

RURAL COMMUNITY AND AGRICULTURE IN THE CAUVERY RIVER BASIN:  
A CASE STUDY OF THE PERUVALANALLUR VILLAGE OF THE  
TIRUCHIRAPPALLI DISTRICT, TAMIL NADU, INDIA

PART THREE

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Part One and Part Two of the same title consisted of the following chapters and published in the different journals.\*

Part One:	Chapter I	Introduction
	Chapter II	Land-uses and Their Implications
	Chapter III	Landownership and Its Implications
	Chapter IV	Occupational Specialization and Labor Organization
Part Two:	Chapter V	Land Tenure and Its Implications

CHAPTER VI

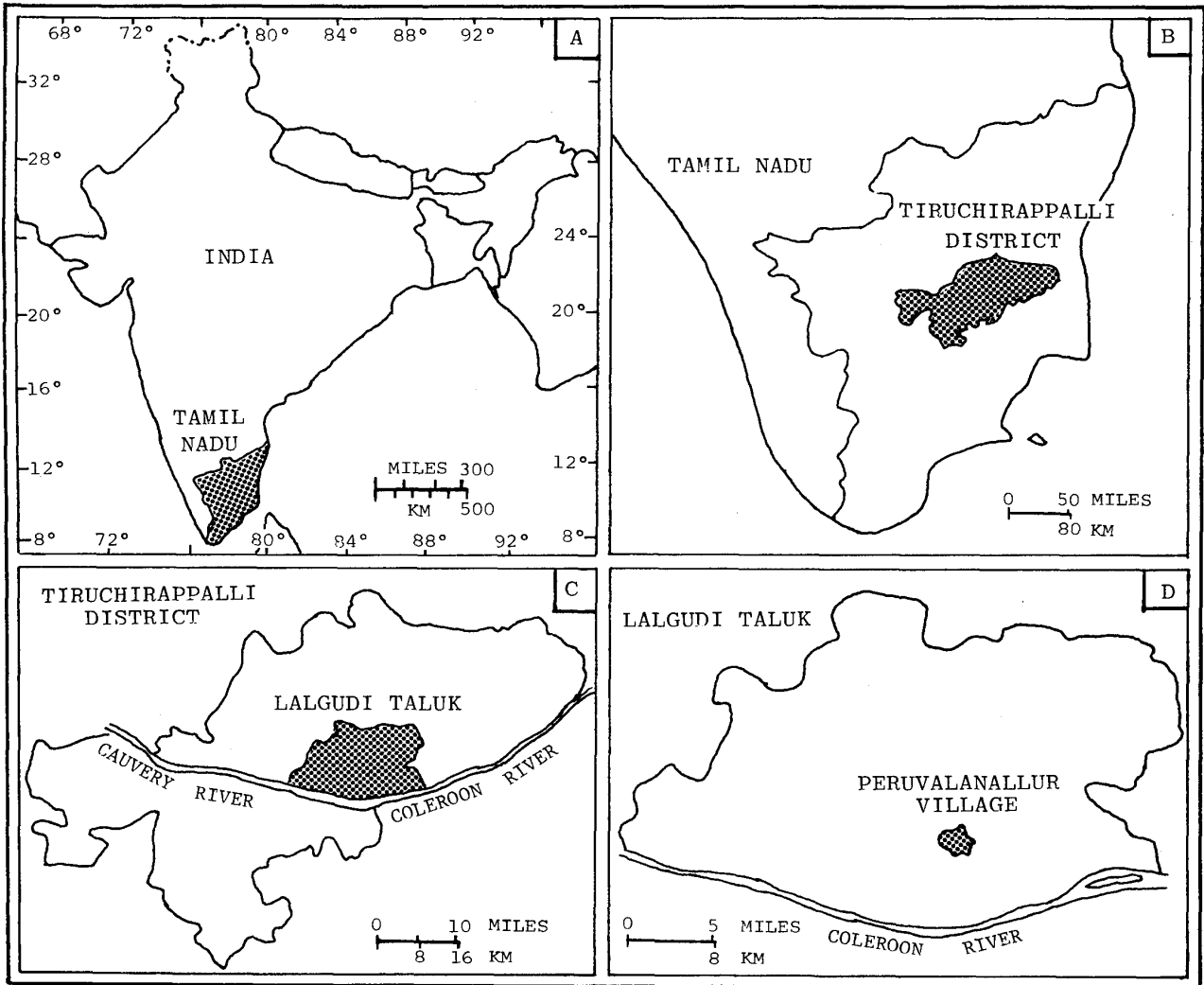
CONCLUDING REMARKS

Peruvalanallur village is located in southern India in the state of Tamil Nadu, in Tiruchirappalli district, in Lalgudi taluk. The village consists mostly of irrigated wet lands. Agriculture is favored by a year-around growing season, by a double rainy period, one during the southwest monsoon of June-September and the other during the northeast monsoon of October to December, and by extensive irrigation systems based on waters from the Cauvery River, particularly one of its distributaries, the Coleroon River, stored in two large tanks in the village, and by local water both from deep tubewells in the drier and higher northern part of the village and from shallow tubewells in the lower and wetter southern part of the village. In spite of the double monsoon the average annual amount of precipitation is only

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\*Yoshimi Komoguchi, "Rural Community and Agriculture -----, Part One", Studies in Socio-cultural Change in Rural Villages in Tiruchirappalli District, Tamil Nadu, India, No. 2 (Tokyo: ISLCAA, 1981), pp. 85-136.

\*Yoshimi Komoguchi, "Rural Community and Agriculture -----, Part Two", Science Reports of Geography, No. 20 (Tokyo: Department of Geography, Komazawa University, 1984), pp. 1-59.



**Figure I-1**

Location of Tamil Nadu State in India (A), Tiruchirappalli District in Tamil Nadu (B), Lalgudi Taluk in Tiruchirappalli District (C), and Peruvalanallur Village in Lalgudi Taluk (D).

about 700 mm or 28 inches, a modest amount for such a warm area, but enough to make possible some crops on the dry unirrigated lands. The main agriculture of the village, however, is based on the irrigated wet lands, which in recent years have become predominantly double cropped. The double cropping had been made possible by an extension of the irrigation season through more extensive irrigation works.

This study has been concerned fundamentally with rural communities and agricultural systems in South India, with specific reference to the variations, both geographical and functional, found in socio-economic activities. More specifically, this study had the following objectives: first, to clarify the structural and spatial patterns of a rural community with special reference to its agricultural activities, and to measure the degree of association and integration among villagers whose socio-economic background seem to vary to a great extent; second, to investigate recent changes in the socio-economic aspects of the community; and by extension, third, to identify some important elements in its modernization.

In order to meet these objectives, the research has focused on the following four topics: (1) land uses and their associations, (2) landownership, (3) occupational specialization and labor organization, and (4) land tenure. The analytical methods adopted included conventional ecological and spatial concepts appropriate for the study of important aspects of a rural community and its development.

This study dealt primarily with a selected community, Peruvalanallur village of Lalgudi Taluk of Tiruchirappalli (Tiruchy) District, Tamil Nadu State in the Republic of India. The studied village, lying on the left bank of the Coleroon River (a tributary of the Cauvery River), is located some 26 km northeast of Tiruchy (the district capital), and some 6 km east-northeast of Lalgudi, where the taluk head office is located. In terms of agricultural activities, Lalgudi Taluk can be classified largely into the wet zone and the dry zone. The wet zone corresponds to the alluvial plains distributed narrowly along the Coleroon River. The agricultural activities in this zone, have been dependent upon the development of irrigation. There are

several irrigation channels in the wet zone, which are connected with the Upper Anicut of the Cauvery River. The wet zone can be further divided into two physiographic sub-zones; that is, a "lower wet" zone and an "upper wet" zone. The availability of irrigation water is more stable in the former than in the latter. The studied village belongs to the "upper wet" zone.

The vast area of the dry zone extends to the north of the upper wet zone in the taluk and is highly dissected along the non-perennial jungles streams (varis). In the dry zone the water for agricultural use is mostly dependent upon the monsoon rains during October-December. However, in many villages of the dry zone in the taluk, there are some "wet-land" areas being irrigated from different sources: eris (tanks), traditional wells, and ground water in which irrigation techniques themselves have been changing recently. It should be noted that these model physiographic zones can be found in much of the Cauvery River basin, although individual areas may vary to a great extent depending upon the regional units concerned.

Peruvalanallur has a territory of 1,335.70 acres. There are two big tanks for irrigation and other uses: the Mela eri (western tank) and the Kila eri (eastern tank), extending to the west and east of the major residential areas of the village. Being connected with the Peruvalai channel, which is controlled at the Upper Anicut by the Public Work Department, the tanks provide water to the southern fields of the village through well-developed field canal networks. Thus, most of the wet lands in the village extend southward of the two tanks. "Dry lands" on higher elevations are found mostly in the northern section of the village; some small irrigated pockets are located within the dry lands.

### Residential Pattern

The residential patterns in Peruvalanallur seem to reflect clearly the segregation of the caste systems prevailing in rural Indian communities. In 1980, the residents of the

village consisted of 33 caste groups and 874 households (3,496 persons). Of these caste groups, eight (Reddiars, Udaiyars, Gounders, Muslims, Pallans, Parayans, Catholic Pallans, and Catholic Parayans) had a considerable number of households, a sizeable population, and distinct individual residential areas, which originally centered around the Reddiars, the dominant caste in the village. Some of the other caste groups resided together on the peripheries of the major caste groups. More specifically, they desire to have in their neighborhood closely-ranked castes, and preferably the higher ones, rather than the lower.

Some other members of minor castes live within the residential area of the major caste groups, without forming their own residential areas. There are few communal troubles between the "intruder" of the minor caste and its immediate neighbors (and the community) of the major caste, if and when the caste rankings of the minor castes were higher than those of the major castes. Such a caste is seen between the Brahmans, as a minor caste, and the Reddiars, as a major caste in the village. Indeed, the Brahmans reside in the core of the Reddiar community. However, if these caste rankings were reversed, the major caste groups would put their communal pressure one way or another not only on the "invader," but also on the members of the major castes who had associated with the "invader." A serious case for concern in this community occurred during period of this field work; a Harijan family occupied one of the Reddiar's residences within the Reddiar community.

#### Expansion of the Residential Area and Its Implication

In relation to the development of residential areas in Peruvalanallur, valuable historical documents are available: the First Settlement Register (1864), the First Re-Settlement - Register (1898), and the Second Re-Settlement Register (1927), as well as their respective cadastral maps, which were mostly reconstructed and modified by the author. During a long period from 1864 to 1927 there was no substantial expansion of the residen-

tial area, although during 1898-1927 very minor changes occurred in its northeastern periphery, none of which changed the areal extent. It is clear from the data that the core of the residential area in 1864 corresponded to that of the present Reddiar community. It should be noted that in 1864 the Reddiars as a caste group occupied over 90 per cent of the privately-owned land in the village,<sup>1</sup> and that a few of the Reddiar landlords were assigned to supervise Poramboke (common land) such as tanks, public roads, river, etc. Although we don't know when people started to settle in this village, the above evidence suggests that the Reddiars were socio-economically the dominating caste groups from an early stage of the village settlement.

During 1927-1980, there was a great expansion of the residential areas in the village, the expanded area almost equaling the entire residential area of 1927. Although the expanded area during the period can be observed in many places in the village, the major areas correspond to the present communities of "Muslim Street", the "North Hindu Pallan," and "East Harijan" (within which Hindu Pallan, Hindu Parayan, and Catholic Parayan castes have sizeable residential areas respectively).

The villagers create new residences in three ways: (1) by purchasing open fields (mostly higher land), (2) by renting banks of irrigation channels and some open spaces along the public roads having contracts with the Public Work Department (PWD), and (3) by creating a new "colony" under the local government program with the cooperation of some big landlords and the community itself.

The first two ways generally result in a piecemeal expansion of the residential areas, whereas the last method provides an organized expansion scheduled for completion in a limited time. The first type can be observed in the "Muslim Street" to

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<sup>1</sup>Since the Settlement Registers include the landowners in other villages who owned lands in Peruvallanallur, this figure would be less if we account for lands owned only by the residents of the village.

the west, a new Muslim area across the Peruvilai channel to the north, and most of the "mixed caste" areas in Peruvilanallur. The second type is well exemplified in the "service area" to the immediate south of the Peruvilai channel, near the central portion.

The third type is represented by the "North Hindu Pallan" area and the "East Hindu Pallan" area (which is a part of the "East Harijans"). The planning of the "North Hindu Pallan Colony" began following a fire that occurred in the "South Pallan" community in 1920. Land for the "new colony" was acquired from some big Reddiar landlords by the government and allocated to the victims of the fire free of cost. A long-term housing loan was provided to each family under the newly-formed Housing Co-operatives. However, the intra-village migration of the victims from the "South" to the "North" continued for about ten years following the fire.

The planning of the "East Hindu Pallan Colony" also was initiated as a result of another big fire that took place in the "South Hindu Pallan" community in 1963. The process of planning and execution was similar to the case of the "North Hindu Pallan Colony", but it took only a few years to shape the "new colony" (for only the well-to-do families migrated from the "South" to "East").

Besides the above types, we can find many cases of "illegal occupation" of Poramboke (common land) and government land by immigrants, most of whom are from dry villages. This type can probably be applied in the case of the Hindu Parayan and the Catholic Parayan castes who have lived on the outskirts (immediately north of Kila eri) of the major residential area even before 1927<sup>1</sup> and who, by 1980, together occupied almost half of the "East Harijan" residential area.

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<sup>1</sup>In this kind of case, the village authority (Reddiar) usually didn't report to the local government unless the villagers were disturbed. In those days, as today, the immigrants were poor agricultural laborers who worked mostly for the Reddiars.

The expansion of the residential area in a given rural community in general is related to its population growth, normally the outcome of both natural growth within the community and migration from outside.

However, we should not underestimate the number of immigrants to this particular village. The results of our interviews support an assumption that there were a great number of immigrants from outside the village during the period 1927-1980, and that they were mostly landless agricultural laborers regardless of their castes.

"What were the reasons for this migration to this particular village?" In relation to this question, it should be noted that there had been great ecological changes in agricultural lands in the village during the period 1927-1980: a great conversion from "single-cropping" to "double-cropping" wet lands supported by the development of irrigation systems. This change certainly has created more jobs in agricultural activities in the village.

#### Inter-village Landholdings

In Peruvalanallur in 1980, agricultural land, including uncultivated area, accounted for 945.70 acres, or 71 per cent of the village territory. It is confirmed that most of the agricultural land in Peruvalanallur was owned by the village residents and Hindu temples (and other public bodies) but that some was owned by outsiders (including Hindu temples). It is also true that Peruvalanallur villagers owned much land in many other villages, although the lands were distributed mostly in the neighboring villages within the same taluk.

It should be noted that the Peruvalanallur villagers together owned much more land in other villages than in their own village, and that in these other villages they owned mainly dry land (2.5 times as much as wet land). These facts themselves contain some important problems related to the socio-economic



activities of the villagers.

When someone holds land in a neighboring village, the owner regards the land as a part of his immediate farm unit, since the owner's land in the other village is within a manageable distance of his residence. This is applicable for most of the cases between the studied village and its neighboring villages.

There is another type of landholding, however, whereby the Peruvalanallur villagers own land in more distant villages. For this type of landholding the locations of the lands involved correspond mostly to the "mother villages" of the owner's family members (and their ancestors). This is also true for the outside villagers (and town dwellers) who have land in Peruvalanallur. This dispersion of holdings thus is mainly a result of inheritance and of inter-village marriages.

Migration of a family unit to the studied area is also responsible for some landholding in distant villages, since the migrants have usually retained their land in their "mother villages."

We can find many cases among the immigrants' families where a female-spouse of the family was originally from Peruvalanallur; that is, she has been married to a man in another village and, after having lived in her husband's village for some years, returned to her "mother village" with her family. The similar cases in context can be observed between Peruvalanallur and its immediate neighboring villages, and even within Peruvalanallur.

The intra- and inter-village landownership is related to the patterns of property inheritance and marriage in the rural communities concerned. Most villagers expressed the feeling that their sons and daughters have an equal right to share their parents' property, and this practice is regarded, at least on the surface, as the basic rule for property inheritance in the studied area. However, in the actual execution of property division, only sons usually have an equal right to share their parents' immobile properties (residence, crop-land, fruit garden, forest, etc.), although the amount of the share might vary depending on the size of the property-holding of the individual

households. In turn, for their daughters, the parents meet all expenses for their marriage, including those of the ceremony, ornaments, and cash money; and even after their marriage the parents are supposed to give cash money and gifts regularly for a long period, all of which value is assumed to be equivalent to their sons' inherited share.<sup>1</sup>

How can we explain the fact that many female members have registered their land properties under their own names? The important points in answer to this question are as follows:

- (1) Among big landlords, there is a common practice by which parents' property is given partially to their daughter(s) as part of a dowry;
- (2) In a related manner, there is a customary rule that the mother's property brought to her husband as a dowry is supposed to be given to her daughter(s);
- (3) In spite of the parents' great desire to have at least a son in their family, there are quite a few families without any sons, but only daughter(s). In this case, the parents' property should obviously be given to their daughter(s);
- (4) There are some widows who have had a long period of married life without any issue.

Most of the female members' land in distant villages was acquired through inter-village marriage.

The size of landholding of each household in Peruvalanallur in 1980 showed wide variation: from landless to 195.27 acres, with 1.90 acres being the average. Out of the 874 total households in the village, more than half were landless. If we take into account the landless and marginal farmers owning less than 2 acres, there were as many as 706 households (81%), but they together occupied only 195.14 acres (12%) of the total area owned by the Peruvalanallur villagers. By contrast, only 39 households (4%) owning 10 acres or more occupied 890.13 acres (54%) of the total area.

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<sup>1</sup>Again, this practice could have been applicable only for 412 households (47%) of the total households (874) in the studied village, since the remaining 462 households (53%) were landless and generally poor except for a few limited numbers of households in each of which at least one of the working members had a decent, non-agricultural occupation.

### Size of Landholdings

The size of the landholdings differed by caste groups. Among the 33 caste groups, the Reddiars (79 households) occupied 974.37 acres (59%) of the total area owned by the Peruvananthapuram villagers, with 12.33 acres being the group's average. Among the Reddiars, 26 households fell under the category of holding 10 acres or more, and they together occupied 732.50 acres (42%) of the total area, although 4 households were landless. After the Reddiars, the ranking of the landholding by castes from the highest were the Udaiyars (12% of the total area), the Grounders, (11%), the Pallans (9%), and the Muslims (5%); and their average holdings were 1.62 acres, 2.51 acres, 0.52 acres, and 1.77 acres respectively.

A few landowning households (owning 10 acres or more) were from the "Backward" caste group (11 households) and the "Scheduled" caste group (2 households). In each of these castes, however, there were very high percentages of landless households (42% in the "Backward" caste group and 65% in the "Scheduled" caste group). Out of the 33 castes in Peruvananthapuram, 14 castes had virtually no agricultural land, the members of these castes having mostly non-agricultural occupations.

The landholding of individual households and/or caste groups should not be thought of as unchangeable over a given period of years. Indeed, the above landholding patterns by size and/or caste have resulted from changes over a long period of years.

### Land Transactions

Since 1864, the Reddiar's percentage holding of the land in Peruvananthapuram has declined, with great changes occurring since 1925. In relation to this, we examined more recent changes

of landholding (or transfers of patta, title ownership of land) in Peruvalanallur in the 12 years between 1967-68 and 1979-80.

Transfers of landownership are usually accomplished in one of two ways, (1) inheritance, or (2) sales transactions. The total transfers of landholding during the 12-year period involved 365 acres in 285 cases, accounting for 39 per cent of the total agricultural land available in the village. The areas which involved inheritance accounted for 192.33 acres in 184 cases, and sales transactions, 172.67 acres in 101 cases.

During the 12 years studied, transactions involving inheritance occurred in only 8 out of 33 caste groups, with great variation in the areas and cases involved among them: the Reddiars showed the largest involved area (132.72 acres in 115 cases), followed by the Udaiyars (10.97 acres in 18 cases), the Grounders (8.94 acres in 13 cases), and the Hindu Pallans (6.35 acres in 14 cases). As expected, the above figures are closely related to the number of landowning households of each caste group.

The family inheritance transactions are usually made some time after the heirs' parents' (especially father's) death, with their formal registrations of the transfers being made much later. However, there were some cases in which the transactions occurred even in the parents' lifetime. These were mostly a consequence of the land-ceiling acts or were the result of dowry transactions which have occurred among the limited numbers of big landowning families belonging to the Reddiars. The areas concerned with the land-ceiling acts and dowry transactions were respectively 57.12 acres (in 34 cases) and 15.92 acres (in 14 cases), which together accounted for about 38 per cent of the total area of the inheritance transactions of the village.

Regarding property division that took place in the parents' life time, still another type is related to various kinds of "family troubles." Examining the individual cases under this type, they were mostly concerned with the result of unsuccessful relationships among the family members, especially between the family head and married sons(s).

Regardless of the types of inheritance, these changes in

landholding are the consequences of the life cycle of the individual inheritees and, by extension, of their family. A more important aspect of inheritance with regard to this study is the fact that, due to population growth within the family, the sizes of the present households' landholdings are generally much smaller compared with those of their parents' (or ancestors) as far as the inherited part of landholdings is concerned. Thus, sales transactions are a major factor responsible for fluctuation (increase or decrease) of landholding in a given family.

During the above 12 years the sales transactions occurred in only 12 out of 33 caste groups; of these only 7 caste groups were involved in both selling and buying, 3 caste groups were involved in only selling, and 1 caste group was involved in only buying. Other villagers also were involved in the sales transactions in Peruvalanallur. There was great variation in the areas and cases in both selling and buying among the caste groups concerned. The balance of area sold and area purchased in each caste also showed a wide range of variation: among 11 caste groups involved, it was found that 5 caste groups together lost 72.15 acres of their land, the Reddiars alone decreasing their landholding by 70.39 acres, and that 6 caste groups together added 44.13 acres to their landholding, the Muslims, Grounders, Udaiyars, and Hindu Pallans increasing their land to a sizeable extent.

It should be noted that other villagers who owned land in Peruvalanallur sold 44.93 acres of land to both the Peruvalanallur villagers and people outside of the village, and that some other villagers purchased 73.25 acres of land from both Peruvalanallur villagers and outsiders. Thus, other villagers in Peruvalanallur increased their land by 28.32 acres during the period.

We realize that, during the short period of 12 years, land sales transactions occurred more frequently than one would have expected, and that the areas involved were larger. It is clear that there has been a re-distribution of land among the villagers and, by extension, among the different caste groups in Peruvalanallur, the Reddiars as a landowning caste group having been a great "contributor." More specifically, among the indivi-

dual Reddiars concerned in the transactions, relatively large landowning households (holding 5 acres or more in 1980) have been the main "contributors" for the land re-distribution in the village.

On the other hand, since the early 1970s, some Muslims (whose family member(s) have had jobs in some oil-producing Persian Gulf countries and have been able to amass substantial savings) have been investing their capital in land, rather than in non-agricultural business, resulting in the Muslims' higher percentage of "gained" areas among the caste groups during the period in Peruvalanallur. It should be noted that outsiders, especially those of dry villages, have had a constant interest in securing more wet land (in Peruvalanallur). Again, the Muslims in other villages have invested their "Gulf money" in buying 20.18 acres in Peruvalanallur during the 12 years studied. Indeed, the Muslims decided, to a large extent, the price of land in and around the studied village.

Thus, the Peruvalanallur villagers together in 1980 occupied 78 per cent of the total privately owned land (872.70 acres) in village<sup>1</sup>, the remaining 22 per cent being held by outsiders. Peruvalanallur villagers had much land in other villages.

#### Development of Agricultural Lands and Irrigation Systems

The present areas of "dry," "single-wet," and "double-wet" lands in Peruvalanallur are a consequence of the expansion of irrigation. In relation to the development of agricultural land, the Settlement Registers (published 1864, 1989, and 1927) and their corresponding cadastral maps provide valuable materials. These materials and the current data collected by the author together show how agricultural land has changed in relation to the development of irrigation systems over the period

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<sup>1</sup>The resident Reddiars in Peruvalanallur occupied, in 1980, 510.44 acres, or 58 per cent of the total privately owned land in the village.

of the years examined.

In Peruvalanallur in 1864, of the total agricultural land (1,048.56 acres), dry and "single-wet" lands occupied 480.53 acres and 568.03 acres respectively. Although the Peruvalai channel appeared first in the index map of the First Re-Settlement Register (1989), it is believed to be one of the early irrigation channels developed by the Chola Kings in the Cauvery delta area, and the channel itself was constructed around the second century, A.D.<sup>1</sup> Thus, by 1864 Peruvalanallur already had its own irrigation systems based on waters coming mostly from the Cauvery/Coleroon River, but partly from local water sources, stored in the two large tanks through the Peruvalai channel. However, the Cauvery River and its distributories showed great seasonal fluctuation in the volume of water carried, there not being any reservoirs in the upper streams at that time. As there were only a few field canals observed in the "single-wet" area, the distribution of water must have mainly been carried out on a field-to-field basis.

During the period 1864-1898, 150.44 acres were converted to "single-wet" land, this being accompanied by construction of the field canals at the village level. The distribution pattern of the field canals in 1898 was fundamentally the same as the current one. Moreover, by 1898 individual areas had been assigned for irrigation from one of the two tanks, the Mela eri or Kila eri or from the Peruvalai channel. Interestingly, this arrangement still exists.

During the period 1898-1927, 120.48 acres of dry land were converted to wet land, and 72.82 acres of "double-wet" land were created mainly by the conversion from "single-wet", but partly too from dry lands. New field canals were observed in the newly-converted "single-wet" areas. The southern fields had been almost completely transformed to wet land by 1927.

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<sup>1</sup>Shanmugam P. Subbiah, "Rural Base in a South Indian Village: A Study into its Structural and Spatial Patterns in Mahizambadi Village of Tamil Nadu," Studies in Socio-cultural-Change in Rural Villages in Tiruchirapalli District, Tamil Nadu, India, No. 4.

During the 52 years between 1927 and 1978-79, 87.48 acres of dry land were further converted to wet land, mostly in the narrow strip immediately to the north of the Peruvilai channel. More importantly, 508.4 acres of "double-wet" land, but also some dry lands. It should be stressed that the fundamental factor contributing to this remarkable expansion of the "double-wet" land must have been the Mettur Dam of the Salem District (located some 178 km northwest of the studied area), the construction of which was completed in 1934. The large-scale reservoir behind the Mettur Dam has been well coordinated with the Upper Anicut (located some 20 km west-northwest of Tiruchy), where waters for the Peduvilai channel, and other channels as well, are controlled by the Public Works Department of the Tamil Nadu Government. Most of the waters in the Peruvilai channel are stored in the two large tanks available (which waters are eventually distributed through its several outlets to the different sections of the southern fields), but some enter directly to the main field canals which run in a north-south direction in the studied village.

In relation to the expansion of "double-wet" land, it should also be noted that some innovative farmers recently have installed shallow tubewells (with diesel engine pump-sets) in the southern wet-lands and deep tubewells (with electric pump-sets) in the northern "dry" land in the studied village.

### Land-use Patterns

In the studied village, which belongs to a part of the "upper wet" zone in our physiographic model, the agricultural areas are mostly wet land, but they also contain some higher "dry" land, including unclutivated land.

Major crops in the wet land are different types of paddy (kuruvai, thaladi, and/or samba) and sugar cane, although various types of gram and other minor field crops are extensively cultivated in the beginning of the dry season in the same fields used for the major crops in the wet season. Since sugar cane (and



bananas) takes almost one year to harvest, their area has been regarded officially in the classification of land as a "double-cropping area", like that of the kuruvai and thaladi paddy fields. On the other hand, the samba area has been officially treated as a "single-cropping area" because there is no other major crop cultivated during that time of the year. It should be pointed out that the traditional categories of "single-cropping" and "double-cropping" include gram and field crops to a lesser or greater extent.

We found in 1979-80 the following types of crop associations in wet land in Peruvallanallur:

1. Single-cropping in wet land . . . . . 171.35 acres
  - (a) samba paddy
  - (b) Samba paddy - gram
2. Double-cropping in wet land . . . . . 650.70 acres
  - (a) kuruvai paddy - thaladi paddy (325.87 acres)
  - (b) kuruvai paddy - thaladi paddy - gram
  - (c) sugar cane (342.83 acres)
  - (d) sugar cane - gram

Land use in "dry" land on higher elevation is more diversified in spite of its relatively small area. This is not only because of the physical differences within the "dry" land itself, but also because the farmers' responses to the land are varied. This character is an attribute of the intermediary position between wet land and real dry lands. Thus, we found the following types of crop associations in the "dry" land in Peruvallanallur:

1. Single-cropping in dry land (only rain fed):  
ground nut, red gram, maize, black gram,  
field beans and ragi (Eleusine coracana) 31.31 acres
2. Fruit trees in "dry" land (with irrigation) 13.33 acres
3. Single-cropping in "dry" land (with irrigation)
  - (a) samba paddy 15.20 acres
4. Double-cropping in "dry" land (with irrigation) 12.64 acres

- |   |              |
|---|--------------|
| (a) <u>kuruvai</u> paddy - <u>thaladi</u> paddy | (6.84 acres) |
| (b) sugar cane                                  | (5.62 acres) |

Cultivated areas of individual crops over the different seasons of the year strongly reflect the year-round agricultural activities of Peruvallanallur villagers. Periods of planting and harvesting the crops are the two busiest seasons, the latter being much busier than the former. However, in the wet zone, where double-cropping is dominant, harvesting of the kuruvai paddy and the planting of thaladi paddy and/or samba paddy must be completed within the limited period from the middle of September through the end of October. This is due to the northeast monsoon rains which, while having a negative influence on the kuruvai harvest, are a positive factor in the entire process of the thaladi and/or samba paddy cultivation and standing sugar cane. Indeed, in this period in the wet zone of the Lalgudi Taluk as a whole, the harvesting of kuruvai and preparation of the fields and transplantation of thaladi and/or samba can be observed simultaneously. Agricultural work in this period is more intense in the "lower wet" zone than in the "upper wet" zone, since in the former double-cropping of kuruvai and thaladi is almost exclusively practiced. Another busy season is the period from early January through the end of March, during which thaladi and/or samba and sugar cane are harvested.

#### Agricultural Labor Force and Its Organization

Peruvallanallur village in 1980 had 1,200 agricultural wage laborers (male: 540 persons; female: 660 persons), of which landless wage laborers accounted for 635 persons (male: 297 persons; female: 338 persons). In spite of the availability of such large numbers of wage laborers in Peruvallanallur, during the busy seasons the area receives many other laborers from outside the village, especially from dry villages. Although the seasonal migration from the dry villages is not a new phenomenon, it has been greater in recent years, especially since the second half of the 1970s. Many seasonal wage laborers come to the village

without previous arrangements and ask work of "would-be" employers. Some big landowning Reddiars procure a group of laborers (15-20 persons) on a contractual basis each season through their relatives in the dry villages. Although the wage of the seasonal laborers from outside the village generally is lower than that of Peruvallanallur laborers, it is at least 1.5 times that found in their own dry villages.

In relation to the seasonal migration of the wage laborers, the recent achievement of double-cropping in the wet zone has had general impact not only on its own labor structure, but also on that of the less-developed dry zone, resulting in a seasonal shortage of labor there, and, by extension, changes in farm management procedures, including the introduction of varam (share-cropping).

Regardless of the size of the landholdings, managing members within the families usually are responsible for agricultural operations. The major physical work for agricultural activities on the individual farms, however, depends largely on the hired laborers, this being the case even in the marginal units, which have such work members in their own families. Most of the manual work for agriculture is conducted intensively and collectively in a limited period on the individual farms by employed laborers.

There are two common wage systems for the agricultural day laborers: (1) the ordinary fixed wage system, and (2) the contract labor system. Some types of work are assigned only to male laborers, others only to female laborers. The agricultural laborers in and around the study area in 1979-80 worked 5 hours a day, including a morning time (9:00-12:00) and an evening time (4:00-6:00). Male laborers were paid Rs. 5 (Rs. 3 for the morning time and Rs. 2 for the evening) per day, whereas females were paid only Rs. 2.25 (Rs. 1.50 for the morning and Rs. 0.75 for the evening). This wage system applies to the various kinds of work done, except for mainly paddy and sugar cane harvests. Only for paddy harvesting is an equal wage in kind (i.e. paddy) given to both male and female laborers.

The contract labor system is applied to every stage of

paddy and sugar cane harvesting, as well as to some other specific jobs such as plowing, transplanting of paddy, spraying of pesticides, application of fertilizers, etc. Both male and female laborers in a party under the contract system usually enjoy a higher wage. This is a result of the collective bargaining power of the laborers in the system, itself a consequence of the time schedules which the cultivators must meet, especially during the two busy seasons. However, it should be noted that the individual laborers in this system not only achieve more work per hour, but also extend working time by 1-3 hours per day over those working in the ordinary fixed wage system.

Whichever wage system is employed, the cultivators have to meet the substantial costs involved in supporting the labor force, this being indicative of the labor-intensive character of the agricultural systems.

It should be pointed out that, except for "Forward" castes, all the sizeable caste groups have considerable numbers of agricultural wage laborers and the "working party" in the contract labor system consisted of members from varied castes. This indicates that, at least for the purpose of economic gain, there was a common base of association and/or integration among agricultural wage laborers whose caste backgrounds are different. A drastic example of the power of this common base was seen in the "wage laborers' strike," occurring early in October of 1980 in Peruvalanallur and initiated by the Harijans demanding that the employers (Reddiars) increase their daily wage. Although there have in the past been frequent instances of conflict between the Reddiaras and the Harijans, this was the first occasion in village history that the laborers held a village-level strike, with the "backward" caste groups acting jointly with the Harijans against the Reddiars. Though this began for the economic gain of the laborers, it obviously indicates some aspects of social change and/or a re-structuring of the social relations among the varied caste groups in the rural community.

## Recent Change in Agricultural Practices and Technologies

The agricultural practices and technologies employed in the studied village reveal some important characteristics. In Peruvālanallur, almost all farmers currently employ the high yielding varieties (H.Y.Vs) for each type of paddy, sugar cane, gram, and other field crops. As is mainly the case in the wet zone in Lalgudi Taluk, the introduction in Peruvālanallur of the H.Y.Vs. for each type of paddy in particular began in the middle of the 1960s (corresponding to the beginning of the so-called "Green Revolution"), almost completely replacing traditional varieties by around 1975. Delayed by only a few years, sugar cane, gram, and other field crops followed nearly the same process as was the case for paddy. It should be pointed out that the newer H.Y.Vs. for the individual crops have repeatedly been replacing the older H.Y.Vs. Adoption of other modern inputs such as chemical fertilizers, pesticides, etc., are commonly practiced among the villagers, although some poor farmers' investments are slightly lower. For these agricultural inputs for each of the major crops, the government-linked Co-operative Bank provides the credit for actual cultivators, this having to be certified by the village karman (caretaker of the land record).

Farming technology in general has been associated with traditional implements and tools, except for the pesticide sprayers and tractors. In 1968 the first tractor (35 h.p.) was introduced in the village by a Reddiar who, in plowing others' fields or earning cartage for sugar cane, paddy, and other agricultural goods, used this first tractor mainly for "business," rather than for his own agricultural purposes. In 1980 there were three tractors (each of the 45 h.p.) owned by the Reddiars in the village. Since the first adoption of the tractor in 1968, the area in the village cultivated by tractors has gradually increased. In 1980, the area cultivated by tractors accounted for about 70 per cent of the total cultivated area<sup>1</sup>, the rest by either bullocks or buffaloes.<sup>2</sup> As a consequence, the numbers of work cattle and water buffaloes used for plowing have been greatly reduced in the village. Efficient plowing by tractors

has been especially important in the period from mid-September through the end of October, during which, after the kuruvai harvest, subsequent preparation of the fields for thaladi and samba paddy has to be completed within a limited amount of days. The tractors have also been used for threshing of the paddy, although beating at the stone plate and/or cattle-treading methods are more popular in and around the studied village.

Human and animal sources of energy are still predominantly used in operational aspects of farming, but this does not greatly limit agricultural production. Rather, it helps wage laborers maintain their employment. However, when more efficient work is necessary, farmers employed modern implements, such as in their use of the tractor.

#### Selection of Crops and Recent Change in Land Use

Selection of the specific seasonal crops for particular fields depends not only upon the physical conditions needed by the individual crops, but also upon the differing production values among the crops. Under the current irrigation systems, two types of paddy (kuruvai in the first season and thaladi in the second season), as one set, and sugar cane are, in most "double-wet" areas, usually interchangeable, although there are some slight differences in the physical conditions required by each. However, it should be recalled that, after two consecutive years' harvests, the sugar cane is replaced by the other crop (paddy) because of its gradual diminishing yields from the first year to the second and to the third. After the cane's replacement, the same land can be used in two ways in the following seasons: (1) kuruvai paddy cultivation in the subsequent first

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<sup>1</sup>Total cropped area represents the aggregate area of all crops raised on the same land during the different seasons of the year.

<sup>2</sup>This figure is not necessarily indicative of a limit in the tractors' capacity, but rather, tractors did not have access to some fields which were either blocked by physical obstacles or surrounded by already-transplanted paddy fields.

season of the year, and (2) skipping the planting of any major crop in the first season, following with samba paddy cultivation in the second season.

Whether or not sugar cane (or paddy) should be cultivated in particular fields during the year largely depends upon the results of the farmers' "benefit-cost analysis," based on experience. In recent years, the market price of processed sugar has been increasing, and accordingly sugar cane has become the most profitable crop. Thus, there has been an increasing interest in sugar cane cultivation. In fact, the cultivated area for sugar cane increased by 41 per cent in the year between 1978-79 and 1979-80. Many farmers converted from samba paddy in 1978-79 to sugar cane cultivation in 1979-80: this means that farmers converted land from a "single-cropping" to a "double-cropping" area within that year. From crop associations stated above, the conversion from samba area to sugar cane area in the next year was possible if the samba cultivation in 1978-79 was the consequence of crop associations following sugar cane harvest in the previous year (the land already being double-cropping area). However, this only partly explains the fact that of the area (95.93 acres) converted to sugar cane in 1979-80, 21 per cent came from the "double-cropping" area and 79 per cent from the "single-cropping" area of 1978-79. In the full explanation of the above fact, two other elements are thought to be important: (1) some farmers could secure subsidiary irrigation water for sugar cane cultivation, this being provided by the nearby shallow tubewell owners on a contract basis, and (2) some farmers, whose fields were adjacent to others' sugar cane fields, too desperately cultivated sugar cane, hoping that their fields could secure some irrigation water through their neighbor's fields. It should be pointed out that there was much more area falling under this second type than under the first. As expected, however, there were great differences in average yields between the two types: the yields of fields with "borrowed irrigation" were only half those found in fields with contracted irrigation. The farmers' crop selection in both types of irrigation depends on other neighboring farmers whose fields are of better quality

and/or equipped with the irrigation facilities. Though land cultivated under the above two methods can be regarded as temporary double-cropping land (being cultivated in this way for only one year and having generally low yields), it certainly has the potential to become a more stable cropping area. It should be noted that even the core part of the current double-cropping area had, for a long period of time, been developed by similar kinds of "trial and error" processes before taking the shape in which it is found today. Indeed, some unstable elements still exist to some extent in the area. Thus, we classified the wet land into three category areas based on its uses for the "single-cropping" and "double-cropping" in the two consecutive years of 1978-79 and 1979-80 as follows:

- |   |               |
|---|---------------|
| 1. Area for stable single-cropping:                                       | 118.41 acres  |
| (a) single-cropping area in both years                                    |               |
| 2. Area with double-cropping "potential":                                 | 135.74 acres  |
| (a) double-cropping in first year, then<br>single-cropping in second year | (52.94 acres) |
| (b) single-cropping in first year, then<br>double-cropping in second year | (82.80 acres) |
| 3. Relatively stable double-cropping area:                                | 569.42 acres  |
| (a) double-cropping in both years   |               |

What should be the farmers' great concern in the future is the promotion and maintenance of the relatively stable double-cropping land and its "potential" to more stable, productive land, converting into a double-cropping area the remaining one-fourth of the total wet (lower) land, currently used as "single-cropping" area for samba paddy. As availability of irrigation water is the key factor for these achievements, farmers must take the initiative to secure more local water, emphasizing the need for the installation of more irrigation facilities, such as shallow and deep tubewells in the southern fields in the village.



## Land Tenure

Under the current agricultural practice and technology and the cultural configurations of the rural communities, the size and amount of means of production, such as land, labor, agricultural implements, and livestock (especially bullocks as draft power) were unevenly distributed among households in the given village. Accordingly, each household would try to utilize its available resources as effectively as possible in accordance with these differences. Representative means of such effective utilization of available human and material resources are seen in the participation in various kinds of tenancy.<sup>1</sup>

There are three types of land tenure currently available in Tamil Nadu; namely, (1) varam (share-cropping tenure), (2) kuttagai (fixed rent tenure) and (3) otti (usufructuary mortgage tenure). However, all types do not occur equally in all the villages, taluks, or districts. Commonly only one type or two are dominant in a given village or area. It should be stressed that, since the 1950s in Tamil Nadu State, the legislature has passed several tenancy acts and rules, the amendments of which are aimed at protecting the "cultivating tenants", including any member (heir) of their family, and that all types of land tenure have been influenced by these acts and rules to a lesser or greater extent, this being the case even though awareness of such acts varies among involved villagers.

Although varam is not practiced at all in Peruvalanallur, it was found in some dry villages in Lalgudi Taluk where some modern irrigation systems have been developed in recent years. In the current varam system, the amount of rent is determined by the total gross produce in the involved land and share-ratios between the landlord and his tenant. The share-ratios of return between the landlord and his tenant vary greatly, depending not only upon the different provisions for irrigation water for the involved lands, but also upon the cost-bearing conditions between

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<sup>1</sup>Yoshimi Komoguchi, "Rural Community and Agriculture in Bangladesh," Science Report of Geography, (Tokyo: Komazawa University, March 1982) pp. 64-65.

the two parties for kinds of agricultural work, fertilizers and pesticides, seeds, operational work on and maintenance of the irrigation facilities.

In some dry villages of Lalgudi Taluk, modern irrigation methods have been emphasized by innovative landowners: (1) many deep tubewells with electric motors have been installed in new places; (2) some of the traditional wells have been converted into motor-pumped tubewells; and (3) quite a few low-lift pumps have been introduced, replacing the traditional aetram-eravais and kavalais. In a dry environment the farming of nanjais (irrigated wet lands) with the new irrigation systems, accompanied by modern agricultural inputs, provides much higher yields than the punjais (unirrigated dry lands) or nanjais using traditional irrigation systems. This, however, requires more capital and a larger labor force. The landowners' varied labor situations are primarily responsible for the decision of whether to enter the varam tenure, as well as the degree of their involvement in the varam farming when such a decision is made. In recent years the labor force available in dry villages has been subject to great seasonal variation. This is closely related to the seasonal migration of its wage laborers to the wet villages, the demand for a labor force in these villages being much higher than that in the dry villages. Thus, there is a seasonal scarcity of wage laborers in the dry villages. Therefore, the landowners whose farming largely depends upon an outside labor force have to seek some way to obtain a year-around stable labor force. One way to solve the problem for such landowners is to choose the varam (share-cropping) tenancy by providing some reasonable conditions for their tenants.

The landowners are afraid that their tenants will gain a "permanent right of cultivation" on the leased lands under the 1969 Tenancy Act. Under the varam tenure, the landowners can defend themselves from the tenants' claims, should they occur, by insisting that the landowners have been managing the farms themselves.

In the studied village, Peruvalanallur, only kuttagai (fixed rent tenure) and otti (usufructuary mortgage tenure) are

observed and commonly practiced. The fact that the Peruvalanallur villagers own more acreage in other villages (59%) than in their own village (41%) reflects its intra- and inter-village land tenure transactions. In 1980, there were 310 individual households (35% of the total village) involved in the two types of land tenure (165 households for kuttagai; 210 households of otti, of which 65 households practiced both tenancies). Of the total land owned by Peruvalanallur villagers, 300.27 acres, or 18 per cent, were leased-out under either kuttagai (205.24 acres) or otti (95.03 acres).

The Hindu temples and other religious organizations of Peruvalanallur and some other village temples owned wet lands in the studied village, leasing them out to the Peruvalanallur tenants under the kuttagai tenancy. The other village and town dwellers also have kuttagai relations with the Peruvalanallur tenants, the lands involved being located in and around the studied village. In fact, most of the arable land of the village is not cultivated by the landowners, but by the tenants under either the kuttagai or otti systems.

Kuttagai seems to be the most common type of tenure in the Tiruchy District. Under the kuttagai system the tenant is supposed to pay a fixed rent in cash or kind to his landlord, the amount being settled before cultivation, and the tenant has to bear all the cultivation expenses. In the wet villages where different types of paddy, sugar cane, and banana are the major crops, the rent is paid in kind for paddy cultivation and in cash for sugar cane and banana cultivation. In the dry villages, cultivable lands are mostly punjais (unirrigated lands) which are used for several types of pulses and millets, groundnuts, chillies, vegetables, etc. The rent for such lands (punjais) usually is paid in cash regardless of the kinds of crops cultivated.

The fixed rent per unit of area varies greatly not only within a village but also in the different villages or regions in accordance with the various qualities of the kuttagai lands, which provide different land productivities. In wet villages like Peruvalanallur, rent is determined largely by whether the land is

characterized as "single-cropping" or "double-cropping" land. It is arguable whether or not the current amount of fixed rent is high (or low). It has, however, certainly become lower than in the past, the productivity per unit area having increased greatly in the last 7-10 years. Another important aspect for the tenant is that he can secure extra work (and wage income) by participating in the kuttagai tenure. For instance, during the paddy and sugar cane harvest, a time in which the contract wage system is especially popular, the tenant can become a member of the "work party" for his operating (kuttagai) land, and thus get an equal share as a working member.<sup>1</sup>

It should be noted that, in many cases in the kuttagai transaction, there are differences between the fixed amount and the actual amount of rent payment, for most of the tenants "bargain" with the landowners after the harvest.

It is generally true that the available kuttagai lands in a given village, regardless of their ownership, were cultivated mostly by the tenants of the same village or by the neighboring villagers. This indicates that the distance factor is important in the practical operation of cultivating kuttagai lands. The fact that the Peruvalanallur tenants have actually leased-in wet lands almost exclusively can be explained by this factor too, since the village itself lies in an extensive region with a wet environment. However, the distance factor depends upon other agricultural conditions in a given village or area. The farmers in dry villages (where agricultural activities are relatively stagnant) usually commute to fields more distant from their homesteads for farming than do those in the wet villages.

The yields of crops per unit of area in the wet land in a wet environment like Peruvalanallur are generally more than three times higher than those in the dry land in a dry environment, although there is a great variation within each of the wet and dry lands in a given milieu. This is another reason why most of the Peruvalanallur tenants desire to cultivate wet rather than

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<sup>1</sup>Thus, for example, the "gross produce" of paddy excludes some grain, this being paid in kind to the wage laborers for their work in its harvest.

dry lands whenever possible.

We examined the households involved in the kuttagai tenancy in relation to the caste and size of landholding. Among the 33 caste groups in Peruvalanallur, only 16 groups were involved in the kuttagai tenancy (landowner-side only: 4 groups; tenant-side only: 7 groups; and both sides: 5 groups). The Reddiars (16 households) leased-out 174.33 acres or 85 per cent of the total kuttagai lands (205.24 acres) owned by the Peruvalanallur vilgers. The other caste groups who leased-out sizeable areas were the Muslims (9.36 acres), the Udaiyars (8.85 acres), and the Gounders (8.15 acres). Each of the remaining 5 caste groups respectively had one household involved in kuttagai tenancy, and its leased land was a very small area (1.50 acres at most). On the other hand, among the 12 caste groups of the kuttagai tenants, 5 groups (Reddiars, Udaiyars, Gounders, Muthurajas, and Hindu Pallans) were the most important ones as far as the involved households and their leased areas are concerned.

As far as the number of the involved landowners' households in the kuttagai tenancy is concerned, there was no relation to the size of landholding: there were 17 households belonging to the marginal landholding group (owning less than 2 acres). Most of these households leased-out all of their lands. However, since their respective sizes of landholding were small by definition, the total leased area and area per household were accordingly small. In general the larger landowning households leased-out more area per household. However, it should be noted that the largest landowning household (Reddiar) in the studied village alone leased-out as much as 136.41 acres of their land. More specifically, one household alone leased-out 12.24 acres (wet land only) in 18 different contracts with the Peruvalanallur villagers (who belonged to 7 different caste groups), and 124.17 acres in 67 different contracts with the other villagers. This explains the extremely high ratio of the leased-out area by the Reddiars, and by the highest landowning class as well.

As would be expected in the kuttagai tenancy, land-less and marginal landowning households that are more involved in the

tenancy. Out of the 129 tenants' households in Peruvalanallur, 90 households or 70 per cent consisted of the landless (44 households) and marginal landowning groups (46 households), and they together leased-in 77.00 acres or 53 per cent of the total kuttagai area (145.28 acres) leased-in by the village tenants. It is generally true that the smaller landowning households leased-in a smaller area per household. This is certainly related to the tenants' capability for farm management, as the tenants in the kuttagai tenancy have to meet all expenses for cultivation.

With regard to the caste relations in kuttagai, a landlord usually chooses his tenant(s) either from his own caste or from socio-economically lower-ranking castes. Conversely, a tenant seeks his landlord(s) either from his own caste or from socio-economically higher-ranking castes. This is certainly related to the barrier of the caste psychology. The one exception is the Muslims, who do not have such cultural barriers.

Another important aspect in the landlord-tenant relationship under the kuttagai tenancy is that, in a given contract, the size of the landholding of the landlord is not necessarily larger than that of this tenant. The implication of this is that, under such landlord-tenant relationships, the landlord was not necessarily more influential, socio-economically speaking, than his tenant. With regard to landlord and tenant relations, our data reveal that the majority of the current kuttagai contracts have continued over long periods, that is, 80 per cent of the total contracts have continued for more than 10 years. The fact that the recent kuttagai contracts, which have started within the last 10 years, make up the lower percentage of all kuttagai contracts (based on data as of March 1980) is certainly related to the influence of the 1969 Act. It should be noted that many of the recent contracts were among close kinship groups. How should we take into consideration the fact that the great majority of the counterparts in the current kuttagai contracts have not changed for a long period of years? One way to look at this fact is that the landlords might not have been as strict with their tenants as is generally understood, although there have been exceptions.

Under the current otti (usufructuary mortgage tenure) system, a tenant gets the right of cultivation of the land involved by depositing a certain amount of cash in advance with his landlord. The period of the otti contract is usually for three years, but it can be renewed if both parties (landlord and tenant) agree on its new terms. The full right of the land involved is returned to the landowner on the repayment of the deposit without any interest to the tenant. Thus, we can regard the tenant's (creditor's) yearly enjoyment of cultivating the otti land as an "annual interest" on the cash deposit to the landowner (debtor).

Out of the 874 households in Peruvalanallur in 1979-80, 210 households or 24 per cent were involved in otti tenancy; of these, 94 households were landowners (debtors) and 124 were tenants (creditors), although 8 households were involved in both. Like the case of the kuttagai tenancy, both landowners and tenants of Peruvalanallur had the otti transactions not only with their own villagers, but also with other villagers, and vice-versa for other villagers.

The 94 households in Peruvalanallur together received Rs. 636,270 of the cash "credits" in exchange for the leasing-out of 95.03 acres under the otti, these being located not only in Peruvalanallur (69.74 acres), but in its neighboring villages as well (25.29 acres). Of these available otti lands leased-out by the Peruvalanallur villagers, the tenants of the same village cultivated 80.19 acres, and the other village tenants cultivated the remaining 14.84 acres.

On the other hand, the tenants of Peruvalanallur together leased-in 91.90 acres of otti lands not only from their own village (80.19 acres), but also from the other village and town dwellers (11.71 acres), paying Rs. 656,270 for the right to cultivate the areas involved.

At this stage, some important aspects should be pointed out. First, out of the total area involved in the otti tenure in the studied area in 1979-80, the ratio for wet land was extremely high compared with that for dry: comparing the otti and kuttagai, it was higher in the former (86%) than in the latter (75%);

second, unlike the case of the kuttagai tenancy, out of the total otti areas leased-out by the Peruvalanallur landowners, the other village tenants had a very small share compared with that of the Peruvalanallur tenants; third, the spatial transactions of the otti between Peruvalanallur and the other villagers were very limited in comparison with those of the kuttagai. This is certainly related to the fact that the wet lands generally provide higher productivity under relatively stable conditions for cultivation. Too, careful farm management by frequent visits has become more important for the successful farming of these wet lands because of its capital-labor intensive character.

The amount of "credit" for the otti land was settled primarily on the quality of the land involved. For the wet land the amount of "credit" varied widely, depending upon whether the land was a "single" or "double" cropping area, and for the dry land, whether it was equipped with irrigation facilities or not.

It should be noted that all the types of crop associations in Peruvalanallur also were observed in the otti lands, because the otti lands in the studied village were distributed almost evenly regardless of the different physiographic conditions of cultivation. When the tenant's profits were examined by taking into account all the available crop associations in the studied village, the obtained figures revealed high rates of imputed interest with a range of 30-55 per cent per annum. Although these rates cannot be claimed to be perfectly accurate, they correspond well to the villagers' general understanding that the otti tenants can safely get back one-third of the amount of "credit" given to their landowners in a year. Realizing that a favorable rate of annual interest for rural people depositing in the authorized banks was 10-15 per cent, it is true in a sense that the tenants' involvement in the otti tenure can be regarded as a highly productive investment.

The results of our interviews indicated that the otti tenancy has been practiced for a long time in and around Peruvalanallur. However, the number of transactions and the area involved in the otti system have been prominently occurred only after the late 1960s; since then, the otti transactions have



become increasingly popular among the villagers. The beginning of the popularity of the otti transactions corresponds to that of the so-called "Green Revolution" in and around the village. In other words, the otti transactions have been emphasized in accordance with the processes recently implemented in the development of its agriculture.

The rapid rise of otti transactions may be related also to the stagnation in the kuttagai market, which has been largely closed to new transactions in recent years, mainly because of the strong influence of the 1969 Tenancy Act. However, the major reasons for the prominence of otti transactions in Peruvallanallur can be found in the recent rise in the productivity of agriculture itself.

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