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FINDINGS FROM MICRO LEVEL
STUDIES**

K.N. Nair
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We acknowledge our gratitude to the authors of the micro-level studies, Smt.Omana Cheriyan, Sri. KK John, Dr. A. Latha and Sri. CG Madhusoodhanan, and Dr. Rene Veron whose works have provided the basic data on which this paper is based. We are also thankful to Drs. D. Narayana and Santhakumar for their valuable comments on an earlier version of the paper and to Prof. PR Gopinathan Nair for his valuable editorial inputs. This Paper has been prepared as part of an ongoing research project on Institutional Changes and Livelihood Strategies under the NCCR North-South Research Partnership.

ABSTRACT

Land Reforms Act in Kerala rendered tenancy invalid and prohibited the creation of future tenancies in the State, but tenancy very much exists. It is a consequence of the simultaneous increase in two categories of people, “those who have land but unable to cultivate’ and ‘those who have the labour and skills, but no lands or not enough lands of their own to cultivate’. Macro state-level data on tenancy from sources such as the NSS appear to be gross under-estimations, going by the data provided by micro-level studies in the state. This paper examines some micro-level studies on tenancy in Kerala, more specifically, its prevalence across locations and crops, characteristics of lessors and lessees, the terms of lease, and the income derived from lease cultivation and in the light of the analysis, argues for institutionalised arrangements for the expansion of lease cultivation, rather than sterner measures to check it. Among other factors, large-scale entry of self-help groups into the lease market to take up lease cultivation, often bringing hitherto fallowed lands into production, has prompted such a positioning.

Key Words: Lease farming, Commercial Cultivation, Sustainable Agriculture

JEL Classification: Q10, Q15

1. Introduction

Kerala's land reform, that intended to place agricultural land in the hands of the tillers and ensure a dwelling place for the hutment dwellers¹, was expected to usher in a more equitable society and to accelerate agricultural production. However, after three decades and more of land reforms, it is now recognized that not much redistribution of land took place; what happened was only transfer of ownership² of land from the former lessors to the lessees. The protracted delay in the land reforms legislation following its initial conception and discussions³ allowed many large land owners to dispose off their lands or register them as smaller units within the land ceiling in the names of relatives, or devise strategies to circumvent the Act using provisions like exemption to plantations. The objective of distributing land to the tillers of the soil was only partly materialized since bulk of the former tenants who benefited from land reforms were people who had no direct dependence on land for their livelihood. Further, agricultural labourers who directly worked on land for their livelihood did not benefit much from the land redistribution since they got only hutment dwelling rights and very little cultivable lands.⁴ Nevertheless, the fact that several

intermediate and lower castes in the state came into possession of land, resulting in some socio-economic mobility among them, has created an overall impression of the success of land reforms in the state.

Although the Land Reforms Act in Kerala prohibited the creation of future tenancies in the state (as per sections 72 L, 73 and 74) and rendered tenancy legally invalid, tenancy has re-emerged. The post-land reform period witnessed a significant shift in the ownership of land, from households who have a primary interest in agriculture as source of livelihood to those who have particularly no interest in agriculture. There has also been a proliferation of small and marginal holdings due to the break-up of joint families and a consequent partitioning of households. While on the one hand, the average size of holding has been declining rapidly, inter-generational inequality in the distribution of land declined. Access to agricultural land through market mechanism has become increasingly difficult for the poor due to the rapid increase in land values as land became a speculative good rather than a factor of production. The period witnessed significant shift in the cropping pattern in favour of tree crops from seasonal and annual crops. This in turn, resulted in a reduced demand for agricultural labour. There has also been a simultaneous reduction in the supply of both hired and family labour in agriculture due to the rapid expansion of education and occupational diversification of labour. On the part of land owners, there has been an increasing tendency to convert paddy lands for the cultivation of other crops and for non-agricultural purposes as rice cultivation became a losing proposition with scarcity and cost of labour becoming prohibitive. Although the real and money wages of agricultural labourers have increased over time, their number of days of employment has been declining due to the shift in cropping pattern and the reduction in labour use, adversely affecting the livelihoods of agricultural labour households. Even some segments of the cultivator households with small and marginal holdings failed to make their living from cultivation in their own lands. It is as a consequence of the simultaneous increase in the numbers of

two categories of people, *'those who have land but unable to cultivate'* and *'those who have the labour and skills, but no lands or not enough lands of their own to cultivate'*, that the expansion of a lease market has come about in Kerala, with the former category of people leasing out their lands to the latter for lease cultivation.

One would expect to get insight into the extent to which land lease market has developed in the state from the landholding surveys conducted by the National Sample Survey organization. According to the 37th round of the NSS (1981-82) 6.7% of the operational holdings is leased in land. This is far lower than the figure (15%) reported for the country as a whole. In terms of area, 2.6 % of the operated area was leased in Kerala. Whereas for the country as a whole it was 9%. The data for the early 1990s (from the 48th round) showed that 5.2% of the holdings, accounting for 2.9 % of the operated area leased in land. The corresponding figure for all India were 7.2 and 8.3 percent respectively. Thus in both Kerala and all India while the percentage operational holding leasing in land has slightly declined, the share in operated area has shown marginal increase. The data for very recent period (2003) available from the 59th round of the NSS showed that out of the estimated 2.1 million farmer households in Kerala 6.6 percent leased in land during the Kharif season and 5.35 % during the Rabi season⁵. From this report, the extent of land leased in as a percentage of the operated area is not available: however, it provides information on the nature of agricultural activity carried out in the leased land: it clearly shows that the lease lands are put to intensive cultivation compared to owned land, in which a good part has been devoted to the raising of orchard including tree crops⁶.

The state level data from sources such as NSS must have considerably underestimated the prevalence of tenancy in the state⁷. Apart from the fact that tenancy is illegal and most of the contracts are oral, and tenants and landowners may not necessarily report their lease arrangements, the concepts and methods used in such surveys are also

not very appropriate to capture some of the location specific characteristics of tenancy in the state resulting in the under estimation of its prevalence. Coming to the concept and methods used in the 59th round, the following aspects needs to be kept in mind: (1) the data was collected for Kharif and Rabi season separately: but lease cultivation is widespread in the cultivation of annual crops (like banana) and crops that last for 2 to 3 years (like pineapple and betel vine). It is not clear, how far the NSS survey has captured such lease arrangements. (2) the leasing in of land by self help groups are widespread in the state, and such lease arrangements falls outside the preview of NSS sampling, since it concentrate only on households⁸. Because of the above limitations of the state level data, for a meaningful assessment of the tenancy situation in the state, one will have to look at the evidence available from micro level surveys and studies.

The purpose of this paper is to assemble and analyze some of the micro level data available on tenancy. More specifically, the paper will examine the prevalence of tenancy across locations and crops, characteristics of lessors and lessees, the terms of lease, the income derived from the lease cultivation, and in the light of the analysis to indicate the possible institutional arrangements for expansion of lease cultivation.

2. Description of the Studies

The micro level studies from which we have drawn data and information for this paper were carried out by different researchers with different objectives and methodology. Table 1 summarizes, a few of the characteristics of these studies. It may be interesting to highlight the nature of information and data available on tenancy from these studies. Cheriyan's study provides information on lease cultivation of betel vines, banana and tapioca. John, while examining the crop rotations in an area where traditional crops were coconut, rice, tapioca and banana, but where crop shift towards coconut and rubber as well as cultivation of vegetables

Table 1. Selected Characteristics of the Micro Level Studies

Author	Study Location	Crops Grown	Objectives	Methodology
Cherian (2004)	Contiguous rice lands spread over three Panchayats in Pathanamthitta district falling in the mid land zone of the state.	Coconut, Rice, Betelvine, Rubber, Tuber crops.	Study the prevalence of tenancy in wet lands, economic viability of lease cultivation, the linkage between lease market and the labour market.	Household survey covering 125 tenants and 80 landowners selected on the bases of random sampling in the study area during the year 1999-2000. The study also used qualitative research methods like PRA
John (2004)	Seven Panchayats in Kottayam district: two in the mid land, and five in the mid land –low land zone.	Rubber, Coconut, Rice, Tapioca, Vegetables, Banana.	To study the cost and returns to vegetable and other seasonal and annual crops cultivated in rotated and non-rotated farms, and the influence of price and non-price factors (including land tenure) on the economic viability of cultivation.	Survey of 490 vegetable growers in the study area selected on the basis of cluster sampling during the year 2002.
Latha and Madhusoodhanan (2004)	Two Panchayats in Trichur district falling in the high land-mid land zone. The data was collected from the cultivators of wet lands in two micro watersheds	Coconut, arec nut, Rubber, Banana, Rice, Vegetables	To study the process of commercialization in banana cultivation and the role of various factors including land tenure in the sustainability of cultivation.	Household survey (2002-03) of about 90 banana cultivators each selected from the two watersheds using random sampling during 2002-03.
Nair et.al. (2004)	One Panchayat in the highland district of Wayanad	Coffee, Pepper, Vegetables, Tuber crops	To study the consequences of the fall in agricultural prices, and the coping strategies of farmers and labourers to the situation.	Survey of 10 percent households in the study village using stratified random sampling with amount of land owned and main source of household income as the variables for stratification during the year 2003.
Veron (1999)	One Panchayat in midland area in Ernakulam district	Rubber, Coconut, Pineapple, Vegetables, Banana, Paddy, Tapioca and other Tuber crops	To study the relationship between commodity market and cultivation practice, with pineapple as a case study.	Qualitative research methods.

is visible gives information on tenancy for these crops. Latha and Madhusoodhanan on the other hand, while looking at the aggressive conversion from paddy to banana gives insights in the tenancy for banana cultivation. From Nair et.al's study, we have village level estimates of the prevalence of tenancy, terms of lease etc. Veron's study did not provide estimates of the prevalence of tenancy; however, it provides insights into the process of working of the lease market. Together these studies allow us to draw some useful insights on the tenancy situation.

3. Prevalence of Tenancy

The estimated prevalence rates of tenancy (% of lease holding to total) in the various study locations and for different crops are given in Table 2. It is evident from the data that the prevalence of tenancy for different crops reported by the various researchers in locations far away from each other in the state is very high. Further, for one location, for which estimates similar to large scale surveys are made, the figure is far higher than that available from macro surveys. The prevalence rates thus reported by different authors is a clear indication that it is high in all parts of the state in the seasonal and annual crops.

One of the studies (Cheriyann) has provided data to understand the development of tenant cultivation in the State since 1990's. Her data on the distribution of tenant farmers by length of tenure showed that above 62 percent of them entered into lease cultivation only in the 1990's (see Table 3). Further, those who took up lease cultivation owned only small plots of land, and they leased in only small plots of land. Those households who were tenants before 1970 owned a higher extent of land compared to those who entered into tenancy in the post-1970 period. The latter group of tenants were the beneficiaries of land reforms who came into ownership of small plots of land.

Table 2. Estimated Prevalence Rates of Lease cultivation

Author	Nature of Information on Tenancy	Percentage of Tenant Holdings to Total	Average Size of Owned Area	Average Size of Leased in Area
Cheriyān	Pertains to Betelvines, Banana and Tapioca only	52	22	13
John	Vegetables and Banana	61	Not available	Not available
Latha and Madhusoodhanan	Only for Banana	42	Information available in terms of no of plants. 46% of the plants were cultivated in leased land	
Nair et.al.	Data on number of tenants, by size of holdings. No crops specific information on tenancy	27.6	132	105

Table 3. Distribution of the Number of Tenant Holdings by Length of Tenure with Average Size of Owned and Leased-in Area

Year of Origin	No. of Tenant Holdings	Average Size of owned Area (cents)	Average Size of Leased in Area (cents)
Up to 1970	18 (14.4)	52.3	19.7
1971-1980	8 (6.4)	15.6	17.1
1981-1990	22 (17.6)	15.3	14.5
1991-2000	77 (61.6)	17.0	11.0
Total	125	21.68	13.25

Note: Figures in brackets denote to total

John has highlighted the development of lease cultivation in his study area in recent years with special reference to vegetable cultivation. In the earlier phases of development of the cultivation of this crop, there was paddy-vegetable rotation at first, which changed to one crop paddy in May-September, followed by two seasons vegetables or banana. Crop rotation has practically disappeared from many fields now, with farmers abandoning paddy and the paddy lands, which were owned by people who have no primary interest in cultivation are kept fallow as a response to the rise in cost of cultivation. Such fallowed lands are leased in by agricultural labourers and marginal farmers for cultivation of vegetables. John found in his study that tenancy is an important factor influencing crop rotation.

4. Lessors and Lessees

These studies provide only limited information on the characteristics of lessors and lessees. Cheriyan's analysis of the socio-economic situation of the lessors reveals that about 80 percent owned less than two hectares of land with better socio-economic background.

Children of a good proportion of the lessor households are employed in other countries and remittance constitutes the financial base of these households. Only very few of the lessors evince interest in farming; cultivation for them is not for livelihood but for keeping their rights over land. In addition to the migration factor, other studies have identified the scarcity and increasing cost of hiring agricultural labourers and the lack of viability of paddy cultivation as few of the other reasons for land owners leasing out their land.

These studies have brought out some important characteristics of the tenants. In the study locations, the percentage of pure tenants (who have no own land for cultivation) are seen to be very high-ranging, from 46 percent in John's study to 70 percent in Cheriyan's study. Another interesting aspect noted is the widespread practice of agricultural labourers leasing in land (see Table 4).

Table 4. Percentage of Pure Tenants and Percentage of Tenants with Agricultural Labour as the main Occupation as reported in Different Studies

Author	Percentage of Tenants Cultivation to Total Tenants	Percentage Share of Agricultural labour to Total
Cheriyan	70	35
John	46	46
Latha and Madhusoodhanan	60	48
Nair et.al	65	39

Two of the studies have provided data on the land ownership position of the tenant households. As we noted earlier Cheriyan's study showed that most of the tenants owned only small plots of land. Another study (Nair et.al) has furnished data on the distribution of leased in land according to the size distribution of operational holdings. It clearly

shows that there is a concentration of the tenants holdings in the bottom size groups, there is a concentration of leased out land in the higher size groups (see Table 5).

Table 5. Distribution of Leased in Land According to No. of Holdings and Average Area (in cents)

Size of Holding	No. of Holdings	Average Area of Leased in Land	Average Area of Owned Land
0-10	15	9	29
11-50	36	37	155
51-100	44	88	119
101-200	13	167	62
201-300	5	300	385
301 & above	10	400	160
Total	123	105	132

About 23% of the lease holdings above 1 acre accounted for about 58 percent of the leased land. Latha and Madhusoodhanan also report that in their study area, the percentage of banana plants planted in leased in land to total banana planted was found to be higher in the higher categories of banana planters, thereby indicating that the practice of lease cultivation has become more intensive in the higher size categories of planters. Veron reports similar pattern for pineapple cultivation. This involvement of the relatively better off farmers along with the poor subsistence farmers raises the question of subsistence versus commercial leasing of land for cultivation; we will return to this question in a subsequent section.

5. Terms of Lease

We have put together the terms of lease⁹ available from the different studies (see Table 6). The important points emerging from this

Table 6. Terms of Lease

Author	Crop	Rent	Mode of payment	Frequency of Payment	Duration	Remark
Cheriyar	Betel Vine	Rs 11000 /acre	Cash	At the time of leasing 50% at planting 80% at harvest At planting	One Year	Sanction to dig irrigation pond - -
	Banana	Rs 9000 /acre	Cash		One Year	
	Tapioca	Rs 3500 /acre	Cash		One Year	
John	Banana	Per Plant(Rs 12)	Cash	50% at planting 80% at harvest	One Year	Rent varied across Panchayats depending on the quality of soil The leasing in takes place after a paddy crop Three season vegetable; allowed to dig ponds, but not allowed to install pump sets
	Vegetable (crop rotation)	Rs 4000 to Rs 6000 per acre	Cash	At leasing	One season	
	vegetable (without crop rotation)	Rs16000 to Rs 20000 per acre	Cash	At leasing	One Year	
Latha and Madhusoodhanan	Banana	Rs 12 to Rs 15 /acre	Cash	50% at planting 50% at harvest	One Year	
Nair et.al Fixed rent	Banana	Rs 15/ pit	Cash	50% at planting 50% at harvest	One Year	
	Ginger	Rs 6000/ acre	Cash	At planting	One Year	
	Tapioca	Rs 3000 /acre	Cash	At planting	One Year	
Crop share	Banana	50% of the produce	Kind	At Harvest	One Year	Land Owner provides fertilizer and seed
	Ginger				One Year	
	Tapioca				One Year	

data can be summarized as follows: (1) There is considerable spatial variation in the rent levels, presumably due to land quality variations and the demand for land on lease (2) Fixed rent and payment in cash are the dominant practices, except in one study (Nair et.al) that reports both fixed rent and crop share. (3) Rent is fixed per plant and per acre, the payment is effected at the time of planting /leasing/ at the time of harvest on an equal basis. The duration is usually one crop year.

These studies have also provided some insights into the changes in the practices in land leasing. According to John's study, in the 1980's and early 1990's rent was fixed on an area basis, which changed in recent years to fixation per mound or per plant. So long as the payment of rent is prompt, the same tenant is permitted to cultivate the land. They are allowed to dig ponds for irrigation, but not to make any permanent constructions like motor sheds. The tenants are expected to clear the mounds/pits before the time for land preparation for the next crop. Latha and Madhusoodhanan have reported considerable increase in rent for five year period, the rent per plant increased from Rs 6 to Rs 12 in one watershed and Rs 10 to Rs 15 in another watershed. In her study area, apart from soil quality, proximity to assured water supply is an important factor that contributed to the differences in the rent levels. Unlike other studies, Nair et.al's study reveals crop sharing as the dominant form of lease arrangement (27 % of the sample lessees operated with fixed terms, 48 % with crop share, and the rest with no clear terms). This may be because of the high rise in the cultivation of crops like ginger and banana and the need to share the risk between the land owners and tenants.

6. Income from Lease Cultivation

Estimates of the income from tenant farming, available from two of the studies show that it is advantageous to both lessees and lessors. Cheriyan's estimates of the cost of cultivation and income from the two crops- betel vine, banana- reveal (see Table 7) that the income accrued from tenant cultivation is very attractive, especially if one takes into

account the cost of imputed family labour. According to these estimates, the income from betel vine cultivation is more than four-fold compared to that from banana and can be planned in such a way as to effectively use idle family labour during the lean months when demand for hired labour is low, although this cultivation requires capital and constant supply of family labour.

Table 7. Income from Lease Cultivation Percent in Betel Vine and Banana Cultivation in three Contiguous Paddy Fields

Sl No	Items Percent (Rs)	Betel vine	Banana
1.	Gross income	1934	523
2.	Cost A (Paid out cost)	577	125
3.	Cost B(Paid A+rent paid)	692	219
4.	Profit of the tenant operator	1242	304
5.	Return for imputed family labour	812	169
6.	Pure Profit	430	145

Source: Omana Cheriyan (2004)

John's estimates (see Table 8) clearly show that the cultivation of paddy is losing proposition, but that the rotation of paddy and vegetables could make the cultivation of paddy economically more viable than income from banana and vegetable cultivation high. He has derived the net income from the cultivation of paddy, banana and three types of vegetables grown in his study area by estimating the gross income and deducting from it, the cost of inputs (including the hired and imputed value of family labour and rent for land). The results clearly indicate that the income from lease cultivation of banana and vegetables are very attractive. It also confirms the prevailing view that the cultivation of paddy is a losing proposition. Both John and Cheriyan have highlighted that the income from lease cultivation has helped small tenants to acquire small plots of land and to move up in the socio-economic ladder as owner

Table 8. Income from Tenant Cultivation (per 10 cents) for Paddy, Banana and Vegetables in Kaduthuruthy Block Panchayat

Sl. No.	Name of Crops	1	2	3	4	5	6	7
1.	Paddy(in Rotated Farms)	20 (2.1)	75 (7.6)	15 (1.6)	15 (1.70)	18 (2.0)	45 (5.0)	52 (5.7)
2.	Paddy in non-rotated farms	-122(-15.0)	-105(-12.4)	-170 (-21.7)	-140(-17.9)	-150(-19.2)	-177(-23.4)	-152(-20.3)
3.	Banana	3580(55.9)	-	3375 (54.0)	3765 (59)	3770 (57)	3500 (56)	3740 (57.5)
4.	Bittergourd	3015 (50.0)	-	2970 (49.0)	3825 (56.9)	3345 (52.2)	3560 (54.9)	3405 (53.8)
5.	Cowpea	1655 (35.8)	1870 (40)	1450 (31.7)	2445 (46)	2045 (40)	2120 (42)	2005 (40.7)
6.	Snakegourd	305 (9.0)	470 (13.8)	110 (3.4)	905(23.8)	545 (15.0)	545 (15.7)	565 (16.2)

Source: K.K.John

Note: Figures in brackets indicate profit as a percentage of gross income.

cultivators and accumulate surplus that is diverted for educating their children. The recent spurt in lease cultivation by self-help groups is also a reflection of the reasonable returns from this activity and the opportunity it offers to the group members in utilizing their idle labour.

7. Tenancy in Commercial Cultivation

Banana and ginger are two other crops in which commercial lease cultivation is found to exist on a significant scale. In both these crops, in years when prices are on the upswing, the lessees could realize significant profits. However, the cultivation of these requires access to capital for investment and the ability to take risks. Both these commodities are susceptible to wide fluctuations in prices and loss due to natural calamities, and incidence of pests and diseases. The entry of agricultural labourers or marginal and small farmers in the lease cultivation of such commercial crops that require access to capital for initial investment and ability to take risks caused by the fluctuations in market prices has been limited. The prevailing crop insurance system does not cover crop loss in lease cultivation. This further limits the entry of poor agricultural labourers and small holders into such cultivation and commercial cultivation of such crops has been restricted to those who can afford relatively larger investments and are able to take risks. The studies by Nair et.al and Latha and Madhusoodhanan brought this out clearly. In their study areas about 30% of the tenants were having non-agricultural occupations as their main source of income.

Agencies like the Kerala Horticultural Development Programme (KHDP) promoted by the state have also been instrumental in altering this situation by making loans available under certain schemes for such commercial cultivation. According to the data collected by Latha and Madhusoodhanan, 61% of the banana farmers in one watershed, and 44% of farmers in the other watershed studied have availed KHDP loan for the cultivation of banana. Under the KHDP scheme, loans are available without collateral of land or other assets to farmers who are organized

into self-help groups, provided the group on the advice of the KHDP field officer recommends the loan as per norms fixed for the purpose. A landless agricultural labourer can thus, avail up to Rs 25000/- as loan from the nationalised bank for raising banana if he has minimum of 5 cents of land and grows a minimum of 300 banana plants. In the event of failure to repay the loan before the next planting season, the group has the liability to make the repayment. John also has reported similar facilities of KHDP utilized by the vegetable farmers. Likewise, in Cheriyan's study area, agricultural labourers and small farmers are able to avail loans for the cultivation of betel vine from nationalised banks through the NABARD scheme meant to promote this cultivation. Under a similar scheme, KHDP provided loans also for the promotion of pineapple cultivation.

Veron's documentation of different aspects of the commercial cultivation of pineapple (1999) shows how this commercial crop has emerged as an important part of agriculture in the 1990s and its nature and characteristics that have contributed to this. Three types of cultivators are involved in pineapple cultivation: owner cultivators, tenant cultivators, who have taken this up as a commercial enterprise, and small scale lease cultivators, who are either agricultural labourers, or marginal farmers who have taken this up as part of their livelihood strategy. A host of issues like crop rotation, inter-cropping, labour requirements and its characteristics, skills needed, nature of land tenure, market for the crop, and security of land lease due to the nature of inter-cropping, are all highly significant influences in the incidence and nature of tenancy in pineapple cultivation, other than one's ability to take risks and make large investments. This explains why pineapple, a crop requiring year-round availability of labour and is more labour-intensive than paddy, has made a place for it in Kerala's agriculture, while paddy is losing out due mainly to security of agricultural labourers. The fact that there is no peak demand for labour in pineapple cultivation and that it ensures continuous employment throughout the year have ensured that unlike in

the case of paddy, rural labourers are available for raising this crop. The role of leaseholders in this cultivation has been significant as KHDP estimates have shown: about 30 per cent of the pineapple production in Veron's study area -Vazhakulam- was by leaseholders. The following excerpt from his study is very revealing of the situation in pineapple cultivation:

“These people (leaseholders) are often middle class cultivators such as salaried employers, with little land of their own. Leasing has evolved particularly for this crop because pineapple cultivation is very profitable and therefore enables lessors to demand a relatively high rent and to achieve adequate returns from the land. (The annual rent for land on rubber plantation varies between Rs 2000 and Rs 6000 per acre: for paddy land it may be up to Rs 8000/- due to the higher productivity there). Moreover lessors of rubber plantations where leasing for pineapple cultivation is most widespread, do not have fear of losing land in legal battles with former lease holders, who may refer to the invalidity of tenancies under Kerala land reform act of 1970. In any case lease arrangements unlike for other crops are naturally term-limited for pineapple intercropped on rubber plantations; intercropping must be discontinued for ecological reasons after four years, at which time, the rubber trees are fully grown and serve as an unmistakable mark of land ownership” (Veron 1999:137).

With the rapid expansion of the market for pineapple in other regions of the country, the production of this crop in the state expanded from Vazhakulam to the adjoining areas at first and subsequently to the rest of the state. Since the landowners and labourers in other regions did not have the necessary skill and knowledge for the cultivation of this

crop, its initial spread beyond the study areas owes itself to lease cultivation. However, with the spread of knowledge and skills in raising this crop, owner cultivators also started cultivating this as an important crop. Despite this, lease cultivation remains widespread in the cultivation of this crop since the raising of the crop requires continuous monitoring and supervision of various cultivation operations that makes it difficult for part-time farmers to undertake this cultivation.

In the lease market that has thus taken root in the state and become widespread albeit subtly, rules and regulations are very often flouted. Some of the crops under commercial cultivation require heavy irrigation during summer months and this contributes to water scarcity and conflicts between different claimants for water. In the area studied by Latha and Madhusoodhanan, for instance, banana cultivation on converted paddy lands has been very indiscriminate. They write:

“for the past few years, about 4.8 ha of three crop paddy land in Pulathuprambu area is being leased out by a single absentee landlord to at least 18 farmers who plant altogether 14270 banana at an exorbitant lease rate of 28-32 per pit, inclusive of water cess. He has installed a private lift irrigation scheme in Manali River and operates a private water market. Another aspect is that many of the tenants are his erstwhile agricultural labourers. Moreover, nobody even raises the question whether he pays water cess to the government for the water drawn from the river”.

The studies by John and Cheriyan also refer to unregulated water extraction taking place as part of the terms of lease. It is difficult to decide from the studies cited, how widespread are the private water firms that Latha and Madhusoodhanan refer to and how intense is the water extraction for irrigating these crops but available information certainly suggests the urgency of investigation on this issue and legislation to control and monitor water use, especially in the context of the recent

severe droughts that several parts of Kerala have experienced. The traditional cultivation practices are also replaced by practices involving intensive use of fertilizer and pesticides with adverse consequences on the health of the soil as also of human beings. John too has highlighted the unhealthy cultivation practices including heavy use of fertilizer for increasing yield levels in commercial cultivation. Although these cultivation practices increase crop yields and incomes, they are highly soil exhausting and are likely to adversely affect the sustainability of agriculture. In the context of pineapple cultivation Veron has made a similar observation.

Apart from the indiscriminate cultivation practices that are potentially deleterious to the environment, there are socio-economic consequences like the banana farmers losing control over seed material and having to import seeds from places like Tamil Nadu to meet the large scale demands during the planting season, women losing jobs and income increasingly as banana cultivation has no place for them, and the banana farmers getting into a perpetual process of indebtedness, unable to cope with the price fluctuations.

8. Summary and Conclusions

Analysis of the micro data assembled from a few studies conducted in different parts of the state by various researchers has revealed the following findings: (1) The prevalence of tenancy reported in these studies are much higher than the situation revealed by large scale surveys; (2) Tenancy arrangements are confined to seasonal and annual crops like banana, vegetables, pineapple, ginger etc. It is found largely in the paddy lands, and to a limited extent in garden lands; (3) while agricultural labourers and sub-marginal farmers are numerically dominant in tenant farming, there exists also the participation of larger land holders and persons with non-agricultural activity who take up this as a commercial proposition; (4) The terms of leasing are characterised by fixed rent, (except in one location where both fixed rent and crop share exists) paid

in one or two installments with the normal duration of lease for one crop year. There is some amount of variation in the rent rates across locations reflecting the differences in land productivity and the demand for land for lease cultivation; (5) Though the prevailing rent rates for cash crop cultivation are high, the tenants have realized reasonable returns from lease cultivation.

In the light of these findings, it is important to examine the prospects for the expansion of lease farming in the state. In a situation in which the fallowing and underutilization of land have become widespread, and the income from agriculture¹⁰ has been on the decline in recent years, expansion of lease farming would definitely result in improving the performance of agriculture, and generation of income and employment opportunities for the poor. The scope of the activity has been widened with the large-scale entry of self- help groups to take up lease farming. In this context it is the responsibility of the state to formulate an appropriate policy framework¹¹ in promoting small-scale lease farming (and not large scale contract farming). Such a policy framework would ensure not only the fixity of tenure, and the lessors' right over land, but also spell out local level mechanisms to organize contracts between the lessors and lessees, making available the relevant information on the availability of land for lease, its quality, etc to potential tenants. Panchayats, already involved in supporting the self-help groups to take up lease cultivation, could play a leading role in this process; they could expand the scope of lease farming by creating a land bank that would function as an intermediary between those who want to lease out their lands and those who want to lease in. Such land banks could also work out an insurance scheme for leaseholders to get compensation for crop failure due to natural calamities or fall in incomes due to sharp fall in prices.

K. N. Nair is Fellow & Director at the the Centre for Development Studies, Thiruvananthapuram. His research interests include Agriculture and Rural Development, Decentraliazation and Local Level Development, Science and Society, Economic Policy and Planning and Institutional Economic analysis.

Email: knn@cds.ac.in

Vineetha Menon worked as Visiting Fellow in the Kerala Research Programme on Local Level Development at the Centre for Development Studies, Thiruvananthapuram. She is currently Reader in the Department of Anthropology in Kannur University. Her areas of interest are Medical Anthropology, Developmental Anthropology and Marginalized Communities.

Email: menon.vineetha@gmail.com
vineetha@cds.ac.in

Notes

- 1 A hutment dweller is a landless person who occupies the hut in the land belonging to a landowner. The act enables the dweller to purchase the land surrounding to his hut up to 3 cents in corporation, 5 cents in minor municipalities, and 10 cents in panchayat areas. The compensation to which the landowner is entitled, when purchase of the dwellers is allowed is 25 percent of the market value. Of this 25 percent, the dwellers is envisaged to contribute only half the share in twelve annual installments and balance is paid from the hutment dwellers benefit fund constituted by the government.
- 2 The most significant aspect of the 1970 Act was to abolish landlordism and tenancy. Since 1970, 37 percent of the net sown area has been transferred to 1.3 million former tenants. Most of these are small holders (89 percent are with holdings below 2.5 acres and 67 percent, with holdings below 1.25 acre). However relatively big cultivators with more than five acre of land, who formerly had belonged to the privileged class of Kanamdars have received about 64 percent of the transferred area. (Franke 1993; Hering 1983) Most of the land was not transferred to active farmers. Many of the new landowners were supervising tenants who employed labourers and sub-leased land. The Kerala Land Reforms Survey of 1968 revealed that in small holdings (2.5 to 5 acres), 76 percent of the labour was hired and only 24 percent of the agricultural work was carried out by family labour. Even in marginal holdings below one acre, 47 percent of the labour was hired. It appears from this that a major portion of the land has not been passed to the actual tillers of the soil, the agricultural labourers.
- 3 Although the comprehensive land reforms act was formulated by the EMS ministry in 1956, it could not complete the legislation since the government was dismissed by the Centre in 1959. The next government (Congress-led) diluted the initial proposals and came out with an Act in 1963. This was subjected to a series of modifications in the subsequent years and the final version, the Kerala Land Reforms Act (amendment) 1969 came into effect from 1 January 1970. The Act envisages (1) vesting in government all the rights, title and interest of the land owners and intermediaries over the holding held by the cultivating tenants; (2) the fixity of occupation to the *kudikidappukars* and the conferment of the right to purchase at concessional rates, the small extent of land in and around their hutment; and (3) ceiling of land holdings and take over of the distribution of surplus lands. For a discussion of the evolution of land tenure in Kerala, see T C Varghese (1970) and for an assessment of land reforms in the state, see Raj and Tharakan (1983).

- 4 For a review of these arguments see Nair and Menon (2004)
- 5 The NSS 59th round on some aspects of farming in India (2003) contains only limited information on land holding and the available information is not comparable with that available from the land holding surveys. The focus in the 59th round was on farmer households where a farmer was defined as a person who operated some land (owned or taken on lease) and was engaged in agricultural activities on that land during the last 365 days. See for details, Government of India (2005).
- 6 The relevant data from the 59th Round on the percentage distribution of land possessed by type of agricultural activity for different categories of land possessed are given below:

Type of Cultivation	Owned and Possessed Land	Leased Land	Otherwise Possessed	Total
Season (Kharif)				
Cultivation	23.71	77.26	18.25	26.49
Orchard	75.22	22.44	80.84	72.47
Others	1.07	0.30	1.0	1.04
Estimated No. of Households (00)	21483	1455	361	21922
Season (Rabi)				
Cultivation	22.6	73.25	15.16	24.81
Orchard	76.37	25.36	83.80	74.81
Others	1.02	0.70	1.04	0.38
Estimated No. of Households (00)	21503	1176	218	21824

Source: GOI (2005)

- 7 The Agricultural Census conducted by the state government and the surveys on land holdings conducted by the National Sample Survey Organization are the two important sources of data on size distribution of ownership and operational holdings. Of this, the former source hardly provides data on tenancy, where as the latter provides estimates of the incidence of tenancy and the terms and conditions of lease. Data on terms of lease clearly points toward the existence of concealed tenancy in the state. In Kerala about 40 percent of the land leased-in was from relatives without specific terms. For a discussion of the incidence of tenancy across states in India see C.S.Murty (2004). Considerable under reporting of tenancy by large scale surveys were also reported in micro

level studies conducted in other parts of India. See for example, Laxminarayan H. and Tyagi SS(1977) and S.K Sanyal (1972).

- 8 According to the data available from the State Kudumbashree Mission, about 3 lakh households belonging to 31841 SHGs spread over 862 Panchayats were involved in this activity in 2004. The total land leased in by them during the year was about 46 thousand acres.
- 9 The terms of lease by SHGs are the same as those applicable to individual lessees. After meeting the paid out cost (including rent, cost of purchased inputs including hired labour). The remaining income is shared by the group members on an equal basis. The Kudumbashree Programme and the *Grama* Panchayats have been supporting the SHGs with credit and extension services to take up lease farming.
- 10 For discussion of the recent trends in agricultural incomes in the state see Jeromi (2005)
- 11 We are not proposing any reform in the tenancy contracts, through measures of land reform, as discussed in recent literature (see the Special issue of the Journal of Agrarian Change on Land Reforms in Developing Countries, Jan-April (2004). Given the nature of socio-economic transformation taking place in the state, and the increasing importance given to the neo-liberal policies, the old arguments for radical reforms of the land market in unlikely to materialize.

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