Chapter V
Chapter V – SUMMARY OF FINDINGS AND CONCLUSION

This study is a resurvey of two villages, Poyyamani and Naganur, belonging to two ecotypes in Karur district of Tamil Nadu, India. The two villages, predominantly agrarian, have undergone considerable transformation since 1979-80, the time of the survey undertaken by Athreya et al.,(1990). This chapter summarises the findings of the present study and offers some conclusions.

5.1 Summary of Findings

5.1.1 Population Growth

In Naganur, the dry village, the growth rate of male population was 9.53 per cent and that of female population was 5.32 per cent; the overall rate was 7.40 per cent during 1991 to 2001. In comparison, the population growth over the period 1981 to 1991 was higher at 18.39 per cent (male- 18.88 per cent; female- 17.92 per cent). In Poyyamani, the wet village, the population growth rate over the period 1991 to 2001 was 3.3 per cent for males and for females it was 6.09 per cent; the overall population growth rate was 4.68 per cent. During 1981-91, the growth rate for male population was 16.22 per cent and that of female population was 16.98 per cent. The overall population growth rate for the period 1981 to 1991 was 16.6 per cent.

Thus, in both the villages, there was decline in the population growth for the decade 1991-2001 compared to the previous decade of 1981-91. It was noted that in specific areas within the villages (Kottayar thottam in Poyyamani village and Krishnampatti in Naganur village) there has been increase in population because of new settlements. In Kottayarthottam, new households
had emerged because of its proximity to the sugarmill in Pettavaithalai. Similarly, in Krishnampatti, people working in the newly developed quarries, had settled adding to the population; seven potter families displaced by quarrying activities had also settled in Naganur.

As far sex ratios, the female to male ratio has declined in Naganur and risen in Poyyamani between 1981 and 2001. Since we have no independent data on sex selective migration for these villages, we cannot say much about whether the evidence reflects improvement in the condition of women or male migration. However, our sample survey did not suggest significant sex selective male migration in 2004-05. It may not therefore be unreasonable to conclude that the conditions of women may have improved more rapidly in Poyyamani than in Naganur. Poyyamani is better connected in respect of transport and communication and better off in terms of health and education facilities than Naganur.

There had been a gradual decline in the sex ratio in Naganur from 1032 in 1981 to 984 in 2001. In Poyyamani, the sex ratio improved significantly from 969 in 1981 to 1002 in 2001. The interaction with people found that there was male child preference in both the villages; however, it was learnt that there was no female infanticide in Naganur and Poyyamani. The declining rate of growth in population is in line with trends in rural and urban populations in the district and the state.

5.1.2 Literacy Level

In Naganur, the overall literacy rate increased from around 23 per cent in 1981 to 55 per cent in 2001; with reference to female population, it increased from nine per cent (1981) to 40 per cent (2001). Thus, the literacy rate for female population improved more than four times between 1981 and 2001. The
figures relating to Poyyamani showed an increase from 40 per cent to 78 per cent during 1981 to 2001. In the case of female population, the improvement was from 26 per cent (1981) to 57 per cent (2001), showing a two fold increase. Thus the literacy rate improved in both the ecotypes; the growth rate of literacy was higher in dry ecotype than wet ecotype. However, the overall literacy rate of Naganur at 55 per cent in 2001 was lower than the average figure of 58.2 per cent for rural Tamil Nadu.

Naganur is a more backward village than Poyyamani. The fact that it has a smaller percentage of SCs than Poyyamani does not imply that its literacy rate should be higher. While female to male ratios have worsened in Naganur and improved in Poyyamani between 1981 and 2001, this by itself cannot be linked to the degree of male preference. It is true that caste barriers have weakened in certain respects, but have certainly not disappeared. It is also noted that literacy rates have improved among SCs and this is attributable both to State provision and the internal dynamics of caste relations. However, this has occurred when 1980 is compared to 2005. This need not be inconsistent with reduced rural development expenditure by the State in recent years.

The establishments of new schools, upgrading of existing schools, a new college in nearby Kulithalai and improved infrastructural facilities had made it possible for the children to travel to nearby locations for education. The discussions with the people revealed that there was an increased awareness on education and desire for giving education to their children. This was the case in both Naganur and Poyyamani.

5.1.3 Workforce Diversification

The workforce participation rate for males declines marginally between 1981 and 2001 in Naganur and increases marginally in Poyyamani. Overall, it
is fairly stable. Female workforce participation rate is more or less the same in Naganur in both 1981 and 2001. It is only in Poyyamani that the female workforce participation rate has increased sharply between 1981 and 2001.


In Naganur, the selected village in the dry ecotype, the proportion of agricultural workforce to total main workers (men) showed an increase between 1981 and 1991, but a substantial decline in 2001. In the case of female workforce, the related figures showed no change during 1981 to 1991, but declined between 1991 and 2001 as in the case of men. In Poyyamani, the figures relating to the proportion of agricultural workforce to total main workers for both men and women showed a marginal increase during 1981-91 and a decline during 1991-2001; however, this decline was lesser with reference to women (98.6 per cent to 93.4 per cent) compared to men (91 per cent to 78 per cent).

The composition of agricultural workforce in the study area had undergone considerable change during the period 1981 to 2001. In Naganur, there was a gradual increase in the proportion of male cultivators and
consequently a decline in the proportion of male agricultural labourers; compared to 1981 (69 per cent), the proportion of male cultivators increased to 74 per cent in 2001. Thus, there was a decline in the proportion of agricultural labour as much as five per cent points during the same period.


In comparison with the situation in Tamil Nadu, the proportion of agricultural labour to agricultural workforce was considerably higher in the study area in all three census years 1981, 1991 and 2001. This results from the high proportion of agricultural labourers in the workforce of the wet villages and the rapid increase of the proportion in the dry villages between 1991 and 2001.

5.1.4 Caste Composition

One major feature common to the sample households of the two villages was that none of them had forward caste households. While there was no upper caste household in Naganur, there were a few in Poyyamani. It was noted that there were sizable number of households belonging to Scheduled Castes (Chakkiliar, Pellar moopan, Devendra pellar and Paraiyar) in both Naganur and Poyyamani villages. Most of these households were located in separate settlements as in the past. The dominant castes were Goundars in Naganur and Muthurajas in Poyyamani, both belonging to the category of Other Backward Community. It was observed that the caste composition of the villages was similar to that of the previous survey (1979-80) with only a small variation; the
number of Brahmin households in Poyyamani had declined, because of out-
migration.

5.1.5 Asset Ownership

5.1.5.1 Land

The previous survey found a skewed distribution of land ownership in
Poyyamani as large areas of land were owned by Brahmins. In Naganur, the
previous survey found a less unequal distribution of land ownership.

During the 30 year period, (1971-2001), considerable changes in the
distribution of operated land holdings under different categories had occurred
both at the national level and at the level of Tamil Nadu state.

During the period 1970-2001, the proportion of number of marginal
farmers in Indian agriculture had increased both at the national level and also in
the state of Tamil Nadu. Similarly, the area operated by the marginal farmers
had doubled at the all-India level and also increased in the state of Tamil Nadu.

In the sample villages also, there had been increase in the marginal land
operators. In Poyyamani, the landowning Brahmins lease out most of their
lands as they had moved out of the village. The leased in lands in Poyyamani
accounted for 36 per cent of the total land operated area among the sample
households. In Naganur, though leasing out of lands was nil, still the marginal
farmers were able to have access to land because of the tendency of land sale
by the other land owning groups.

Among the sample households which resorted to buying new lands,
most belonged to backward community consisting of Soliya Vellalar, Urali
Goundar, Malayaman Goundar, Muthuraja, Kambalathu Naicker and
Malayaman Udayar. In Poyyamani, the households which had acquired lands especially from the Brahmins, belonged to the castes of Muthuraja and Kandar (Other Backward Community). However, there were still sizeable numbers of landless households in both the villages. One-fourth of the sample households in Naganur and half of the sample households in Poyyamani were landless households during 2004-05. The inequalities in operational landholdings for the two villages are explained by the Gini coefficient for the sample households; the calculated vale for Naganur was 0.29 and for Poyyamani it was 0.43. Thus, the inequality in operated landholding in Poyyamani, though lower than the findings of the study of 1979-80, still considerable. However, the Gini coefficients are much lower than that of Tamil Nadu (0.64) and India (0.54).

The previous survey found that the lease amount (kuthagai) was mostly to in kind, the form of a portion of the produce. This survey noted the increasing practice of lease amount in cash also, besides kind; the cash kuthagai ranged between Rs 5000 and Rs 10000 per acre depending on the type of crop and the expected yield. It was found that for paddy, the amount range was Rs.5000 to 8000 per acre; the corresponding amount for sugarcane ranged between Rs.5000 to 7500; and for banana, the amount was Rs.10,000. Another feature found was the low kuttagai amount paid to the land owners residing in distant places by the longstanding registered tenants.

5.1.5.2 Livestock Ownership

Sample households in both villages rear livestock for generating income. Three fourth of all sample households in Naganur and one half in Poyyamani reared livestock. The 1979-80 survey also found that, in the dry ecotype of Naganur, there were more livestock. At that time, there were widespread uses of drought animals to draw water from the wells and for other agricultural operations. With the use of mechanized implements, the practice of using
animals for drawing water from the wells had disappeared. But, in Naganur, draught animals were still used for ploughing the land and also for post-harvest operations. The details of livestock ownership of the sample households revealed that in Poyyamani high milk-yielding cows were given more importance. On the other hand, in Naganur, low milk-yielding country cows and she buffaloes were in large number. While there were only 17 heads of sheep and goats in Poyyamani, there were as many as 182 in Naganur. Though the correlation co-efficient (r) values were positive between the operated area and value of livestock in both the villages, it was higher at 0.68 in Naganur compared to 0.32 in Poyyamani, the wet village. It was because, in Poyyamani, rearing livestock was more an economic phenomenon, but in Naganur, it was part and parcel of the agricultural life of the people.

5.1.5.3 House Ownership and Status

The type of houses ranges from simple dwellings to strong cement roof (RCC) buildings. It was found that a few households own more than one building. They use the additional dwelling for keeping the cattle, storage and other purposes, but do not let it out for rent. The traditional thatched roof, mud wall and floor were still important with reference to the sample households. In both villages, sample households with tiled roof were large in number. While sample households with cement walls were more in number, mud walls were still. Similarly in the type of floor, though cement floor houses were large in both the villages, again mud floors were also prominent. In this survey, the presence of RCC roof houses for the dalits was noted which was not found in the previous study.

Another notable feature was that despite wide extension of electricity supply in villages of Tamil Nadu, among the sample households, 32 per cent in Poyyamani and 31 per cent in Naganur did not have power connections.
In the case of household items, the items varied from the traditional utensils to modern gadgets such as grinder, refrigerator, television, etc. Motor cycles and mopeds were also used for transportation besides by-cycles. It was also observed that the sample households in the wet village of Poyyamani owned a larger variety of household items compared with the dry village of Naganur.

5.1.6 Income Dimensions

The incomes of the sample households derived substantially from agriculture. But, there were other sources of income such as non-agricultural wage employment in nearby towns, self-employment in non-agricultural avenues and remittances from household members working in distant places, etc. The size of household income also depended on the number of people employed in each household besides the nature of employment. It was found that in many households the income from sources other than agriculture had become considerable.

While the gross household income revealed the income status of the households, considering the household size and estimating the per capita income provided a clear picture of the livelihood level of the individuals. The lowest sample per capita income was Rs. 548 in Poyyamani and Rs.600 in Naganur. Since the estimated official poverty line for rural Tamil Nadu was Rs. Rs. 4222.32 per capita per annum in 2004-05 (NSSO), 61.5 per cent of sample households in Naganur and 44.7 per cent of sample households in Poyyamani were below the poverty line. The average income of Rs. 2499 per capita per annum in Naganur and Rs.2639 per capita per annum was well below the below poverty norm of Rs. 4222.32. The calculated average per capita income for the sample households of Naganur was Rs. 5437 and Rs. 8891 for Poyyamani. Thus, the sample households in Poyyamani were found to have a
comparatively higher per capita income than those of Naganur; moreover, compared to Naganur, larger number of households in Poyyamani belonged to the higher per capita income category above Rs. 25,000. It was noted that even in some households with relatively large operated landholdings the income was lower. Thus, the size of landholdings alone was not a major factor in determining the household income. It was noted that none of the sample households in both the villages could earn its total income from cultivation. The upper limit of the proportion of crop income to household income was around 75 per cent in Poyyamani and in Naganur.

Similarly, the households which earned a larger proportion of income from wage employment earned lower total household income. The calculated correlation coefficient values revealed that in both the villages, the r-value between total household income and the proportion of farm wage employment to household income was negative at -0.52 in Naganur and -0.50 in Poyyamani.

While crop cultivation, agricultural wage and rearing of livestock were the major avenues of income in Naganur, agricultural and non-farm wage employment were the major avenues of income in Poyyamani. One-half of the sample households in Naganur and one-third in Poyyamani earned their entire income from agriculture. There were few sample households in Naganur which earned a portion of their income from non-farm self employment, mostly from gem-cutting at home. It was noted that gem-cutting was undertaken only by women in the age group of 15 – 40 in Naganur. Farm business other than crop cultivation was an income source in Poyyamani, especially from sale of coconuts and mangoes.
5.1.7 Irrigation and Cropping Pattern

In Poyyamani, the major source of irrigation was from the canal water of river Kavery. In Naganur, wells were the principal source of irrigation, with declining supplementation from tank sources. Thus, Naganur was more dependent on rain-fed agriculture.

The earlier survey found the wet belt of Poyyamani had assured canal irrigation for nine to ten months in a year. The dry belt of Naganur was found to be mostly rain-fed with well water supplementation and tank irrigation; water lifting from the wells was done with the traditional Kavalai method. The tank irrigation in Naganur was found to be deteriorating because of lack of maintenance.

The present study found that the area under irrigation increased in Thogamalai block in which Naganur belongs, from 1985-86 (4405 ha) to 2003-04 (5888 ha) because of significantly more intensive well irrigation. The traditional kavalai method limited the quantity of water drawn from the wells per day, but mechanization had now facilitated drawing higher quantity of water. Thus, the area of irrigation increased over the period, because of the copious supply of well water. The increase in number of wells during 1985 to 2003 was high in both the blocks. In Naganur, 18 sample households of the 29 who cultivated had their own wells for irrigation. Among them, four purchased water from others to supplement irrigation from their own wells.

The wet block of Kulithalai with wide use of surface water had also gone in for intensive groundwater irrigation, with an increase in the number of wells by 115 per cent during the period. The corresponding figure for the more groundwater dependent dry block of Thogamalai was 64 per cent. These figures
corroborate the enhancement in the irrigated area of cultivation as a proportion of the overall area under farming in both the blocks.

In the wet ecotype of Kulithalai where Poyyamani was located, with lack of assured canal water supply, there had been significant increase in the use of well irrigation. Thus, well irrigation which was not used before 1980 had became an essential supplement to canal irrigation. It was noted that compared to 2000-01, in 2003-04, the well water irrigated lands in Kulithalai block increased almost three times; this was because 2003-04 was a year of secure drought. The information gathered at the informal discussions with the villagers and Village Administrative Officer (VAO) was that there were attempts to deepen nearly 60 bore wells in Poyyamani during the acute water crisis of 2001-03; only 11 were stated to be successful. The details from sample households also revealed that seven of 19 landholding households had supplemented canal irrigation with water from wells.

In the case of area under fallow, there was increase in both the areas during the period 1980-2005. Though there had been increase in the proportion of area under fallow to total geographical area in both the blocks, the rate of increase was higher in Kulithalai. The features relating to keeping lands fallow in Naganur revealed that 21 of the 29 sample households with operated lands had kept their lands fallow owing principally to water scarcity.

The share of net irrigated area to net cropped area has gone up during the period 1980 to 2005 in both the areas. While there was increase in the net irrigated area in cropped area in both the blocks, the rate of increase was higher in the dry block of Thogamalai (53 per cent) than the wet block of Kulithalai (34 per cent) during the period 1985 to 2005. Thus, the intensity of irrigated cultivation was more pronounced in the dry block of Thogamalai than it was earlier.
5.1.8 Nature of Crops Cultivated

The non-food crops generally cultivated in the study blocks of Kulithalai and Thogamalai have been cotton, groundnut, sunflower, green grass (suba grass & Korai) for fodder and for mat-making, flowers and trees for firewood. Cultivation of the above mentioned crops except sunflower was found in the previous survey. In Kulithalai, the proportion of non-food crops to gross cropped area was three per cent in 1985-87 and increased to 10 per cent in 2003-05. The corresponding figures for dry block of Thogamalai were 15 per cent (1985-87) and 16 per cent (2003-05) respectively.

In Thogamalai block, the area under paddy had more than doubled from 23 to 50 per cent of total area under food crops during 1985-2005. It showed that the share of paddy in total area of food crops cultivated and also that of gross cropped area had increased in Thogamalai block. This expansion in paddy cultivation was accompanied by a decline in the area under the coarse cereals such as, cumbu and small millets.

In Kulithalai block, though the area under food crops as a proportion of the total cultivated area had remained above 90 per cent, there were variations in the proportion of principal crops such as paddy, sugarcane and banana. While the increase in the area under banana had almost doubled, the area under paddy and sugarcane also showed an increase during the period 1980-2005. Therefore, the share of area under these three crops in the total area under food crops increased from around 58 per cent to 80 per cent during the same period.

The proportion of area under oilseeds cultivation in total area under food crops as well as that of gross cropped area in both the blocks remained at the same.
In the case of sample households, paddy was found as the major crop with 46 per cent of the gross cultivated area of all the sample households in Naganur and 64 per cent in Poyyamani.

In the dry village of Naganur, the irrigated crops were cultivated in a wider area of 71 per cent of the gross cultivated area of the sample households. In Poyyamani, the entire operated area of 25.58 acres belonging to the sample households were found to be irrigated lands. Next to paddy, banana was the major crop covering 21 per cent of gross cultivated area of sample households. Though surgarcane and Korai were cultivated by one sample household each, they were widely seen in Poyyamani.

The present study showed that the yield of paddy in Poyyamani was higher, exhibiting a positive correlation \( r = 0.6 \) with the land size. On the other hand, in Naganur, the paddy yield was constrained by the availability of irrigation facilities. The highest productivity achieved in Poyyamani was 2500 kg/acre.

The previous survey found contract labour (kothu) widely prevalent in wet ecotype where Poyyamani was located. The present study, we found the practice of employing contract labour in paddy cultivation in both the villages. In the dry village of Naganur, 63 per cent of sample farmers used contract labour at various stages of paddy cultivation; this feature had emerged only after 1980 and was necessitated by the introduction of new agricultural strategy in a broad manner.

In Poyyamani, all the 14 sample farmers used contract labour for cultivation; ten of them reported that contract labour cost accounted for more than 50 per cent of total labour cost; though the system existed even before
1980, unlike in the past, it offered employment only to the able bodied young men and women. It involved very high levels of intensity of labour.

While the previous survey observed the introduction of chemical fertilizers in the study area, the present study found widespread use of chemical fertilizers in almost all crops. It was noted that even in the dry village of Naganur chemical fertilizers were increasingly used for dry crops such as un-irrigated groundnut and gingelly. The average per acre consumption of chemical fertilizer in the wet village of Poyyamani was relatively larger than Naganur in paddy cultivation. In the distribution of fertilizers and pesticides, the role of public institution such as cooperatives was found to be less, whereas the merchants were dominating the market.

5.1.9 Credit Avenues and Borrowing Behavior

The previous study in 1979-80 noted the introduction and spread of organized credit mechanisms catering to more than half of the credit requirements.

In the present study, we found some households borrowing exclusively from institutional credit, others from exclusively non-institutional sources and yet others from a combination of these two sources. The findings from the sample revealed that the non-institutional credit operations were comparatively more important in extent than that of institutional credit. The new source of self-help groups was also found as growing avenue of credit for the sample households. It was found that the farmers who borrowed credit from the merchants at the beginning of cultivation especially in the cases of bananas and paddy, experienced a disadvantage in the price front when they had to sell the produce to the lenders at lesser than the prevailing market price.
5.1.10 Labour and Employment

The benchmark survey (1979-80) observed in the wet ecotype different types of labour in agriculture such as *kottu* (contract labour), *atta coolie* (daily wage labour) and *panniyal* (attached labour). In the dry ecotype, the atta coolie and panniyal systems were prevalent. There was also a traditional division of labour in both ecotypes on the basis of different caste-based occupations. While the labourers were confined to only agriculture related activities within the village in the wet area, the labourers were able to find employment in non-agricultural activities within and outside the villages in the dry area.

The present study noted considerable changes in the employment structure of both the villages in 2004-05 as compared to 1979-80. The inadequate local employment opportunities and the possibility of finding jobs in the nearby urban areas (such as in the textile, paper and cement factories in Karur), motivated many people to go out of the villages to find jobs.

Our study revealed that the mechanisation had deprived traditional artisans such as carpenters (plough-making) and coppers (leather work) who were thus compelled to seek employment elsewhere. We also found agricultural activities offered more days of work for men rather than women in Poyyamai and marginally more days of work for women in Naganur. Outward migration of male labourers in Naganur was comparatively higher than in Poyyamani.

Agriculture wage labourers in both the villages when they move out in times of need to nearby villages get higher wages. This was because of the transport cost invariably added to the wages. The practice of contract labour is increasing as the gang taking up contract work is able to get larger wage income per person. In the dry village of Naganur, SC agricultural labourers go
to distant places (around 150 km) such as Erode, Perundurai and Kodumudi and engaged in contract labour at the time of transplantation and later at the time of harvest.

5.1.11 Food Security

All the sample households in both the villages had mentioned their accessibility to the PDS system. But there were variations in accessibility across sample households. Since most of the households had almost switched over totally to rice consumption, the study considered the consumption of rice, the staple food, as a mark of food security. The weak negative correlation (-0.19) between per capita income and the proportion of rice bought from PDS shop in Naganur revealed that practically all households accessed the PDS for their requirements of rice, regardless of income. On the other hand, the corresponding value (-0.48) for the wet village of Poyyamani showed that the people depended comparatively less on the PDS system as their per capita income level became higher. The assured higher level of own rice for consumption in the wet area was an important reason for this trend. Similarly, the positive correlation (0.47) in Poyyamani with reference to daily milk consumption and per capita income was higher than that of Naganur (0.09). The relatively larger stock of milch animals in Poyyamani and the traditional habit of the people in the wet area were the reasons.

A large number of sample households (27 of 39 in Naganur and 24 of 38 in Poyyamani) showed an average rice consumption ranging between 300 and 500 grams per capita per day. It was found that there were seven sample households in Naganur and 11 households in Poyyamani which could not attain the consumption of 370 grams of rice per capita per day to meet the basic requirement of 2400 calories the minimum norm by Indian Council of Medical Research.
"A few observations may be relevant in this context. Nor all households had adequate access to food grains at the time of survey. The one-rupee a kilo rice scheme came into force much later in 2006. The PDS provided only between 12 and 20 kgs per household per month of rice and this quantity is inadequate for most of the households. Incomes from wage and self-employment were low in the case of many households. It is also true that wage work in both agriculture and non-agriculture is highly energy-intensive (transplanting, harvesting, threshing, quarry work, work in loading and reloading, construction, etc). Excessive expenditure of energy and inadequate access to food do explain the widespread incidence of malnutrition. To these, one may add lack of sanitation facilities and of adequate access to safe drinking water.

Because of low levels of income, many people consume inadequate amounts of pulses and nutrients. This also contributes to malnutrition.

5.2 Conclusion

Since independence, Indian agriculture has undergone significant institutional changes such as limited land reforms. Technological changes brought about by the Green Revolution have also transformed Indian agriculture. These changes have impacted on the rural economy and life in rural India has changed in important ways. During the last 60 years, numerous surveys, resurveys and studies have been undertaken to document the variations in the transformations in different parts of the country. The benchmark study considered for the present research was made in 1979-80 (Athreya, et.al., 1990) pertaining to two agricultural ecotypes in central Tamil Nadu. This study is a resurvey examining both changes in the wider region to
which the study villages belong and the socio economic conditions of a sample of households in each of the two study villages.

In the study area, land relations differ somewhat between the dry village of Naganur and the irrigated village of Poyyamani. Dalits own little or no land in Naganur, while they own some lands in Poyyamani.

However, both in the study villages and rural Tamil Nadu in general, a large proportion of dalit households turn out to be labour households with little or no land and deriving most of their income from wage labour. This is shown by NSS data. {V. B. Athreya (2009), accessed at www.fas.org.in} We do not have data on the extent of land owned by women in sample households, but here again, despite legislation in the State specifying the right of daughters to equal share in family property, women’s access to land is rather less than men’s.

Close to 40 per cent of the operated lands among the sample households in Poyyamani, the wet village, are still leased-in lands. Thus, tenancy remains important, but it is mostly registered tenancy with regulated rents and not of the classical rack-renting variety. Widespread changes in the irrigation pattern have turned the dry area into a region of intensive agriculture using ground water. Similarly, in the wet area, which depended on canal water, there has been groundwater use as a supplementary source of irrigation. As for the cropping pattern, paddy cultivation has also grown in the dry area along with introduction of commercial crops. There has been a decline in the cultivation of small millets.

Productivity in agriculture increased in both Poyyamani and Naganur in 2004-05 compared to 1979-80. It is likely that the productivity increase took place mostly in the 1980s, though we have no evidence for intervening years
between 1979-80 and 2004-05. Local informants felt that yields had become stagnant, despite higher levels of application of inputs such as fertilisers.

The employment pattern of both the villages is affected by the industrial development in nearby areas, particularly Karur and Tiruppur, where industrial growth has been impressive. However, despite this dynamism over the last three decades, incidence of poverty remains very high in both the villages in 2004-05. The study demonstrates that the level of rural poverty remains unacceptably high despite high growth rates of GDP.

The role of government and cooperative institutions in the provision of credit and input like fertilizers, prominent twenty years back, has become weak. Thus has allowed private merchants to dominate the agricultural input market, and private, high interest rate sources to play a large role in the provision of credit. The proportion of income from non-agricultural sources to total income has increased. While there has been inadequate employment generation in agriculture the scope to get jobs in the nearby areas has increased because of industrial growth. The significant change relates to the massive progress in general literacy level with a remarkable growth in the female literacy. However, the present level of literacy in the dry village of Naganur is still below the state average literacy level. Altogether, there has been progress in the villages and also in the economic conditions of the sample households. A general improvement in living conditions between 1979-80 and 2004-05 is not necessarily inconsistent with agricultural stagnation and reduced role of the Sate in rural development in recent years. While we do not have village level data for 1979-80, it is widely accepted that agricultural growth rates were generally high between 1980 and 1997, and the stagnation is a post-1997 phenomenon.

The fact that over 60 per cent of sample households in Naganur and 45 per cent in Poyyamani, are below even the dismal official poverty line is a
reminder of the massive extent of deprivation despite the progress made in agricultural productivity and output and the growth of industry nearby.

In this respect, the study runs counter to the estimates of poverty for the rural areas of the state as a whole obtained from NSS data. Even using the official poverty line expenditure, we find that a large proportion of the households are below the poverty line in both villages. This is despite much greater non-farm employment, some rise in real wages and a modest rise in agricultural productivity. The decline in days of employment may partly explain the situation.