

## Population, Employment, and Wages: A Comparative Study of North Arcot Villages, 1973–1983

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ONE ASPECT OF the research undertaken in North Arcot in 1973/74 by the Cambridge project was a comparative study of the sample villages. Chambers and Harriss wrote of their study of intervillage variations:

Comparative analysis involves an exercise in classification. Yet as many typologies of villages are possible as there are dimensions or scales against which villages can be assessed. The challenge in searching for a typology is to choose scales or dimensions which are both powerful in making sense of other factors and useful in seeing what might be done to improve rural livelihoods; so that the important result should be not so much the categories that are produced as the principles of classification . . . What is important is not that we should be able to say “This is A, that is B” but rather that we should understand the principal reasons for variations between villages, because it is probable that those reasons will tell us much about the critical variables in rural development. (1977, p. 303)

Starting from an analysis of long-term trends in village populations and examining possible reasons for the marked differences among villages in the extent to which they had apparently been able to absorb increasing numbers of people, Chambers and Harriss considered location, resources in relation to population, and the nature of the production process as “the mainly causal factors,” and demographic trends, farming practices, aspects of labor relations, and wages as “mainly derivative factors.” They argued finally that a major cause of variations was the differing extent of continuity in the processes of production in different villages. Villages with better-quality irrigation had more continuous production and had, on the whole, supported higher levels of increase in their populations, higher demand for labor, and contrary to some expectations had higher wage rates. The analysis highlighted the importance of seasonality (which Chambers went on to study in

depth; see Chambers, Longhurst, and Pacey 1981), and the paper on intervillage variations concluded with the broad statement that “a North Arcot District with a quasi-industrial agriculture, with a continuous demand for labor throughout most of the year, is a target worth bringing into clearer focus” (Chambers and Harriss 1977, p. 322).

Systematic differences among villages were summarized as follows:

#### QUASI-INDUSTRIAL VILLAGES

Kalpattu, Randam: Indications of labor shortages, high wage rates; both sides have an interest in semipermanent labor contracts

Vegamangalam: This pattern disturbed by political strength of scheduled castes (no attached labor)

Vinayagapuram: The same level of demand for labor not evident; more equal distribution of landholdings associated with modest demand for labor

#### SEASONAL “EXPANSION” VILLAGES

Duli, Meppathurai: Modest wage rates, no *padials*, no continuous labor shortages

#### SEASONAL-PRODUCTION-PROCESS VILLAGES

Sirungathur, Veerasambanur, Vengodu: Indications of labor surplus strong; low wage rates; few meals (perquisites) given to laborers; little opportunity for semipermanent labor contracts

Vayalur: This pattern complicated by the fact that scheduled castes have some “independence” and by the availability of higher-paid employment outside

Amudhur: Indications of labor surplus and low wage rates, but pattern distinctive because of particular caste relations

In the absence of firm data on labor demand and supply and on variations in them through the year (for villages other than Randam), the argument depended on the observation of a positive correlation between the apparent quality of irrigation and both wage rates and incidence of labor attachment, and the presumptions—tautological, given that they were supported only by limited qualitative evidence—that production was more continuous and that labor shortages generally existed in these “good-irrigation/high-wage” villages.

This chapter takes the analysis of intervillage variation in 1973/74 as its starting point, but subjects the relationships postulated in that analysis to more rigorous scrutiny, using the Cambridge-Madras universities and IFPRI-TNAU survey data on household labor use and seasonal wages. It finds, essentially, that the earlier analysis probably overestimated the direct connections among quality of irrigation infrastructure, continuity of demand for labor, and levels of wages and the incidence of semipermanent labor contracts. It argues that the class

and caste (status) structures of villages also exercise an important influence upon employment patterns and wages; and whereas the earlier analysis pointed to the significance of seasonality as a determinant of rural livelihoods, this chapter draws attention to the importance also of factors that contribute to the segmentation of rural labor markets.

The same general caveats that entered in the presentation of the 1973/74 study apply here. There are major difficulties over the definition of some villages. The sampling frame for the North Arcot surveys was the census list of villages. The villages in this list include different types of social units (see Chambers and Harriss 1977, p. 302); they are not always the same as the villages defined for revenue (administrative) purposes, and units may have been aggregated or disaggregated in different ways at different census points, so that it is sometimes difficult to trace a village from one census to another; it may also be uncertain as to whether the village surveyed by a research team is exactly the same as the unit listed by the census. A further set of difficulties arises from the fact that villages are not clearly bounded entities, and there is interpenetration by ownership of land, wells, and pumpsets, and by movements of labor. Finally, as was said of the 1973/74 analysis, "much of the argument which follows is based upon impressions and upon evidence of rather low reliability . . . But . . . a set of interpretations appears to hang together, and . . . raises policy issues" (Chambers and Harriss 1977 p. 303).

### Population Trends

Comparison of the census results for the villages at different points is far from straightforward for the reasons just mentioned, and it is possible that the 1971/81 trends shown in Table 6.1 have been affected, in some cases, by boundary changes. It appears that the population in all 11 villages increased by only 14.8 percent over the decade—compared with 17.2 percent for the population of Tamil Nadu as a whole—though with considerable variation between the  $-2.5$  percent recorded for Meppathurai and  $+37.1$  percent for Duli. We believe that both of these extreme results partially reflect boundary changes. Taking the figures at their face value, it would appear that the higher rates of growth have generally been experienced in what were considered to be seasonal-production-process villages in 1973/74. This may not be altogether surprising, given the facts that there has been some intensification of agricultural production in these villages over the decade, and that some of the continuous-process villages (like Randam) were thought already to have become saturated with population even by 1973/74.

**TABLE 6.1**  
**Village Populations**

| Village  | 1971<br>Census | 1973<br>Survey | 1981<br>Census | 1983<br>Survey | Percent Change |         |
|--|----------------|----------------|----------------|----------------|----------------|---------|
|  |                |                |                |                | 1971-81        | 1973-83 |
| Amudhur  | 934            | 942            | 1,121          | 986            | 20.0           | 4.7     |
| Duli   | 450            | 456            | 617            | 538            | 37.1           | 18.0    |
| Kalpattu   | 1,942          | 1,537          | 2,228          | 1,393          | 14.7           | -9.4    |
| Meppathurai  | 804            | 551            | 784            | 747            | -2.5           | 35.6    |
| Random <sup>a</sup>  | 1,446          | 1,388          | 1,614          | 1,487          | 11.6           | 7.1     |
| Sirungathur  | 980            | 948            | 1,172          | 1,049          | 19.6           | 10.7    |
| Vayalur  | 634            | 639            | 739            | 692            | 16.6           | 8.5     |
| Veerasambanur  | 540            | 565            | 560            | 620            | 3.7            | 9.7     |
| Vegamangalam   | 1,028          | 1,023          | 1,214          | 1,062          | 18.1           | 3.8     |
| Vengodu  | 1,061          | 1,046          | 1,274          | 1,165          | 20.1           | 11.4    |
| Vinayapuram  | 784            | 750            | 846            | 814            | 7.9            | 8.5     |
| Total  | 10,603         | 9,845          | 12,169         | 10,553         | 14.8           | 7.2     |
| Total<br>excluding<br>Kalpattu &<br>Meppathurai <sup>b</sup> | 7,857          | 7,757          | 9,157          | 8,413          | 16.5           | 8.5     |

<sup>a</sup>Random is a pseudonym for Nesal (see Chapter 4).

<sup>b</sup>For Kalpattu and Meppathurai, there are particularly acute uncertainties as to the comparability of survey and census units, and the comparability of 1973 and 1983 survey units.

There is also the possibility, discussed below, that there has been some decline in fertility, and this more in advanced, continuous-process villages than in the poorer, seasonal-process ones. The overall increase of 14.8 percent is appreciably higher, however, than the 10.1 percent increase recorded for these villages for the decade 1961-71, which might be taken to suggest the greater capacity of the local production system to support increases in population (even though there are still indications of net emigration from some villages, such as from Random, Veerasambanur, and Vinayapuram; see Chapter 4).

In each case (comparison of the Cambridge-Madras survey results for 1973 with the 1971 census, and of the 1983 IFPRI-TNAU results with the 1981 census), it appears that the survey listings have tended to produce lower estimates of population than the preceding censuses, though more so in the case of the 1983 survey (8.1 percent difference compared with 1.3 percent difference between 1971 and 1973—for villages excluding Kalpattu and Meppathurai, in which cases comparability is very doubtful). This higher difference in 1983 compared with 1973 may reflect the fact that the survey was conducted in the midst of a series of three agroclimatically very poor years, during which there was a lot of short-term migration from the villages to local towns and to the cities of Madras and Bangalore. But even allowing for this factor

and excluding the difficult cases of Kalpattu and Meppathurai, it seems either that the census operation actually tends to inflate population numbers or that household surveys systematically underestimate them.

In 1983/84, already aware of the discrepancies between census and survey figures, stringent efforts were made by the IFPRI-TNAU survey team to check the accuracy of data on village populations. Even after correction of initial household listing figures—which are expected to be on the low side because of investigators' lack of familiarity with the villages—the disparity shown in Table 6.1 remained. The accuracy of the survey figures is broadly confirmed by the independent measurement of the population of the main village of Randam by anthropological investigation. This showed an increase of 8.65 percent between April/May 1973 and January/February 1984, corresponding quite closely with the 7.1 percent increase shown in the comparison of the survey results from 1973 and 1983. There does seem to be a possibility that the census results for 1981 overestimate the village populations, and that the overall rate of population growth over the decade has not been as high as the 15 percent that appears.

In view of the general importance of labor absorption and support for natural population increase within the rural economy (this was also the organizing theme of the work by Chambers and Harriss on inter-village variation), it is striking that the sample villages in eastern North Arcot should have supported so small an increase in population (even 15 percent could be considered relatively low and possibly indicative of emigration), especially over a decade of rather rapid growth of agricultural production. In the absence, at the time of writing, of full census records for North Arcot for 1981, the analysis cannot be pursued much further. The extent of local migration is indicated by the fact that the urban population of North Arcot district as a whole grew by 29.6 percent according to census data, and one of the market towns in the study region, Arni, saw population grow by 27 percent over the decade. The possibility that there has been migration from villages to towns in North Arcot, as well as to the more distant cities of Madras and Bangalore, is borne out by evidence of such movements of people from Randam, Veerasambanur, Vinayapuram, and Duli (for which more detailed information is available; see Chapter 4).

Account must also be taken of the possibility that there has been some decline in fertility. The situation in some villages in eastern North Arcot seems in general to resemble that in an area in Karnataka state, to the west of the city of Bangalore, studied by Caldwell, Reddy, and Caldwell (1985). The population in their study area has hardly changed in the recent past because net emigration, mostly to Bangalore, is more or less equal to the natural increase. There is also strong evidence in

this very detailed microdemographic study of fertility decline, brought about by a range of interlocking factors, but including especially the desire of parents to keep their sons and even their daughters at school, which has increased the costs of having children. Parents want to educate their sons in order to increase their chances of obtaining urban jobs or local off-farm employment, and thereby of gaining access to potential for extra earning; and they wish to educate their daughters in order to improve their chances of marrying them to men in such jobs. The expansion in urban jobs and off-farm employment has made these expectations reasonable. Much the same aspirations and intentions were expressed to the author in Randam (though not uniformly across classes; more among wealthier high-caste landholders than among landless laborers), and the possibility of fertility decline there was suggested by evidence of the increased use of family planning.

The predictions of the 1973/74 study of intervillage variation—that population growth would be supported differentially according to the character of the production process in different villages—are difficult to test, therefore, in view of the data problems, but they are also questionable because of the likelihood of changes in the demographic process. In relation to our main concern with employment and wages, what seems most important are the indications of local migration from the villages to towns. The extent to which this may be the result of growth linkages from agriculture is the focus of other chapters in this book.

### Trends in Occupational Structure

Following from the foregoing consideration of population trends, the question is raised about the nature of changes in the occupational structure of the region. Data on occupational structure in the sample villages come from the initial household listing surveys in 1973 and 1982, made when the investigators were unfamiliar with the villages. Given this fact and the difficulty of assigning individuals to discrete occupational categories when they may work at several occupations, the data unfortunately cannot be considered very reliable.

Changes in the numbers of those reporting their main occupation as agricultural labor are shown in Table 6.2. It seems that there has been an absolute increase overall of 364 agricultural laborers in the 11 villages, and that the rate of increase in their numbers (16.9 percent) has been rather higher than that of the population as a whole. The picture differs a good deal among villages, however, and the general

**TABLE 6.2**  
**Number of Agricultural Laborers by Village**

| Village       | 1973    |                             | 1983    |                             | Independent Estimates <sup>a</sup> |      |
|---------------|---------|-----------------------------|---------|-----------------------------|------------------------------------|------|
|               | Persons | Percent of Total Population | Persons | Percent of Total Population | 1973                               | 1983 |
| Amudhur       | 275     | 29.2                        | 357     | 36.0                        |                                    |      |
| Duli          | 90      | 19.8                        | 137     | 25.5                        | 100                                | 103  |
| Kalpattu      | 298     | 19.4                        | 233     | 16.7                        |                                    |      |
| Meppathurai   | 89      | 16.2                        | 128     | 17.1                        |                                    |      |
| Randam        | 355     | 25.6                        | 376     | 25.3                        | 243                                | 272  |
| Sirungathur   | 179     | 18.9                        | 310     | 29.6                        |                                    |      |
| Vayalur       | 166     | 26.0                        | 110     | 15.9                        |                                    |      |
| Veerasambanur | 158     | 28.0                        | 131     | 21.1                        | 162                                | 150  |
| Vegamangalam  | 216     | 21.1                        | 246     | 23.2                        |                                    |      |
| Vengodu       | 213     | 20.4                        | 235     | 20.2                        |                                    |      |
| Vinayagapuram | 114     | 15.2                        | 254     | 31.2                        | 145                                | 110  |
| All villages  | 2,153   | 21.9                        | 2,517   | 23.9                        |                                    |      |

<sup>a</sup>See J. Harriss 1986.

increase is substantially made up by the large increases recorded for Vinayagapuram (140), Sirungathur (131), and Amudhur (82).

An independent estimate for Vinayagapuram, based on a one-fifth stratified random sample (reported in Chapter 4), leads to an entirely contrary conclusion for this village of a decline in the numbers of agricultural laborers, from 145 in 1973 to 110 in 1983. It seems possible in this case that there was underestimation of their numbers in the 1973 survey (total 114) and overestimation in 1983 (total 254). For Veerasambanur, surveys and independent investigation alike suggest a decline in the numbers of agricultural laborers; both sources suggest a small increase in Randam (19 and 29); and the survey results for Duli show a sizable increase (47), while the independent sample estimates indicate little change in absolute numbers (from 100 to 103). In view of the difficulties inherent in the collection of labor force data in circumstances like those of North Arcot villages, no firm conclusions can be drawn. It seems possible that the numbers of those employed mainly as agricultural laborers have declined or remained constant in some villages, and it is unlikely that there has been a disproportionate increase in their numbers overall. The independent studies referred to indicate a slight absolute decrease; and we can say that there is no very clear or very strong evidence from these villages of the process of "depeasantization" and expansion of the agricultural labor force, which has often been supposed to be the prevailing tendency.

## Irrigation and Agriculture

In 1973/74, Chambers and Harriss considered the irrigation facilities of the villages to be as follows:

### QUASI-INDUSTRIAL

(i.e., fairly continuous irrigation and labor demand throughout the year)

Kalpattu—very reliable wells

Vegamangalam—perennial spring irrigation

Vinayapuram—two crops a year from tank and river channel

Random—86 percent of wells have pumpsets

### SEASONAL-CUM-INDUSTRIAL

Amudhur, Vengodu, Veerasambanur, Vayalur, Meppathurai, and Sirungathur—combinations of small tanks, wells, and some pumpsets, with water supplies of varying reliability and depth

### SEASONAL

Duli—wells negligible, reliance on one crop a year from small tank

It seemed possibly to be significant that the three villages that had experienced the lowest intercensal rates of population increase between 1961 and 1971 were those that had received electricity connections most recently and had, correspondingly, only just begun to see much development of groundwater irrigation by 1973 (Vinayapuram, Vengodu, and Veerasambanur). In view of this late start, it is not surprising that of these three, Vinayapuram and Vengodu should have seen the greatest expansion in mechanized groundwater pumping since 1973 (see Table 6.3). By the same token, it is striking that the number of pumps in Veerasambanur has hardly increased at all—indicative of the general

**TABLE 6.3**  
**Expansion of Groundwater Irrigation, 1973–83**

| <i>Village</i> | <i>Increase in Number<br/>of Pumpsets<br/>(percent)</i> |
|----------------|---|
| Amudhur        | 5.4   |
| Duli           | 266.0   |
| Kalpattu       | 4.3   |
| Meppathurai    | 21.0  |
| Sirungathur    | 47.0  |
| Vayalur        | 9.0   |
| Veerasambanur  | 8.0   |
| Vegamangalam   | 57.9  |
| Vengodu        | 92.0  |
| Vinayapuram    | 281.0   |

*Note:* No data are available for Random.

failure of agricultural development there, which has been associated with emigration and probably falling real wages (in contrast to the situation in other villages; see Chapter 4). Other villages in which there has been expansion in mechanized pumping over the decade are Vegamangalam (remarkably, perhaps, for a village that received an electricity connection at a very early stage), Sirungathur, and Duli (from a very low base). These developments cannot be associated very clearly with population trends for reasons that have been explained. Also, they do not appear to have very much affected the distinctions between villages that were made earlier, for they are borne out quite consistently by the 1982/83 cropping indices for the villages (computed from the IFPRI-TNAU farm survey data and shown in Table 6.4; note these low indices for a year of acute drought, a pattern also evident in Table 3.2).

The question is then raised as to the seasonality of labor demand: How strong are differences among villages, and do they fit with the statements made about variations in quality of irrigation? Then, to what extent have seasonal variations changed between 1973/74 and 1983/84? The data are problematic, however. As we go on to explain in the next section, the survey data on household labor use are an imperfect guide to the level of and variation in labor demand in different villages because of variations among villages in the extent to which the household samples include "seigneurial" landowners who seek to avoid involvement in labor on the land. Further, directly comparable data were not recorded in 1973/74 on a month-by-month basis for use of household labor on own farm.

Comparisons for the resurvey villages between 1982/83 and 1983/84, and between resurvey and continuous-process villages for 1982/83, show that there was generally higher variance in the nondrought year,

**TABLE 6.4**  
**Cropping Indices, 1982/83**

| <i>Village</i> | <i>Cropping Index</i> |
|----------------|-----------------------|
| Amudhur        | 1.16                  |
| Duli           | 0.62                  |
| Kalpattu       | 1.32                  |
| Meppathurai    | 1.10                  |
| Randam         | 1.83                  |
| Sirungathur    | 0.77                  |
| Vayalur        | 1.20                  |
| Veerasambanur  | 0.83                  |
| Vegamangalam   | 1.56                  |
| Vengodu        | 1.02                  |
| Vinayagapuram  | 1.33                  |

though the lows were less pronounced than in the drought year (un-surprisingly). In 1982/83 there were not significant differences between continuous-process villages and others—though this finding cannot be considered significant, given that the continuous-process villages especially include those with seigneurial landowners. It is worth pointing out that whereas Pinstруп-Andersen and Jaramillo (1989) report very little indication of seasonal variations in labor use when they aggregate data from different villages, marked seasonal variations still appear when the data are examined for each village separately. Because peaks and troughs come close together and are not recorded as occurring in precisely the same months in every village, putting data for different villages together may produce a quite misleading effect of uniformity through the year.

### Employment and Wages

We begin by reporting some basic facts insofar as we have been able to establish them from the survey data. The ranking of the villages in 1982/83 in terms of the average number of person-days of labor performed per household per month in all activities (employment in agriculture, in nonagriculture, in family nonfarm business, and in work on own farm) was as follows (see Table 6.5):

Meppathurai  
 Veerasambanur, Kalpattu  
 Vinayagapuram  
 Sirungathur, Vegamangalam  
 Vayalur, Randam, Vengodu  
 Duli  
 Amudhur

There is no obvious correspondence between this ranking and the variations among villages in terms of the quality of irrigation and intensity of cropping. Comparison of the results for the five villages that were resurveyed in 1983/84 with those for 1982/83 suggests that Amudhur was especially hard hit in the drought year, but the ranking of the other four villages is the same. Overall, it seems fair to suppose that the effects of the drought have not exercised a distorting influence on the relative positions of different villages.

Table 6.6 reports wage rates—where possible, those actually paid according to farm survey data, rather than those said usually to be paid in the village—for the main (*samba*) season, for the principal operations performed by men and by women. Table 6.7 reports data on in-kind

**TABLE 6.5**  
**Household Labor Use (average person-days/month/household)**

| Village       | 1982/83 |        |       | 1983/84 |
|---------------|---------|--------|-------|---------|
|               | Male    | Female | Total | Total   |
| Amudhur       | 11.5    | 5.9    | 17.4  | 50.3    |
| Duli          | 18.4    | 1.4    | 19.8  | 34.8    |
| Kalpattu      | 18.6    | 17.2   | 35.8  | n.a.    |
| Meppathurai   | 30.3    | 12.3   | 42.6  | 59.9    |
| Randam        | 18.7    | 7.7    | 26.4  | n.a.    |
| Sirungathur   | 23.7    | 4.5    | 28.2  | n.a.    |
| Vayalur       | 21.8    | 4.3    | 26.1  | 44.1    |
| Veerasambanur | 25.0    | 11.9   | 36.9  | 51.1    |
| Vegamangalam  | 19.2    | 9.0    | 28.2  | n.a.    |
| Vengodu       | 19.6    | 6.7    | 26.3  | n.a.    |
| Vinayagapuram | 19.4    | 11.5   | 30.9  | n.a.    |

wages for harvesting and threshing. In view of the importance of these payments for agricultural laborers' income, it is very unfortunate that with the data available it is impossible to be confident of knowing whether or not there have been changes in them, or even about differences between villages. There are two reasons for this. One is that the payments were made traditionally in terms of bundles of paddy on the stalk, or of local volumetric measures of grain. Different measures, though sometimes with the same name, were used in different parts of even a small region like the study area. Attempts have lately been made to standardize these measures in terms of liters or kilograms. The result has been that cultivators and laborers may say they have paid or have received a certain number of traditional measures, when the payment has been made out of a standard liter measure—or perhaps the other way round. People still refer to harvesting and threshing payments in terms of a particular number of measures. There is no clear evidence that these ideas of standard payments have changed, except perhaps in Vinayagapuram and Amudhur, where they may have increased. The picture is made even more complicated by a second consideration: over the decade there has been a shift away from the standard daily payments that were still the norm in 1973/74 to much more employment of labor on the basis of various specific contracts. These contracts mean that it is possible for the individual laborer to earn more than, or less than, the traditional rate for the day.

In these circumstances it seems most sensible to rely on comparison of payments for the principal operations paid for in cash, in the main paddy season. Neither in 1973/74 nor in 1982/83 is it easy to rank villages, because of differences between relative payments to men and

**TABLE 6.6**  
**Samba Season Wages (Rs/day)**

| Village                    | Plowing (men)     |                       |         |         | Plucking (men)    |                       |         |         | Transplanting (women) |                       |         |         |
|----------------------------|-------------------|-----------------------|---------|---------|-------------------|-----------------------|---------|---------|-----------------------|-----------------------|---------|---------|
|                            | 1973/74           |                       |         |         | 1973/74           |                       |         |         | 1973/74               |                       |         |         |
|                            | 1973/74           | (Inflated to 1982/83) | 1982/83 | 1983/84 | 1973/74           | (Inflated to 1982/83) | 1982/83 | 1983/84 | 1973/74               | (Inflated to 1982/83) | 1982/83 | 1983/84 |
| Amudhur                    | 2.00 <sup>a</sup> | 3.67                  | 2.75    | 5.50    | 1.80 <sup>a</sup> | 3.30                  | n.a.    | 6.00    | 1.30                  | 2.40                  | 2.00    | 2.37    |
| Duli                       | 2.00 <sup>a</sup> | 3.67                  | 3.00    | 7.20    | 1.00              | 1.84                  | n.a.    | 5.00    | 1.50                  | 2.75                  | 2.50    | 3.00    |
| Kalpattu <sup>b</sup>      | 3.50              | 6.44                  | 5.00    | n.a.    | 1.00              | 1.84                  | n.a.    | n.a.    | 1.00                  | 1.84                  | 2.00    | n.a.    |
| Meppathurai <sup>b</sup>   | 2.80 <sup>a</sup> | 5.14                  | 5.00    | 3.22    | 2.00              | 3.67                  | 3.00    | 4.30    | 1.50                  | 2.75                  | 2.10    | 3.18    |
| Randam                     | 2.50              | 4.60                  | 4.62    | n.a.    | 2.50              | 4.60                  | 5.50    | 5.00    | 1.50                  | 2.75                  | 2.70    | 3.00    |
| Sirungathur                | 2.50 <sup>a</sup> | 4.60                  | 5.00    | n.a.    | 2.00 <sup>a</sup> | 3.67                  | n.a.    | n.a.    | 1.00                  | 1.84                  | 2.25    | n.a.    |
| Vayalur                    | 2.00              | 3.67                  | 6.33    | 5.60    | 2.00 <sup>a</sup> | 3.67                  | 7.50    | 8.00    | 1.00                  | 1.84                  | 2.66    | 4.00    |
| Veerasambanur <sup>b</sup> | 2.33              | 4.28                  | 3.00    | 2.83    | 2.00 <sup>a</sup> | 3.67                  | 2.83    | 3.00    | 1.20                  | 2.20                  | 2.00    | 2.00    |
| Vegamangalam               | 3.00 <sup>a</sup> | 5.50                  | 5.00    | n.a.    | 3.00              | 5.50                  | 5.37    | n.a.    | 1.00                  | 1.84                  | 3.16    | n.a.    |
| Vengodu                    | 2.00              | 3.67                  | 4.10    | n.a.    | 1.00              | 1.84                  | 3.00    | n.a.    | 1.57                  | 2.87                  | 2.13    | n.a.    |
| Vinayagapuram              | 2.00 <sup>a</sup> | 3.67                  | 3.00    | 4.37    | 1.70 <sup>a</sup> | 3.12                  | 3.00    | 4.00    | 0.70 <sup>a</sup>     | 1.29                  | 2.00    | 2.00    |

Source: Plot data from the Cambridge-Madras universities and IFPRI-TNAU surveys.

<sup>a</sup>Average wage for village, not plot means.

<sup>b</sup>The wages for Kalpattu, Meppathurai, and Veerasambanur are for the *navarai* season.

**TABLE 6.7**  
**Harvesting and Threshing In-kind Wages (mm/day)**

| Village       | Harvesting (women) |          | Threshing (men) |          |
|---------------|--------------------|----------|-----------------|----------|
|               | 73/74              | 83/84    | 73/74           | 83/84    |
| Amudhur       | 2.5                | 6.0      | 3.5             | 8.0      |
| Duli          | 3.5                | 2.5      | 1.0             | 6.0      |
| Kalpattu      | 3.5                | 3.5      | 3.5             | 3.5      |
| Meppathurai   | 3.0                | 3.0-4.0  | 4.5             | 4.5-6.0  |
| Randam        | 3.0                | 3.0      | 6.0             | 6.0      |
| Sirungathur   | 4.0                | 4.0      | 4.0             | 4.0      |
| Vayalur       | 2.5                | 3 kg     | 5.0             | 6 kg     |
| Veerasambanur | 3.0                | 3.0      | 6.0             | 6.0      |
| Vegamangalam  | 4.0                | n.a.     | 4.0             | n.a.     |
| Vengodu       | 3.5                | 5 liters | 3.0             | 6 liters |
| Vinayapuram   | 2.1                | 4 kg     | 2.3             | 6 kg     |

Note: mm = one *padi*, or measure of paddy.

to women in different places. In 1973/74, looking across the cash wages and harvesting payments, and noting that the data for these operations were reduced to a standard measure, it appears that Randam and Vegamangalam had fairly high wages, though Meppathurai also had quite high cash wages while Vinayapuram especially and Vayalur had lower wages than elsewhere. Cash wages were low in Veerasambanur also. Given that paddy is relatively unimportant in Kalpattu and that payments to labor in the cultivation of bananas and turmeric are comparatively high, it is thought that wage rates should be considered to have been high there. In 1982/83 wage rates seem still to have been generally high in Vegamangalam and less clearly so in Randam, but high also now in Vayalur and perhaps in Sirungathur. Cash wages were clearly lower than elsewhere in Vinayapuram, Veerasambanur, and Amudhur.

Evidence on changes in real wages is mixed. Only in one village, Vayalur, is there a clear indication of an increase in the real wage paid for plowing. For the other operations, real wages seem to have remained roughly constant or to have increased in Vayalur, Vinayapuram, Randam, Sirungathur, and Vegamangalam. They appear to have declined in Meppathurai, Veerasambanur, and perhaps in Amudhur, though the picture for all these villages, and for Duli, appears rather more favorable when we consider the wages paid after the drought year in 1983/84. It is certainly interesting that the evidence on wages for the drought year, however, offers an indication of an increase in real wages over 1973/74 in continuous-process villages (Randam, Vegamangalam, Vinayapuram) and in a seasonal-process village that has seen a good

deal of expansion of groundwater irrigation (Sirungathur), while it shows decline in other seasonal-process villages.

The principal hypothesis put forward concerning intervillage variations by Chambers and Harriss was that better irrigation endowment, leading to more intensive cultivation, generates higher and more continuous labor demand through the year, and probably higher wage rates too. The hypothesis was qualified by the recognition that proximity to a town or the existence of a diversified village economy might also, because of opening up alternative income-earning opportunities, increase overall labor demand in a village. In this respect the villages appeared to be differentiated according to 1982/83 household labor use data as follows:

**NONAGRICULTURE AND NONFARM BUSINESS EMPLOYMENT IMPORTANT:**

|              |  |
|--------------|--|
| Random       | (37 percent of total male employment; 25 percent female) |
| Sirungathur  | (26 percent male and 12 percent female)                  |
| Kalpattu     | (29 percent male and 6 percent female)                   |
| Vayalur      | (16 percent male and 19 percent female)                  |
| Vegamangalam | (16 percent male and 15 percent female)                  |

**NONAGRICULTURE AND NONFARM BUSINESS EMPLOYMENT LOW:**

|               |                                |
|---------------|--------------------------------|
| Veerasambanur | (11 percent male and 0 female) |
| Vengodu       | (10 percent male and 0 female) |
| Meppathurai   |                                |
| Duli          |                                |
| Amudhur       |                                |
| Vinayagapuram |                                |

Nonagriculture and nonfarm business employment is more important in villages nearer to towns or small service centers (Random, Sirungathur, Vayalur, Vegamangalam) or with an especially diversified economy (Kalpattu). Nonagricultural employment is more important in the periurban village of Duli than the survey data show, according to an independent sample (see Chapter 4). Laboring and carting in Cheyyar are important sources of income.

In relation to the principal hypothesis proposed, the relatively low levels of household labor use in Random and Vegamangalam, with their good irrigation, intensive cultivation, and nonagricultural employment opportunities, appear at first to be hard to explain, as do the levels of labor use in Veerasambanur and Meppathurai, with their less good irrigation and lower cropping intensities. Relatively low household labor use but relatively high wages in Random, Vegamangalam, and Vayalur (close to a service center where alternative employment is available) are probably explained by the fact that these are villages with

a fairly numerous and high-ranking dominant caste from which come a number of larger and richer cultivators who do not themselves participate very much in cultivation work. If this argument holds, we should expect to observe (1) relatively low participation in cultivation by paddy farmers and (2) relatively high employment of hired labor and semi-permanent labor. Data shown in Table 6.8 confirm that Randam, Vegamangalam, and Vayalur are in the lower half of the range for "adult family males working on farm" among paddy farmers, and that Randam and Vegamangalam are low in the range for "adult family females working on farm." Semipermanent labor is employed in all three villages, and Vegamangalam and Randam are among the highest employers of agricultural labor. The explanation cannot be rejected, therefore.

Other villages in which semipermanent labor is employed and which are high employers of agricultural labor are Duli, Amudhur, and Vinayapuram. They are also—especially Duli and Amudhur—low with regard to "adult family males working on farm" among paddy farmers. These are also villages in which there are households with the kind of seigneurial lifestyle of the richer households of Randam, Vegamangalam, and Vayalur. In terms of number of days of work per household in agricultural wage labor among landless households, however (Table 6.9), Duli and Amudhur are rather low, while Vinayapuram is relatively high. The small amount of employment for landless-labor households in Duli and Amudhur may reflect the poor irrigation and low intensity of cultivation in these villages. Kalpattu has relatively high household labor use because of its diversified agricultural economy and high employment opportunities outside agriculture, in the context of

**TABLE 6.8**  
**Total Paddy-Farm Labor Use, 1982/83 (person-days/month/household)**

| <i>Village</i> | <i>Family<br/>Male<br/>Labor</i> | <i>Family<br/>Female<br/>Labor</i> | <i>Hired<br/>Labor</i> |
|----------------|----------------------------------|------------------------------------|------------------------|
| Amudhur        | 14.6                             | 7.6                                | 9.0                    |
| Duli           | 16.6                             | 0.8                                | 11.0                   |
| Kalpattu       | 21.7                             | 14.5                               | 8.8                    |
| Meppathurai    | 30.0                             | 10.3                               | 9.3                    |
| Randam         | 24.8                             | 5.6                                | 10.0                   |
| Sirungathur    | 30.6                             | 7.2                                | 3.5                    |
| Vayalur        | 23.3                             | 7.0                                | 5.8                    |
| Veerasambanur  | 23.9                             | 9.2                                | 2.7                    |
| Vegamangalam   | 22.9                             | 5.4                                | 12.0                   |
| Vengodu        | 25.9                             | 5.2                                | 5.9                    |
| Vinayapuram    | 27.9                             | 4.1                                | 15.2                   |

**TABLE 6.9**  
**Farm Employment, Landless Households,**  
**1982/83 (person-days/month)**

| <i>Village</i> | <i>Days of Employment</i> |
|----------------|---------------------------|
| Amudhur        | 15.4                      |
| Duli           | 23.7                      |
| Kalpattu       | 31.8                      |
| Meppathurai    | 55.2                      |
| Randam         | 27.6                      |
| Sirungathur    | 17.7                      |
| Vayalur        | 28.2                      |
| Veerasambanur  | 44.8                      |
| Vegamangalam   | 40.0                      |
| Vengodu        | 29.8                      |
| Vinayagapuram  | 39.7                      |

fairly good irrigation, and because it is a Vanniya-dominated village. The Vanniyas are a numerous but historically quite low-ranking caste community not much given to the seigneurial style of the Agamudaiyans of Randam, the Mudaliars of Vegamangalam, or the self-styled Kshatriyas of Vayalur. They engage a good deal in cultivation.

Pursuing the logic of these arguments—which is that the effects of the irrigation and cultivation systems and of access to nonagricultural employment are moderated by the nature of the class and status structures of different villages, as well as by labor supply factors—it is possible to suggest the typology of villages in terms of labor use and wages, which is shown in Figure 6.1. The explanation for this is as follows:

#### RANDAM, VEGAMANGALAM

Randam —agricultural labor, 25 percent  
 scheduled caste, 50 percent

Vegamangalam—agricultural labor, 23 percent  
 scheduled caste, 33 percent

Middle to low overall household labor use but high wages; high use of hired labor; employment of semipermanent labor and relatively low on-farm work by paddy-farming households; high nonagricultural and nonfarm employment.

Interpretation: These are villages with seigneurial high caste and quite big landowners, seeking to employ others and not working much on the land themselves. High wages because of high demand for hired labor and, in each case, proximity to town.

#### KALPATTU

agricultural labor, 17 percent  
 scheduled caste, 11 percent

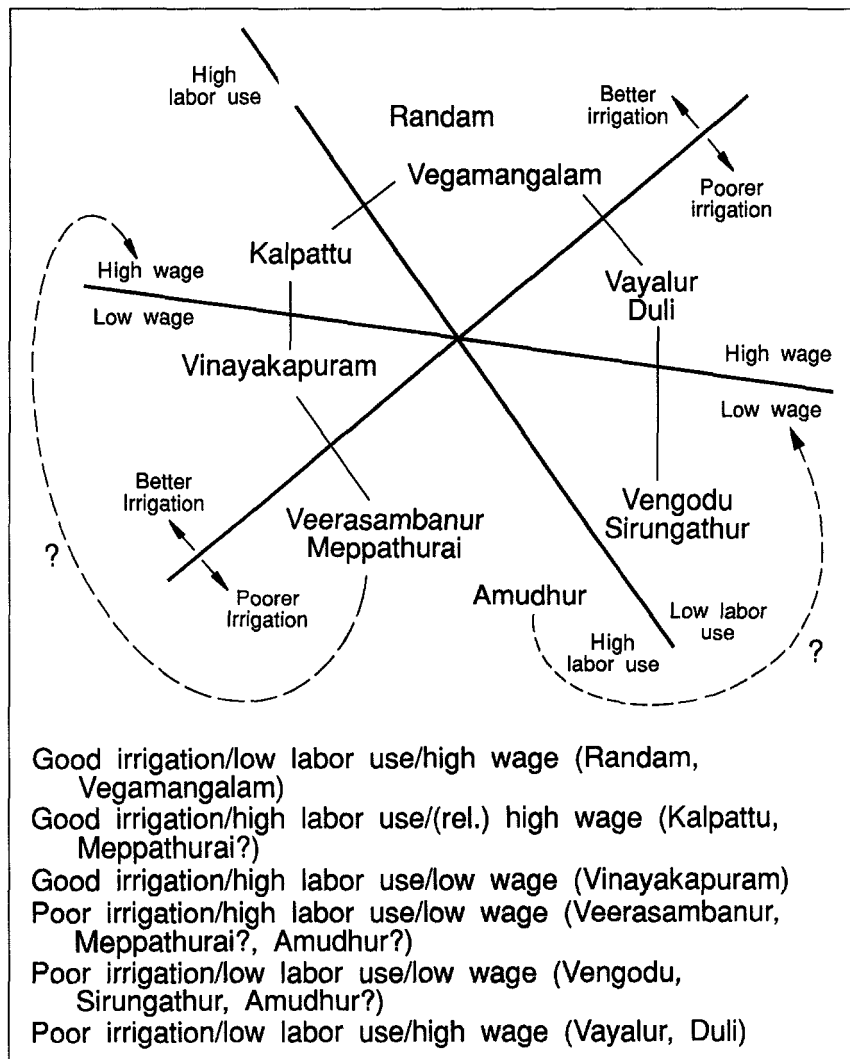


Fig. 6.1. Schematic classification of North Arcot villages, 1980s.

High overall household labor use, fairly high wages, fairly high use of hired labor (especially female), some employment of labor on semi-permanent basis, relatively high on-farm work by paddy-farming households.

Interpretation: High demand agriculture and high nonagricultural and nonfarm business employment. More of a working-peasant type of larger landholder from Vanniya caste. Relatively low supply of labor in the village.

## VINAYAGAPURAM

agricultural labor, 31 percent

scheduled caste, 24 percent

Fairly high overall household labor use, with wages apparently still rather low though having seen real increases over the decade; high hired labor use and employment of labor on semipermanent basis; average to high on-farm work by paddy-farming households.

Interpretation: Relatively high demand agriculture, in a context with a few seigneurial-type (Brahmin) larger landholders, but predominantly working-peasant Vanniyas. Lower wages here because of high local supply of labor and lack of access for landless to alternative employment opportunities.

## VEERASAMBANUR, MEPPATHURAI, AMUDHUR

Veerasambanur—agricultural labor, 21 percent

scheduled caste, 47 percent

Meppathurai —agricultural labor, 17 percent

scheduled caste, 28 percent

Amudhur —agricultural labor, 36 percent

scheduled caste, 33 percent

Patterns not wholly consistent with each other but alike in showing high overall household labor use (taking evidence for Amudhur in 1983/84) and low wages (less clearly so in Meppathurai, but it was like the other two villages in showing decline in real wages from 1973/74 to 1982/83) in a context of indifferent irrigation and lower cultivation intensity. Some employment of semipermanent labor in all three villages, average to high hired labor use in Meppathurai and Amudhur but low in Veerasambanur. High on-farm labor in paddy-farming households in Meppathurai, fairly low in Veerasambanur and Amudhur.

Interpretation: Meppathurai, where irrigation is probably rather better than in the other two villages, has a pattern similar to that of Kalpattu. In the other two villages, the combination of high overall labor use, low wages, but quite low participation in on-farm work in paddy-farming households may be explained by the presence in these villages of large numbers of scheduled caste and of agricultural-labor households, together with poor but would-be seigneurial landholders (Agamudaiyans in Veerasambanur and Brahmins and Reddiars in Amudhur). The context is one in which opportunities for nonagricultural and nonfarm business employment are limited.

## VENGODU, SIRUNGATHUR

Vengodu —agricultural labor, 20 percent

scheduled caste, 15 percent

Sirungathur—agricultural labor, 30 percent

scheduled caste, 67 percent

Low to average overall household labor use and middling wages; low use of hired labor and high on-farm work by paddy-farming households; few semipermanent laborers.

Interpretation: These villages show similarities with Veerasambanur, Meppathurai, and Amudhur, but they appear to be distinguished by the absence of would-be seigneurial landholders and lower levels of labor use among their landless households. It is not clear why this last fact should obtain.

#### VAYALUR, DULI

Vayalur—agricultural labor, 16 percent  
                   scheduled caste, 21 percent  
 Duli —agricultural labor, 21 percent  
                   scheduled caste, 18 percent

Low overall household labor use but high wages (especially Vayalur); high hired labor use in Duli and increased employment of labor on semipermanent basis; low on-farm work by paddy-farming households (see 1983/84 data); fairly high employment in nonagriculture and in nonfarm business (even in Duli; see data in Chapter 4).

Interpretation: In these villages it seems that wages are relatively high because of the combination of seigneurial landholders and the availability of alternative employment outside agricultural wage work, and in a context with quite low intravillage labor supply.

### Conclusions

When we turn the microscope as low as the level of individual villages and compare “specimens,” it is not surprising that it is possible to discern—or at least to suggest the existence of—complex, subtle, and highly specific combinations of factors that must seem confusing to those who have not peered so intently through the same lens. If we turn the objective of the microscope back up a little and take into the field of view all 11 villages again—and the reader might care to simulate this by looking at Figure 6.1—then it may be suggested that the pattern discerned by Chambers and Harriss, defined by the irrigation-cultivation intensity and continuity dynamic, still seems to obtain. But it is clearly modified or blurred by access to nonagricultural employment opportunities, and by the effects of class and status structures in different villages (particularly the extent to which villages are dominated by working-peasant or by at least would-be seigneurial landholders). The net result might appear to be a palimpsest. But it is probably more accurately described as a labor market that is still quite highly segmented and influenced by institutional factors. The circumstances are different, but the basic finding is similar to that of Rudra and Bardhan in their studies in West Bengal (see Rudra 1984; Bardhan and Rudra 1986).

This conclusion is broad and may be unsatisfactory, but it is a salutary reminder of the existence of forces that almost certainly mean

that in securing access to such new employment opportunities as have been created by the growth linkages from agriculture in eastern North Arcot, certain social groups have been discriminated against. It was found, for example, in the comparison of the structure of business activity and employment in the market town of Arni in 1973 and 1983 that for all the increased employment in the town, members of the scheduled castes are still discriminated against in a wide range of activities (Harriss and Harriss 1984). That this is a more general tendency may be indicated by the fact that the proportion of scheduled caste people in the village populations has increased in five of the sample villages and appears to have decreased in only two of them. Part of the explanation for this may be that scheduled caste people have been less successful in gaining access to work outside agriculture and outside the villages.