether some figures can be meaningless *but* useful; the clumsiness of the language reflects only a part of the clumsiness of the thought that lies behind it. In so far as the Expert Committee is saying that employment has several aspects and one real number cannot express all that, its position is indeed unexceptionable. Any particular number will probably focus on only one aspect of unemployment, and to get a more complete picture one would have to see other figures related to other aspects of unemployment. The issue, therefore, is not the meaningfulness, nor even the usefulness, of the class of one-dimensional magnitudes, but the incompleteness of the information contained in any one such magnitude. If this is recognized, the solution to be sought is in presenting a *set* of figures reflecting *different* aspects of unemployment, and not in scrapping whatever figures one has. The alternative to choose should be a multi-dimensional approach rather than a zero-dimensional one.

There is, in fact, a streak of confusion that seems to run through the whole discussion on unemployment estimation. The Expert Committee argues: "In our complex economy, the character of the labour force, employment and unemployment, is too heterogeneous to justify aggregation into single-dimensional magnitudes. We, therefore, recommend separate estimation of the different segments of the labour force, taking into account such important characteristics as region (State), sex, age, rural-urban residence, status or class of worker and educational attainment."³ More detailed information split up into categories is, of course, more helpful in many ways, but the conflict between the different estimates of total unemployment figures

arises from the fact that there are different concepts of unemployment. These differences apply not merely to total figures but also to figures split up in terms of region, sex, age, etc. In fact the alternative estimates derived from the National Sample Surveys, the Census and the Employment Exchanges—the contrasts among which worries the Planning Commission—can be split up into these categories without much difficulty, and needless to say the differences will still persist. It was as if an argument about the size of a house—with some people claiming it to be large on grounds of its tall height, while others disputing that claim by pointing out its narrow breadth—was settled by expert advice suggesting that one should examine each room rather than the whole house. Of course, to find out whether the house is usefully large, one would have to examine the rooms as well, but each room like the house itself would have to be examined from the point of view of all of its dimensions. A stubborn refusal to come to grips with the different concepts of unemployment makes the sophistication of separate estimation for each segment of the labour force much less productive than it could have been.

Furthermore, it is not correct to assume that unemployment totals have no usefulness whatsoever. First of all, there is some mobility of labour between regions and between rural and urban areas; indeed in this city (Calcutta) a substantial part of the labour force comes from rural regions of another state, *viz.*, Bihar. Second, even when labour is not mobile, investment to absorb them is, and for planning investment requirements, figures of total unemployment are relevant. Third, in some jobs male and female labour may be substitutable without much difficulty, so that in some problems, the aggregate availability of labour may be the relevant thing to look at. Fourth, on the income earning side, male and female employment may also be partly substitutable, and for the family the relevant figure may be that of total earnings and not earnings of each sex. Similar arguments hold in other fields.

In a sense it is, of course, always better to have the information split into segments since one can reconstruct the total by adding, whereas from the total one may not know the segments, but in some exercises one is primarily concerned with the aggregate figures, and there is also the problem of the convenience of estimation and use. But the important point is that no matter how much we decide to split up, the differences arising from different concepts of unemployment will be present and must be explicitly faced.

3. INCOME, PRODUCTION AND RECOGNITION

As a background to alternative estimations of unemployment, one may begin by contrasting three different aspects of employment, *viz.*, (i) the income aspect, (ii) the production aspect, and (iii) the recognition aspect. Employment adds to

income, contributes to production, and leads to recognition by the person and by others that he is doing something satisfactory. While these aspects frequently go in the same direction, they do not always coincide, and an important reason for differences between various estimates of unemployment lies in this non-coincidence.

Before I comment more on these aspects, two preliminary questions may be sorted out. First, it may be noted that I have not included what Professor Raj Krishna calls "the time criterion".⁴ This is partly a matter of nomenclature. Before we start checking the amount of time for which a person is employed during the year, we have to have some theory of what to count in as employment. Why should we, for example, count in the time a peasant women spends in helping her husband in the field but leave out the time spent in cooking? In terms of the passage of time, or in terms of the effort involved, it is not clear that the latter has a lower claim to being included in comparison with the former. If there is a distinction, it arises from the fact that the former is taken to be "gainful" in the sense of contributing to income, whereas the value of the housewife's domestic work is left out of the national income figure. I think there are good reasons to dispute this convention of the national income accounts, but given the income estimation procedures, some distinction between different kinds of work follows automatically. It is on this classification into "gainful" and other work that "the time criterion" is based, so that essentially it focusses on the "income aspect" of employment.

The second clarification relates to the use of low income as a criterion of unemployment which has been done by several authors including Dandekar and Rath⁵, and in some "country reports" by the I.L.O., notably in the Kenya report⁶. On this approach, to quote Dandekar and Rath, "an adequate level of employment must be defined in terms of its capacity to provide minimum living to the population." This identification of unemployment with poverty has the advantage of drawing attention to the close relation between the two, even though it can be somewhat misleading if a person happens to be poor despite working very hard in some job where he is severely exploited. The solution there presumably must lie in the elimination of exploitation rather than in offering more employment. When it comes to policy recommendations, Dandekar and Rath do take note of such possibilities, but for the same reason it is probably best to classify these people as simply poor rather than unemployed. It will, of course, frequently be the case that unemployment in the sense of not having any gainful work for much of the time will turn out to be the most important reason for poverty, but this will be an empirical observation about unemployment rather than a definition of it.

It should be seen that the income aspect as used here relates to the income being conditional on the work in question, and not primarily to whether the income

level is high or low. It should be obvious that this conditionality will depend on whether we look at the income from the point of view of the person in question or from that of the family. For wage employment in a capitalist enterprise this is not a particularly serious issue but the distinction can be important and complex in family enterprises. For example, migrating workers employed in factory occupations or as domestic servants in cities like Calcutta who return to their family farms in the harvest time, may do this partly to contribute to the family output or to the family income, but also partly to establish their own rights to a part of the joint family income. In fact, in some cases their contribution to production and family income may well be nil or negligible but the sharing of the burden of harvesting may be important for continuing to get a personal share out of the family farm's produce. For some problems, *e.g.*, in the determination of labour supply, this distinction is important, but I shall not pursue it any more here.

I would now like to discuss the production aspect and the recognition aspect very briefly. The well-known concept of "disguised unemployment" belongs to the category of production aspect, and under this approach the extent of surplus labour is estimated by calculating the number of working members who can be removed from the rural sector without affecting the output there. It is in this form that the question of the existence or not of surplus labour has been hotly controverted in the development literature. The measurement problems here are enormous, but the concept is easy enough to follow.

The recognition aspect does, however, involve many conceptual problems. When a person offers himself in the job market and decides that he must look for something other than what he has got, the dissatisfaction with his employment status cannot be lightly dismissed by saying that he has after all some job already. To survive people may have to accept even the most dislikeable work, and to ignore a person's attempts at getting away from his situation, on the grounds that he already has something, is an unduly mechanical approach to the problem of unemployment.

This type of question is of particular relevance in interpreting the data from the Employment Exchanges. An important survey of a sample of those registered in Calcutta in 1965 conducted by Mr. Sudhir Bhattacharya and others for the National Sample Survey indicated that only about 20% of those registered were in fact unemployed in the stringent N.S.S. sense. It is, however, clear that lengthening queues in the Employment Exchanges do, given other things, imply a worsening employment situation. While it is true that most people may be willing to move to another job if much better terms are offered, and this fact does not make them unemployed in any sense, it is nevertheless of some significance to know how many people are, in fact, looking for another job. Of course, many factors influence the extent to which

one is ready to take part in the search process, but given the social and economic structure of India, the size of the live registers at the Employment Exchanges cannot be easily dismissed as an indicator of unemployment.

In fact, it is even possible for someone to regard himself as "unemployed" even though he has some kind of a job. The I.L.O. Mission to Ceylon noted many cases "where people said they were 'unemployed' when they meant that they did not have a regular job offering security and some sort of steady income."⁷ The N.S.S. criterion of taking somebody as employed if he has worked for even one day in the reference week does not make it a particular strain to treat someone as unemployed even though the N.S.S. keeps insisting that he is not.

4. ESTIMATES BASED JOINTLY ON INCOME AND RECOGNITION ASPECTS

To illustrate the distinction between these different approaches to the unemployment question, I shall discuss a few alternative estimates of total unemployment in India. For example, the Committee on Unemployment which reported earlier this year (and which is not to be confused with the Committee of Experts on Unemployment Estimates whose recommendations I discussed earlier), used the N.S.S. data for the 19th Round to estimate unemployment in India in 1971. The four ratios of unemployment for urban male, urban female, rural male, and rural female, taken from the data for the 19th Round, which had been collected in 1964-65, applied to the numbers of people in these four categories in the 1971 Census, yield a total figure of 9.0 million people unemployed in the N.S.S. sense. In addition the Committee on Unemployment included those who had worked for less than 14 hours a week and this calculation was also based on the 19th Round ratios applied to the 1971 population. This led to the inclusion of another 9.7 million as unemployed. The total of 18.7 million people form about 10.2% of the working population of 183.6 million.

To what concept of unemployment does this figure belong? There would seem to be two distinct elements in this. There is the implicit use of the income aspect in taking only those who had no "gainful" activity or had a minute amount of it. But to qualify as unemployed in the N.S.S. 19th Round, a new entrant with no gainful activity would have also had to pass the test of "seeking work", *e.g.*, through the Employment Exchanges, or by directly applying for jobs, or by seeing prospective employers. In the rural areas apart from seeking work, the criterion of "being available for work" was also used. In either case some use of the recognition aspect of employment is involved, the test being more strict for urban areas than for rural in view of the difficulty of "seeking" work outside the urban areas. If a person had no gainful work but was not seeking work in an urban area, or was

neither seeking nor available for work in a rural area, then he could not enter the category of the unemployed no matter what others might think of his status. The 18.7 million figure of the Committee of Unemployment is, therefore, essentially an intersection of two sets, *viz.*, the unemployed according to a recognition criterion and the unemployed according to an income criterion.⁸ The same observation applies to Raj Krishna's earlier estimate of 9.3 million wholly unemployed and 21.5 million unemployed and severely underemployed in 1971 based on using ratios derived from the N.S.S. 17th, 19th and 21st Rounds, applied to population figures from the 1971 Census and participation rates from the 1961 Census.

5. THE PRODUCTION ASPECT AND DISGUISED UNEMPLOYMENT

Estimates using the "production aspect" of employment are very rare indeed. Despite the fact that "disguised unemployment" in economies like India have been discussed in the general development literature more than any other kind of unemployment, it is remarkable that the Committee of Experts on Unemployment Estimates did not even have the occasion to discuss it as a serious approach to the measurement of unemployment in India.

However, a most impressive estimation of rural unemployment in India from the production point of view has been presented by Mrs. Shakuntla Mehra using the Census of 1961 and the Farm Management Studies of 1956-57. Her approach is based on the distinction between labour and labourers. She examines the variation of the intensity of work per person in holdings of different size groups. It is presumed that the work intensity per person will be highest for the largest land holding size group. She calculates the number of the required workforce to produce the existing volume of output in each size category keeping all factors of production unchanged including *labour time*, but reducing the number of *labourers* involved. She does this by assuming that the work intensity in all the smaller holding size groups will be the same as in the largest size group. Thus the same work will be performed by a smaller number of people by working more of the time, but the work intensity is never to exceed what is already observed in the farms with the largest endowment of land.

The required workforce thus estimated is then deducted from the actual workforce to obtain the size of surplus labour. For all India this works out as 29.1% of the total agricultural workforce. If one were to eliminate all fractions of persons who may turn out to be surplus—since amputation is not a nice way of taking half a surplus man to town—one could get a *minimal* estimate of surplus labour by deducting from the surplus workforce the number of households. This yields a set of minimal estimates for each state, with an all India figure of 6.4% unemployed.

Shakuntla Mehra settles for the arithmetic average of the two for each state, yielding for India 17.1%.

Some difficulties with this use of the production approach may, however, be noted. First, the "norm" of work intensity is fixed by the largest size holding group rather than by the economic calculations of the people involved. The behavioural question of work motivation is left out.

Second, it is in fact not the case that the highest work intensity occurs in the largest size group in each region. Among the Indian states, Maharashtra, Andhra Pradesh, Gujarat, Madhya Pradesh, and Kerala, involve a violation of this assumption, and for this reason the first three states in fact end up yielding negative volumes of surplus labour in Shakuntla Mehra calculations, which she treats as zero, on the ground that the available labour force is in fact producing the existing output. If, however, one picks the activity norm not from the largest holding size but from whichever size group happens to have the highest intensity of activity, then the surplus labour figure would have to be revised upwards for these five states. It would appear that for India as a whole it will add another 4.6% of the workforce to the total size of surplus labour.

Third, it should also be noted that the deduction of the number of households from the figure of surplus labour to obtain the minimal estimates is of relevance only when movement outside the area is considered. For supplementing work within the neighbourhood, the so-called maximal estimates should hold. Taken in conjunction with the 4.6% additional surplus labour on the basis of the corrected norm, this yields 33.7%, which for the 1971 agricultural workforce would imply a figure of 42.4 million unemployed in the production sense.

Fourth, another source of underestimation is the fact that the variation that is exploited to permit some people to move out from the farms, keeping the total work time unchanged, is understated in Mehra's calculations since her data come in size class averages. It is obvious that averaging softens the blow and if one looked at the inter-farm data one would find a larger range of variation and thus a larger volume of disguised unemployment using this methodology.

The corrections do not, however, all run in the same direction. A possible basis of over-estimation arises from the fact that some people belonging to the smaller holding size group may in fact be working part of the time as casual labour in the larger farms. When this is ignored, the estimation of surplus labour will be biased in an upward direction for two separate reasons. First, some of the workers who are surplus in the small holdings may in fact already be employed as casual labour in the larger holding size groups. Second, intensity of work per head of the

workforce of the larger farms will be lower since the workers classified under the larger size group would have been supplemented by these part-time labourers to share out the total work time calculated from the Farm Management data. This will tend to reduce the work norm.

Another possible source of over estimation arises from the possibility that some of the workers in the smaller size holdings may in fact have non-farming duties such as domestic work to perform and may not be available for the full work load carried by workers—possibly hired ones—in the larger farms. The problem is particularly relevant for women, but it is of interest to note that even if all the female labour is eliminated from the available workforce keeping the estimate of required workforce unchanged, there will still remain in Mehra's estimates a considerable surplus for India as a whole (about 5.2%) despite the severity of the assumption.

Finally, much depends on the time pattern of labour inputs. Rather than taking the number of days per year per person, it would be better to take the number of days per person *in each season* and then to choose the maximal work intensity among all size groups for all seasons as the norm to calculate the workforce requirements in each season for each category. The maximal requirements among the various seasons will yield the binding requirement for each category. It is easily checked that if the application of labour is more even over the seasons for the smaller farms (with lower intensity), then this will raise the size of the surplus labour. And this may well be a plausible situation since the differential of real labour cost tends to be greater during the slack seasons.

It will be interesting to carry out all these corrections, and Shakuntla Mehra is already engaged in revising her earlier estimates as far as the data situation will permit. Similar calculations with later data will be of obvious relevance for manpower planning in India, and it is a pity that the official thinking in India has paid virtually no attention to the productivity approach to unemployment estimation.

6. JOB SEEKING AND THE RECOGNITION ASPECT

Finally, the number of people on the live registers of the Employment Exchanges provides one variant of the recognition approach to unemployment estimation. In March 1971 the number of people on the live registers was 4.2 million. (This has risen sharply to 8.2 million by October 1973.) One difficulty with the use of this figure is that it relates mostly to the urban areas and it is not easy for a rural unemployed to make use of this channel of employment search. However, the 25th Round of the National Sample Survey asked the agricultural labourers and the bottom 10% of cultivators whether there was at least one member willing to take up

full time work (i) inside the village only, (ii) outside the village only with guaranteed employment, and (iii) outside the village even without guaranteed employment. These data need much more scrutiny, but it is interesting to examine what kinds of magnitudes are yielded by this approach.

The tabulated data of the N.S.S. 25th Round are available for 16 states and administered territories, including Andhra Pradesh, Assam, Gujarat, Haryana, Karnataka, Kerala, Madhya Pradesh, Maharashtra, Manipur, Orissa, Punjab, Rajasthan, Tamil Nadu, Tripura, Uttar Pradesh, and Delhi. Taking the percentage of households of the agricultural labourers who have at least one member who is ready to accept full time work in one of the three categories for each state and weighting them by the estimated number of households of agricultural labourers in each state, we arrive at a weighted average of 50.3%. For the bottom 10% of the land-owning peasants the weighted average works out as 42.6%.

Taking these weighted average figures as the relevant all-India ratios, we can apply them respectively to the total number of agricultural labour households and the 10% poorest cultivators in India. The 1971 Census gives the number of agricultural labourers as 47.5 million and that of cultivators as 78.2 million, so that the relevant figures should be 47.5 million and 7.82 million respectively. The average number of working members per household was around 2.16 according to the National Sample Survey Report No. 144, 17th Round¹¹. For the poorer groups with which we are concerned, the number tends to be lower since family size increases with the size of land holding, so that in using 2.16 as our conversion figure we may be underestimating the number of households in these two categories. The numbers thus arrived at are respectively 22.0 million agricultural labourer households and 3.6 million bottom 10% cultivators. Applying the willingness ratios arrived at earlier we get 11.1 million and 1.5 million as the number of households in which at least one member is willing to accept an outside full-time job. This gives an absolute minimum of 12.6 million working members willing to accept full-time employment.

These people are, in some sense, the agricultural equivalent of those who are registered in the Employment Exchanges in the urban areas. They may or may not be currently employed, but they are willing to take up full-time work if offered. Among the possible reasons for *not* being willing, suggested in the schedules, are "no person can be permanently spared from agriculture" and "present employment in village is adequate and economical." Needless to say, there is some ambiguity in all this. The expected salaries they mention varies a great deal and it is not at all obvious from the questionnaire and the instruction to the field staff of the N.S.S. that the respondents would have treated the salary figures they mentioned as the *minimum* emoluments at which they are ready to take up outside employment.

We cannot, however, add the 12.6 million agricultural jobseekers to the 4.2 million registered in the Employment Exchanges in 1971 until we are sure that there is no overlap. A study conducted by the Directorate General of Employment and Training in 1968 had indicated that about 34.4% of those registered in the Employment Exchanges are normally resident in rural areas,¹² and applying the same ratio to the 4.2 million figure for 1971 one would obtain 1.4 million rural people registered. Deducting this from 12.6 million we obtain the minimal estimate of 11.2 million of the rural jobseekers not covered by the Employment Exchanges, and this added to the 4.2 million from the Exchanges yields a total of 15.4 million. In fact, it is very unlikely that there will be any significant overlap since the two groups of jobseekers in question come from the poorest strata of the rural population and the possibility of their having the opportunity of registering themselves with nearby Employment Exchanges is rather remote. If there is no overlap, the total figure will be 16.8 million, giving a range between 15.4 and 16.8 million.

This exercise in using the recognition aspect on its own is geared towards producing a minimal estimate rather than a best guess value. In fact, there are several reasons for expecting that the real number of job-seekers is much larger.

First, many households will have more than one person who is ready to take up outside employment. Our assumption of one person per household is obviously an underestimate.

Second, we have covered only the bottom 10% of the cultivating households, but there are obviously other cultivating households from which job-seekers may come. We have, however, no figures for other groups, but if we apply the same ratio to those operating tiny holdings, say, below 1.01 hectares (who are treated as "marginal farmers" in rural programmes such as the MFAL and are bunched together with agricultural labourers), then we shall have to deal with 39.9% of the cultivating households.¹³ This will raise the number of willing households to 6.0 million, producing a minimal total of 17.1 million rural job-seekers. Given the 4.2 million registered in the Employment Exchanges with a maximal overlap of 1.4 million, we get the range as of 19.9 million to 21.3 million.

7. SOME CONCLUDING REMARKS

(1) Unemployment is not one concept but a class of concepts. The different dimensions of unemployment correspond to these conceptual differences. The attempt to get one number representing "the level" of unemployment is, therefore, fundamentally misconceived. In the search for "consistency" one should avoid the temptation of grinding distinct concepts into some kind of a homogeneous dust.

(2) It is a mistake to think that the problem of multi-dimensionality of unemployment will disappear if one disaggregates properly. Even for one given person—and it is not easy to push disaggregation much further—the dimensions may differ, and the person can be unemployed according to one concept and employed according to another.

(3) Multi-dimensionality is no reason for eschewing whatever information on unemployment one has. *The Draft Fifth Five Year Plan's* failure to give any estimate of unemployment in the country and any idea of the likely volume of additional employment to be created by the Plan, using any of the concepts of employment, makes its credibility peculiarly low. This is especially so since employment is a major vehicle of income redistribution, which is supposed to be a basic objective of the Fifth Plan.

(4) The estimates of the different aspects of unemployment in India in 1971 presented here all turn out to be fairly gigantic. The estimates can all be improved with the use of better and later data, but the magnitudes are alarming, and so are the trends of some readily observable parts of the estimates, *e.g.*, the rise in the number on the live registers in the Employment Exchanges from 4.2 to 8.2 million between March 1971 and October 1973.

(5) The biggest estimates come from the production approach suggesting about 42.4 million rural unemployed in 1971. But the need for several corrections has been pointed out and the data base is rather old. The neglect of this approach in the official literature is somewhat odd especially in view of its relevance to resource planning.

(6) The estimation of the minimal number of job-seekers based on the recognition approach yields a figure around 20 to 21 million. This is fairly close to the estimates of the unemployed and the severely underemployed based on mixtures of the income approach and the recognition approach used by the Committee on Unemployment (19 million) and by Raj Krishna (21 million). Since the underlying concepts are quite different, as I have tried to discuss in some detail, the empirical proximity is a coincidence.

NOTES

1. I am most grateful to Dharm Narain, J. Krishnamurti, Shakuntla Mehra, and R. Thamara-jaksji, for helpful discussions and much guidance.

2. 'Unemployment,' reprinted in *Talks on Planning*, Indian Statistical Institute, 1961.

3. *Report of the Committee of Experts on Unemployment Estimates*, Planning Commission, Government of India, 1970, p. 31.

4. 'Unemployment in India,' Presidential Address delivered at the 32nd Annual Conference of Indian Society of Agricultural Economics; reprinted in *Indian Journal of Agricultural Economics*, Vol. XXVII, January-March, 1973.

5. V. M. DANDEKAR and N. RATH, 'Poverty in India', *Economic and Political Weekly*, Vol. VI, Nos. 1 and 2, January 2 and 9, 1971.

6. International Labour Office, *Employment, Incomes and Equality : A Strategy for Increasing Productive Employment in Kenya*, Geneva, 1972.

7. International Labour Office, *Matching Employment Opportunities and Expectations : A Programme of Action for Ceylon*, Geneva, 1971.

8. In fact it is an intersection of three sets, since the N.S.S. figures include only those between 15 and 60 years of age.

9. S. MEHRA, 'Surplus Labour in Indian Agriculture,' *Indian Economic Review*, Vol. I, April 1966; reprinted in P. Chaudhuri, ed., *Readings in Indian Agricultural Development*, Allen and Unwin, London, 1972.

10. There is, however, also the possibility that these labourers-cum-cultivators may turn out to have the highest intensity of work, and this could push up the norms *beyond* the ones chosen by Mehra.

11. *Tables with Notes on Some Aspects of Land Holdings in Rural Areas*, N.S.S., No. 144, 17th Round, Table (31).

12. *Report of the Committee of Experts on Unemployment Estimates*, Planning Commission, Government of India, 1970, p. 27.

13. *Indian Agriculture in Brief*, 12th edition, Directorate of Economics and Statistics, Ministry of Agriculture, Government of India, 1973, Table 4.1.