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# PATTERN OF EMPLOYMENT AND THE NATURE AND CAUSES OF UNEMPLOYMENT IN AGRICULTURE

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## CONCEPT AND DIMENSIONS OF EMPLOYMENT

Employment is a state of being engaged in productive work. Continuous engagement in such work with sufficient amount of labour put in and an adequate reward flowing from it constitutes full employment. Now, full employment has three postulates. It should be continuous and not intermittent, there should be a sufficient amount of man-hours' or man-days' work rendered, and the income accruing from it should be commensurate with the effort made.

Judged on these criteria, full employment in agriculture is a rare phenomenon. There are seasonal, regional and structural variations. The busy and the slack seasons are too well-known to need any repetition. The regional variation is caused by the difference in land-man ratio in cultivation and the comparative mobility of the labour force in different regions. The structural variation arises on account of difference in the intensity of labour required for different kinds of cultivation undertaken or different practices followed.

The above variations relate to the intensity-density dimensions of employment. Besides these, there is another aspect of employment, *i.e.*, productivity. Unless certain norms of production are achieved with the given units of labour, employment cannot be said to be full or economically viable. These norms will have to be worked out and determined with reference to a number of factors in which the unit of labour will be constant but factors like kinds of crop grown, soil and climatic conditions obtaining, cultural practices followed, extent of irrigation available will be variable. In short, the norms will emerge from detailed studies being conducted in productivity coefficients and will, in the main, vary from crop to crop and region to region.

There is yet another dimension of employment and that is income. We are inclined to propound the view that income below a certain level should be regarded as a definite sign of under-employment. The line of demarcation need not necessarily be the subsistence level. In fact, it should be much above that. It should be at a level where the income can be taken to ensure for the worker and his family a life of reasonable comfort and to maintain his efficiency as a worker. The income level so defined will not be the same for the whole country but vary from region to region. The regions for the purpose could broadly correspond with the agricultural regions in the country.

On the income dimension, we have no doubt in our mind, a much larger volume of under-employment will come to light than on the present time dimension.

Many of those who are considered by the measure of time as fully occupied will be found to be greatly wanting in employment on the score of income.

#### STUDY OF MANPOWER UTILIZATION

A study of manpower utilization was made in a village in Rajasthan in the later part of 1963. In this study, *inter alia*, the pattern of employment and the extent, nature and causes of unemployment (which term included under-employment) were investigated and analysed. These aspects of the study are presented and discussed here.

The study was conducted by the census method and the heads of all the households were canvassed for it. The period of reference for the collection of data was the immediate one year preceding the enquiry. All persons of 14 years of age and above were considered adults for the purpose of employment. Persons of 60 years of age and above were considered unemployable but such of them as were in employment were taken into account for the analysis of both the employment and under-employment data. Three hundred and twenty days or more worked in the year were taken as constituting a full year. The remaining days were accounted as holidays, voluntary or forced, provided the days were spread over the whole year and did not run in a stretch.

All adults working for a minimum of one hour per day in gainful employment were regarded as employed. Those not rendering even this much of work were taken to be unemployed. Eight hours of work or more per day constituted a full man-day for an adult male worker. In case of adult females, in view of the fact that they have to devote time to a number of domestic duties, a minimum of four hours of work per day was adopted to constitute a full man-day. Persons putting in less hours of work than these were considered under-employed.

The individual was taken as the unit while computing employment and unemployment on the time dimension, but family was the unit in their analysis from the point of income. The largest single source of income to a family determined its main occupation.

#### *Background Information*

The village was situated in the south-eastern part of Rajasthan which has a good climate and a fair amount of rainfall. It lay at a distance of 6 miles from the nearest railway station and 15 miles from a town. The nearest post-office was  $1\frac{1}{2}$  miles away and the bus route about a mile away on which the frequency of buses was two during the major part of the year.

The population of the village was 1,209 and the number of households 235. Of the total population, 456 persons were less than 14 years of age, 700 between 14 and less than 60 years and 53 were over and above 60 years. In respect of literacy the village stood at a very low level. It was nil among females and only 3.8 per cent among males.

One characteristic feature of the village was that it had no sharp caste distinctions. There were no *Brahmin* and *Vaish* families in the village. There were

only 2 Rajput families and they were economically so indigent that they wielded no influence. The rest were what may be called the lower castes. It was not that there was no hierarchical complex in them at all but they had absolutely no conflict among them. There was, therefore, considerable social harmony in the village.

The main crops grown were wheat and barley in the *rabi* season and maize, groundnut and pulses in the *kharif*. The yield of all the crops was low. This was mainly because cultivation was still done in the traditional way and no improved agricultural practices had been adopted.

Another notable feature of the village was that while its geographical area was 2,183 acres, only 638 acres constituted the net sown area. There was a considerable scope of extending this area for as many as 292 acres were cultivable waste, 646 acres pastures and grazing land and 293 acres under forest. This was too uneconomic a use of land and provided a good scope for diverting part of it for cultivation and developing the rest intensively as pasture and forest. An area of 452 acres of cultivated land was irrigated by a canal and another 10 acres by wells. Because of this facility 223 acres were sown more than once. This gave a gross cropped area of 861 acres.

#### PATTERN OF EMPLOYMENT

Occupationally, the cultivators were the largest single group of families in the village. Out of a total of 235 households, 170 or 70.2 per cent had cultivation as their main source of income. Taking the total population of the village into account, 895 or 74 per cent depended on cultivation and of the total adult population, 610 or 81 per cent were employed in cultivation.

The average size of cultivation holding in the village was very small, being only 4.7 acres including fallow land. The largest size of holding was 8.5 acres and the smallest a little less than half an acre. There were, therefore, no sharp distinctions between big, medium and small cultivators.

The next largest group followed labour as their main occupation. About 18.6 per cent of the households and 16.2 per cent of the total population had labour as the main source of their families' income. Here it is significant to note that only one member per labour household undertook wage employment, thereby accounting for only about 6 per cent of the total adult population of the village being employed as labourers. This was because of two reasons. Firstly, 39 of the 44 labour households owned small pieces of land on which they did their own cultivation as a subsidiary occupation. Secondly, the scope for regular wage employment in the village was not large enough to absorb more people. The 44 persons who had labour as their main occupation took employment both in agriculture and other avocations but admitted that their main and regular employment was only in agriculture and they were, therefore, essentially agricultural labourers.

The artisans and the servicemen formed the next two main occupation groups in the village, but since they do not come within the purview of this paper they are

not being dealt with here. Therefore the next group which had a close, though not direct, affinity with agriculture was that of dairy farmers. Seven persons followed dairy farming as a main occupation. Here too like labour only one member from each of the families which had dairy farming as the main occupation was working in the profession. This is essentially a domestic occupation and does not need too many family members to attend to it unless it is carried on a large scale which was not the position in the present case. Besides, all these seven families had agricultural land of their own. They undertook cultivation on it as a subsidiary occupation and some members of their families were employed in it. Roughly about 3 per cent of the families and 1 per cent of the adult population had dairy farming as their main occupation. None of the other occupations merited being considered here as they were essentially of a non-agricultural character. The percentage distribution of adults following main occupations is given in Table I.

TABLE I—PERCENTAGE DISTRIBUTION OF ADULTS BY MAIN OCCUPATION

Category	Main Occupation							Total
	Culti- vation	Labour	Rural crafts	Service	Dairy farming	Others	No work	
Males .. .. .	79.2	9.3	2.1	2.1	1.3	2.8	3.2	100.0
Females .. .. .	83.0	2.2	0.5	0.0	0.5	0.8	12.9	100.0
Total .. .. .	81.0	5.9	1.3	1.0	1.0	1.8	8.0	100.0

There were 195 persons in the different subsidiary occupations. They constituted about 26 per cent of the total adult population of the village. The most popular of these occupations was dairy farming which absorbed 79 persons distributed over 72 families. Among those following a subsidiary occupation, dairy farming accounted for the employment of 40 per cent and among the total adult population for 10.5 per cent. The largest number of persons in this group belonged to cultivator families and took to dairy farming not strictly in the spirit of an occupation but like an item of domestic work wherein cattle had to be tended anyhow and some of the milk and milk products obtained in the process were passed on for sale like the disposal of a by-product.

The next in importance among the subsidiary occupations was cultivation which gave employment to 46 persons. The majority of them belonged to labour households followed by those of the dairy men in the main occupation. These persons were in the category of self-employed earning dependents who cultivated their own small pieces of land but did not earn enough to place their families in the category of cultivators.

Labour came next among the subsidiary occupations. Thirty-three persons worked as wage-earners both in agricultural and non-agricultural employment. Although some of them changed position from agricultural to non-agricultural labour and *vice versa*, taking into account the quantum of their employment for the year as a whole 25 could be placed as essentially non-agricultural labourers and 8 as agricultural. The majority of them belonged to the artisan and the miscellaneous group of households in the main occupations. They were all in the category of earning dependents who worked for a wage to supplement their family income.

The percentage distribution of adults following subsidiary occupations is given in Table II.

TABLE II—PERCENTAGE DISTRIBUTION OF ADULTS BY SUBSIDIARY OCCUPATION

Category	Subsidiary Occupation							Total
	Culti- vation	Labour	Rural crafts	Service	Dairy farming	Others	Nil	
Males .. .. .	8.5	7.0	6.7	0.0	18.2	1.0	58.6	100.0
Females .. .. .	3.6	1.6	1.4	0.0	2.2	0.5	90.7	100.0
Total .. .. .	6.0	4.4	4.2	0.0	10.5	0.8	74.1	100.0

Among the 610 cultivators in the main occupation group the proportion of males and females was almost even, being 308 and 302 respectively. This shows that almost as many female family workers participated in cultivation as males. There were several factors operating in this situation. Firstly, nearly all the cultivator families belonged to lower castes in which it was an age-old tradition for the females to work on family farms. Secondly, the average size of a cultivator family was 5.5 as against 4.2 in others. This enabled a larger proportion of family hands being available for farm work. Thirdly, there was no large variation between the big and the small cultivators. Only 32 cultivator families employed wage-paid farm labour. The rest depended almost entirely on family workers, a fair number of whom was naturally women.

The proportion of males to females among the labourers in the main occupation was 36 to 8. This was mainly because there was less demand for female labour than for male labour on account of its generally supposed lower productivity. Secondly, a lesser number of women were willing to offer themselves for wage employment, even when it was more remunerative than those working on family farms. Since a large majority of the labour households had some land

of their own for cultivation, the female members preferred to work on them rather than go in for wage-paid labour.

In dairy farming as the main occupation there were 5 males and 2 females. All these households also possessed plots of land on which they did cultivation as a subsidiary occupation. More of their female members were engaged in cultivation than in dairy farming and this accounted for the difference in the ratio of males to females in dairy farming as a principal occupation.

Among the subsidiary occupations, dairy farming occupied the top position. Here the difference between males and females was quite marked, being 71 to 8. Since a large majority of those who followed this as a subsidiary occupation were cultivators and a sizable number of their female family members was engaged in cultivation, only a very small number of their womenfolk was in dairy farming. On the other hand, the heads of households who were very largely males and followed cultivation as their main occupation also stated dairy farming as their subsidiary occupation. This accounted for the big difference in the ratio of males to females in this occupation.

Cultivation as a subsidiary occupation accounted for 33 males and 13 females. The largest number of those following this as a subsidiary occupation belonged to labour households and as women from these households took more to cultivation than wage labour for reasons stated above, a larger number of them were engaged in cultivation even as a subsidiary occupation than those in labour as the main occupation.

The male-female ratio in labour as a subsidiary occupation was the same as that in the main occupation and the reasons for this were also the same as explained above in that case.

#### EXTENT OF UNEMPLOYMENT

Unemployment (which included under-employment) was measured for a period of one year immediately preceding the enquiry for the present study. Data were collected on the number of days worked by each adult person and the average number of hours worked per day. An analysis of this data revealed that out of the total adult population of 753, 60 persons had no gainful employment throughout the year. Of these, 13 were males and 47 females. This showed that about 8 per cent of the adult people in the village was unemployed for the whole year. Sex-wise the percentage was 3.2 for males and 12.9 for females. In the total population, 53 were in the age-group 60 and above. They constituted a group which is considered unemployable on account of their advanced age. Nevertheless, 25 of them were gainfully employed and only 28 were unemployed. This distribution of unemployed adults by sex and age-groups is shown in Table III.

Excluding the 60 wholly unemployed adults, we get the figure of 693 who were gainfully employed. Of these, 455 or 65.7 per cent were fully employed according to norms of time. Their proportion among the males was 67.3 per cent and among the females 63.6 per cent. Thus, 32.7 per cent of the gainfully em-



TABLE III—THE UNEMPLOYED BY SEX AND AGE

Sex	14 Years to less than 60 Years		60 Years and Above		Total	
	No.	Per cent to total in the group	No.	Per cent to total in the group	No.	Per cent to total
Males .. .. .	7	1.9	6	24.0	13	3.2
Females .. .. .	25	7.4	22	78.6	47	12.9
Total .. .. .	32	4.6	28	52.8	60	8.0

ployed adult male population and 36.4 per cent of the adult female population were under-employed. The quantum of their under-employment on an average varied between 1 to 7 hours per day for males and 1 to 3 hours for females. Converted into man-days of idleness, an adult male worker was unemployed for 110.5 days and an adult female worker for 119 days in the reference year. The combined average was 114.6 days. Thus, an adult worker spent almost four months in a year in idleness. The percentage distribution of the under-employed by average number of hours of idleness per day is given in Table IV.

TABLE IV—PERCENTAGE DISTRIBUTION OF THE UNDER-EMPLOYED BY AVERAGE NUMBER OF HOURS OF IDLENESS

Category	Number of Hours of Idleness per Day							
	1	2	3	4	5	6	7	Total
Males .. .. .	27.7	24.4	18.7	13.0	8.1	5.7	2.4	100.0
Females .. .. .	59.1	33.0	7.9	—	—	—	—	100.0
Total .. .. .	42.8	28.6	13.4	6.7	4.2	3.0	1.3	100.0

Table IV shows that there was an inverse proportion between the hours of idleness and the number of under-employed persons and the phenomenon was common to both males and females,

Of the 32 wholly unemployed persons in the working age-group (14 years to less than 60 years), 16 belonged to cultivator households, 9 to labour, 5 to artisans and 1 each to dairy farming and 'other' households. While in absolute numbers

the largest concentration of the unemployed was in the cultivator households, proportionate to the strength of the households following these occupations the position was quite different. On this basis, the largest unemployment was among artisans (14.7 per cent), followed by labourers (5.1 per cent), 'others' (4.0 per cent), dairy farmers (3.3 per cent) and cultivators (1.7 per cent).

The position was much the same in respect of the under-employed persons. Proportionately, the under-employed among the artisans were 80 per cent, among the labourers 61.4 per cent, among those in miscellaneous occupations 35.7 per cent, among the dairy farmers 25.6 per cent and among the cultivators 28 per cent.

Apart from norms of time, under-employment is measured in terms of average annual income also. Consequently data were collected on the income of the families included in the study during the immediate one year before the enquiry. An analysis of the income data revealed that the annual income of the people was extremely low. This would be clear from Table V which gives the distribution of families by annual income.

TABLE V—DISTRIBUTION OF FAMILIES BY ANNUAL INCOME

Income group (in Rupees)	Number of Families in the Group	Percentage of Families in the Group to Total Families
Less than 100 .. ..	3	1.3
100 to 299 .. ..	65	27.7
300 to 599 .. ..	98	41.7
600 to 899 .. ..	39	16.6
900 to 1,199 .. ..	17	7.2
1,200 to 1,499 .. ..	8	3.4
1,500 to 1,999 .. ..	3	1.3
2,000 to 2,999 .. ..	2	0.8
3,000 and above .. ..	Nil	—
Total .. ..	235	100.0

No family had an income of Rs. 3,000 or more a year, while 1.3 per cent had an annual income as low as less than Rs. 100. The majority of the families (70.7

per cent) had an income of less than Rs. 600 a year each, about 24 per cent between Rs. 600 and Rs. 1,199, 3.4 per cent between Rs. 1,200 and Rs. 1,499 and only 2.1 per cent above Rs. 1,500. This shows that about 98 per cent of the families in the village had an income much below the national average of Rs. 1,700 per family per year. The per capita annual income was Rs. 101.7, *i.e.*, just about 30 per cent of the national average. Judged from this angle, the entire work force of the village was grossly under-employed.

#### NATURE OF UNEMPLOYMENT

There was virtually no admission of unemployment or under-employment on the part of the large majority of the persons affected. When specifically asked whether they had any spare time to devote to some gainful employment or take up some additional work to supplement family income, almost all replied in the negative. Surprisingly enough, even the majority of those who were wholly unemployed also stated that they could not take up any employment because they were not keeping good health, although apparently they did not seem to suffer from any such handicap. Only about half a dozen persons in the village admitted that they had some leisure which they could utilize in gainful work. Even in their case there was no keenness or firm desire to take up some employment but only an expression of a wish which could, when the actual opportunity came, be availed of or denied suiting the mood and temper of the person.

From all accounts there was no active pursuit of any work opportunities nor any migration from the village in search of employment. Even when work was assured and readily available at close proximity to the village, there was no keenness or urge to avail it. This was evidenced by the fact that a big industrial plant was being set up at a distance of only 4 miles from the village and a large amount of even unskilled labour was required at wages which were about 33 to 50 per cent higher than available in or anywhere around the village. Still very few persons from this village or neighbouring villages went there to take up employment. Further, very few persons who got the employment stuck to the job. No sooner there was enough money in their pockets than they left the job to enjoy themselves. Besides wage employment, there was considerable scope for the sale of milk, milk products and vegetables in the factory being set up. But there were no signs of either any cultivator going in for vegetable cultivation or a dairy farmer expanding his business to meet the growing demand for milk and milk products.

The above is not a solitary instance of indifference to work. There are soapstone quarries at a distance of about 2 miles from the village, where, on an average, about 60 labourers were employed throughout the year. The wage rate was more than that in the village both for male and female workers and the working time was 8 hours a day. Still only about 8 persons from the village under study worked in the quarries from time to time. It was a constant complaint of the contractor of the quarries that the labourers did not stick to work and left the job on the slightest pretext, particularly those who had even a small piece of cultivated land in the family. He was prepared to employ about 40 persons from this village on a regular basis provided they entered into a contract with him to work at the quarries throughout the year. The labourers on their part were not willing to enter

into any such contract, not because they had the guarantee of an alternate job or prospects of a better job, but because they wanted to maintain their 'freedom' and the free-lance character of their employment.

The casualness towards employment was not confined to any particular caste or occupation group in the village but found among all. It was in the character of the people not only of this village but, by and large, of the area or the region as a whole. It was particularly heightened in this village because out of 235 families as many as 230 owned cultivated land and felt both pride and security from utter want in its ownership.

In this village caste was not a barrier to employment of any kind, particularly wage employment. Except for two Rajput families, the village was free from the so-called high caste Hindus and their typical mentality of being choosy or sensitive about jobs. The other castes inhabiting the village were of a lower order and did not have much social distance between them nor a very high sense of social prestige. Similarly, the occupation groups were not insular of each other inasmuch as the members of the one took to the occupations of the other as a subsidiary occupation. The members of artisan families taking to wage-paid labour, of labour families to cultivation and of cultivator families to service or casual labour was a common occurrence in the village. This was again due to the fact that there were no sharp caste distinctions creating barriers between one class of people and another. The employment pattern and the social structure in the village were, therefore, such that along with an intensification of efforts in the existing economic enterprises to mitigate the rigours of under-employment, there was considerable scope for diversification of work opportunities.

The under-employment was not only disguised but considerably seasonal in character. There was a spurt of activity in the harvesting season both for the self-employed cultivator and the wage-paid labourer. This involved a larger employment as well as a more intensive use of manpower. There was some enhanced activity in the weeding operations also, but during the rest of the year agriculture continued on a subdued note, involving a large quantum of under-employment. Further, it was not always or in all cases that during the busy periods there was full employment in agriculture. Vagaries of nature, small size of cultivation holdings, outmoded capital equipment and cultural practices caused under-employment or wasteful employment in varying degrees.

#### CAUSES OF UNEMPLOYMENT

The principal causes of unemployment and under-employment, at least in the village under study, were temperamental and emotional. One was plain and simple laziness or inertia, the other was excessive attachment to land. It passes one's comprehension that when fuller and better job opportunities await a person almost next door, what can make him turn his back on them. Whatever arguments might be adduced on the theoretical plane for such blatant indifference to gainful work as obtained in this village, there is no doubt that the largest single cause of unemployment was the love of idleness. Next only to this was their attachment to land. Even where there were small, fragmentary holdings, people clung to them like leeches. Irrespective of whether they were able to wrest even

two square meals a day from such holdings or not, they took cool comfort in the fact that they possessed land and, therefore, need not bother about anything else in the world.

A singular lack of spirit of adventure and immobility—both geographical and occupational—were other important reasons. A big, flourishing city, which was itself coming up in a big way economically, lay at a distance of only 15 miles from the village and offered many and varied opportunities of gainful employment. Surprising as it may sound, but nevertheless true, not a single person from this village had migrated to the city in recent years to take up any kind of job there. There were plenty of job opportunities in the neighbourhood of the village itself. Even these were not availed of by the people to any appreciable extent. Further, what is more significant in this context is that in the big industrial plant that was being set up at a distance of only 4 miles from the village there was a lot of opportunity for the bold and the enterprising among the village people to develop and flourish into semi-skilled and skilled workers in trades like smithy, carpentry and masonry, which were not very much alien to the genius of the people, and get themselves absorbed permanently in the maintenance division of the factory. While workers in these trades were brought from distant places like Punjab and western Uttar Pradesh, no local artisans took up a job with them even as a helper, much less any other class of people from the village. The main reason of this was that it was compulsory for such workers and their assistants to stay at the campus of the factory for which nobody from the village under study was prepared, although a fairly satisfactory 'shed' accommodation was provided.

Small size of cultivation holdings and the old methods of cultivation were other causes of under-employment. About two-thirds of the holdings were less than  $3\frac{1}{2}$  acres each. Further, an over-whelming majority of cultivators followed the traditional methods and had not taken to improved agricultural practices. The two together—the small holdings and the old methods—were hardly likely to provide adequate employment or generate sufficient income for a family of about  $5\frac{1}{2}$  per sons of whom as many as over 3 joined hands in cultivation. The excess pressure on land could be relieved only in two ways—either to bring more land under the plough or to divert part of the work force to jobs not wedded to land. Intensification of agriculture was another way, but this was essentially a long-term process. Orientation of cultivators in a backward and tradition-bound area like the south-eastern Rajasthan in improved and modern methods of cultivation needed sustained labour and a long time to bear fruit. Even then, this will only generate more income but will not provide sufficient work for all the available farm hands. For full employment for them, again, we will have to resort to either bringing more land under cultivation or providing alternative avenues of employment. Fortunately, there is plenty of scope for both in and near the village. The crucial point, however, is that it will be necessary to break first the age-old inertia and immobility of the people and then to instil in them a spirit of adventure and a right attitude to work. Without this there is no escape from downright and abject unemployment.