Structure and dynamics of lease land farming in Kerala

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Abstract
Lease land farming is legally prohibited in most parts of India, including Kerala. Even then the system is widely practiced, in an informal way. This study analyses the present structure and dynamics of lease land farming, focussing on the lease farming in pineapple. The study was conducted in the Muvattupuzha Block Panchayath of Ernakulam district, a major centre for pineapple farming, where pineapple is cultivated as an intercrop in rubber plantations. The average leasing period is 3.5 years and about 90 per cent of the lessors insist on written agreement, without any formal registration. The common practice is to pay the full rent as cash in advance, in the beginning of the crop year. Nearly 35 per cent make an agreement to plant and manage the main crop (rubber) along with a cash payment. Hardly 15 per cent of the respondents, pay the cash rent and also manage the rubber which is already planted. On an average, the lease rents for different situations ranged from Rs.67,031 to Rs.88,888 per hectare per year which adds to the income of land owners, while providing a living to the lessees. This differential lease rent observed in the region could be accorded to various geographical and ecological factors such as topography of land, market availability, irrigation facility and soil productivity. Legalising lease farming system can supplement the income of lessors and lessees, while adding to the agricultural production

Key words: Lease rent, Lease market, Intercrop pineapple in rubber, Lease agreement

Introduction

Land is considered as the most valuable and highly dependable fixed asset in all economies and more so in agrarian and developing economies like India where it holds a symbol of both status and sustenance. In such economies the agricultural production was done under lease arrangements with resource poor communities who are willing to make use of their labour while the land owner does the associated capital investments. However, there has been criticism on the social and economic implications of this system, as the land owners were exploiting the rights of the tenants while making these landless labourers work for them. Moreover, the tenant-landlord relationship was feudalistic in nature. Hence, in order to safeguard the rights of tenants the system of lease land farming is either legally banned or prohibited in many parts of India (Haque, 2012). For instance, the Kerala Land Reforms Act (1963) has rendered tenancy legally invalid in the state and prohibited future tenancy as well.

But the changes in social structure has resulted in the emergence of land owners who consider land only as an asset and not as a productive base i.e. they are a group who are either too busy to farm (as their main source of income is from non-farm activities) or too poor to farm (as they do not have the capital to invest). This further ushered a way for the system of tenancy in which a landowner who does not cultivate land, leases out for cultivation against a payment of rent. Amidst the ongoing controversy over the structure and characteristics of the new land lords (Nair and Menon, 2006; Vijay, 2012; Reddy and Shaw, 2013) there is agreement on the fact that the lease farming continues in India either as share cropping or as fixed rent tenancy, even in states where it is banned.

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The land holding surveys conducted by the National Sample Survey Organisation gives an insight into the extent of land lease market. Accordingly, 11.5 per cent of rural households in India leased in land and 6.5 per cent of the total operated area was under lease farming (59th round NSSO, 2006). However, in Kerala, out of the total 2.1 million farmer households, 6.6 percent leased in land during the Kharif season and 5.35 per cent during the Rabi season (59th round NSSO, 2003). Though the state has seen a fall in percentage of the tenant holdings to 5.1 per cent, the share of operational area under lease farming has increased to 4 per cent (NSSO, 2003). The area put under farming (collective farming) by the state sponsored SHG (Kudumbashree) is reported as 27270 hectares, which is primarily under lease farming arrangements. Due to the legal restrictions, exact information on extent of lease farming situation in Kerala and its details are not available. This paper analyses the structure of lease land farming system in intercropped pineapple (Rubber main crop) in a prominent pineapple area in the state of Kerala. Here, according to informal estimates nearly 80 per cent of the area under the crop is considered as under lease farming.

Materials and Methods

Pineapple is cultivated in Kerala in 8002 hectares of which Ernakulam district alone accounts for 62.4 per cent. Among the seven Block Panchayaths (BP) where pineapple farming is a commercial activity, Muvattupuzha BP (the study area) alone accounts for 30 per cent (1549 ha). Various geographical and climatic conditions make the region congenial for the production of about 16354 tonnes of pineapple. The Vazhakulam pineapple which is grown in this area has got Geographical Indication (GI) registration.

The study adopted a multistage Random Sampling Method for sample selection with the Grama Panchayaths (GP) (three out of eight) as the first stage and farm households as the second stage. Three specific groups of respondents were pre-determined viz., own farm cultivators, lessors and lessees. For the preparation of sampling frame, out of the eight Gram Panchayaths in Muvattupuzha Block Panchayath, three were randomly selected and from the respective Krishi Bhavans, the list of pineapple farmers were collected. The data maintained at Vazhakulam Pineapple Farmers Association was also collected for the same. A random sample of 40 respondents belonging to each of these groups was then identified. Thus the total sample size for the study was 40*3 = 120.

The study is based on both primary and secondary data. Primary data was collected by personal interview method using pretested structured interview schedule as well as personal observations. The primary data included the details of socio-economic information of the farmers, holding size, lease land characteristics and lease conditions. Based on the area under pineapple cultivation (leased in and owned), the three categories of respondents were post stratified into Marginal Farmers (MF), Small Farmers (SF) and Large Farmers (LF) and the range was fixed based on the sample distribution. Thus in this analysis, Marginal Farmer is considered as one who cultivates less than 0.8 hectares of pineapple, Small Farmer is who cultivate 0.8 -1.6 hectares of pineapple and Large farmer is the one who cultivate more than 1.6 hectares.

Results and Discussions

Socio-economic profile of the respondents

Generally, respondents of the age group 50-60 years were the major group among lessors and owners. But lessees who are the active participants in the lease land farming system were of younger age group (40-50 years). Most of the lessors are highly educated, 45 per cent of them are graduates. Majority of the lessees, on the contrary, are less educated. Most of them (43%) have a higher secondary education level. It is very interesting to note that higher level of income (4-6 lakhs) is

enjoyed by 17.5 per cent of lessees compared to only 10 per cent of lessors. The average income earned by the three categories is Rs.2-4 lakhs per annum. As expected, most of the lessors were salaried class (either in private or government services) or self employed whereas for 63 per cent of the lessees, agriculture was the major source of income.

Systems of lease farming

Pineapple farming in the study area is mainly undertaken as an intercrop in rubber plantations. As such there exist two major situations of lease farming.

1. Pineapple as an intercrop in areas which are proposed to be developed as rubber plantation for the first time (Situation I).
2. Pineapple cultivation in slaughter tapped plantations. It includes already planted areas as well as areas where planting is to be done (Situation II). Under this system, there are three specific systems of lease rent fixing.
   a. System I- where the rent payment is entirely in the form of cash
   b. System II- where the lessee plant and manage the main crop rubber, along with a cash payment
   c. System III- where the lessee has to manage the already planted rubber crop along with a cash payment

As such, the lease rent involves two components, the payment to be effected as cash and the investment towards the planting and/or management of rubber plantations. In our study 50 per cent of the respondent lessees were opting for the payment of rent as cash alone, and the rest 50 per cent opted for a combination of cash and planting and/or management of main crop. Based on the system the share of each component to the total rent varies. As such, this practice of cash payment and management is not seen reported elsewhere. Fixed cash rents are the common form of tenancy in situations of high uncertainty and where the crops are more profitable. When fixed rent and payment in cash are reported as the dominant practice in Kerala (Nair and Menon, 2006), the practice of leasing land on both cash and crop sharing basis is common in Punjab (Awasthi, 2005). In conformity with the observation of Nair and Menon (2006), produce sharing was not reported as part of rent agreement in pineapple farming. There are several reports of crop share lease where the produce is shared, as part of rent agreement (Nair et al., 2004; Bezbaruah and Goswami, 2013).

The economic life of pineapple is usually 3.5 years and in majority cases (77.5%) the lease period is 3.5 years. 7.5 per cent cases leased for only 3 years and 15 per cent extended the lease period for full 4 years (Table 1). However, the lease rent payment was for only three years. The agreement includes the clearing of the land by the lessee. The crop residues are to be removed and the land is to be made clean and ideal for the growth of rubber plants.

Generally the cash payment is as advance annual payments. There was, however, one single case in

Table 1. Lease conditions existing in the study area

	Particulars	Lessee (no.)	Lessor (no.)	Total (no.)
	3 years	3 (7.5)	3(7.5)	6(7.5)
Duration	3.5 years	32 (80)	30 (75)	62(77.5)
	4 years	5 (12.5)	7 (17.5)	12(15)
Mode of Payment	Annual paymentFull payment in advance	1(2.5)	40(100)	80(100)
Lease agreement	Verbal	4(10)	9(22.5)	13(16.25)
	Written non-registered	36(90)	31(77.5)	67(83.75)

(Figures in the parentheses represents percentage to the total)

our sample, where the full payment was made as advance which is not common. Most of the tenancy agreements are written as per the rules of civil contracts, and are not formally registered. 90 per cent of the lessees and 77.5 per cent of the lessors follow this pattern. Oral agreements are common when the lessors/lessees are relatives, friends or trust worthy persons. Sangwan (2000) in Haryana and Swain (1999) from Orissa also reports the same pattern.

The lease rent amount under different situations differ on account of the changes in management aspects, and the land characteristics. For instance, in situation I, where the land is proposed to be planted for the first time, the lessee has to undertake planting and management of the main crop (rubber) along with the pineapple. The rent in such instances includes the direct cash payment and the investment towards planting and management expenses. Thus, during the lease period the total lease amount was estimated as Rs.242498 which varies across farm sizes. The total rent was 27 per cent higher in LF group compared to small and marginal farmers. On an average, 42 per cent of the expenses towards rent was effected in first year itself (Rs. 93750), and the rest of the amount was equally distributed in the subsequent years. The average share of the cash component to the total rent was 60 per cent, which varied from 56 per cent in the first year to 63 per cent in the third year. Across the farm size, it was the highest among marginal farmers (66%). For small and large farmers the cash component amounted to 59 and 56 per cent respectively. This variation is due to the neighborhood characteristics of land and its location. The small and fragmented land areas are seen located near to Vazhakulam market whereas the new rubber plantations in the sample distribution are located in remote areas which explain the difference in cash rent (Table 2).

In situation II, there are three different systems. Under system I, the owner undertakes the planting and management of the main crop and the lessee is permitted to cultivate pineapple as intercrop and confine to its management alone. Here, the entire rent payment is effected as cash which averages to Rs. 67031/ha/yr, thus making the total rent amount at Rs.2,01,094 during the lease period of three years. The average rent paid by LF were found to be 47 per cent higher than that paid by SF. The average size of operational area in LF group was 1.25 hectares, which usually is distributed in a few fragments. Under such circumstances, the shade from neighbour's plots is minimized and thus there can be better utilization of land and more number of suckers can be planted. Hence the rent is fixed

Table 2. Lease rent rates for pineapple cultivation in new rubber plantations (Situation I) (Rs/ha/yr)

		MF	SF	LF	Mean
Ist Year	Cash Rent	56,250 (60.00)	41,250 (52.32)	48,333 (54.71)	48,611 (55.91)
	Management Cost	37,500 (40.00)	37,500 (47.61)	40,000 (45.28)	38,333 (44.08)
	Total	93750	78750	88333	86944
IInd Year	Cash Rent	56,250 (69.23)	41,250 (62.26)	48,333(56.31)	48,611(62.5)
	Management Cost	25,000 (30.70)	25,000 (37.73)	37,500 (43.68)	29,166(37.49)
	Total	81250	66250	85833	77777
IIIrd Year	Cash Rent	56,250 (69.23)	41,250 (62.26)	48,333 (56.31)	48,611 (62.5)
	Management Cost	25,000 (30.70)	25,000(37.73)	37,500 (43.68)	29,166 (37.49)
	Total	81250	66250	85833	77777
OverallLease rent	Cash Rent	1,68,750 (65.82)	1,23,750(58.57)	1,44,999 (55.76)	145833 (60.1)
	Management Cost	87,500 (34.14)	87,500(41.42)	1,15,000 (44.23)	96,665 (39.9)
	Total	2,56,250	2,11,250	2,59,999	2,42,498

(Figures in parentheses represents share of cash and management cost to the total)

Table 3. Lease rent rates for pineapple cultivation in cash alone system I (Rs/ ha/ yr)

	SF	LF	Average
Ist Year	54375 (33)	79688 (33)	67031 (33)
IInd Year	54375 (33)	79688 (33)	67031 (33)
IIIrd Year	54375 (33)	79688 (33)	67031 (33)
Total	163125	239064	2,01,094

at a higher amount for such large stretched lands compared to small and marginal land. In the sample distribution 32 percent of large farmers are following this system of lease cultivation (Table 3).

The system II is of slaughter tapped rubber plantations ready for replanting. This land is leased out on the condition of new planting of rubber and the management of seedlings during the lease period. The lessee, has to plant and manage the rubber plantation, while he cultivates pineapple as intercrop. Usually the lessor makes stringent condition on the management aspects of rubber like choice of planting material, plant density and other input use. The total rent paid under this situation was estimated at Rs.2,41,954 of which 53.84 per cent is as cash and the rest as investment towards planting and management of rubber (Table 4). Nearly 35 per cent of the rent amount is to be invested in the first year and the rest is equally distributed during second and third years. There is considerable difference between the three size group of farmers, in their amount of rent. On comparing the total rent paid by three groups, SF are paying a higher amount by about 12 per cent more with respect to the average rent. However, it is to be noticed that the contribution of cash component to the total rent was more in case of LF (63%), compared to MF (51%) and SF (48%). Hence, it can be deduced that the higher rent for SF is largely due to their higher investment in planting and management of rubber. According to the recommendation of Rubber Board, the planting density for proper growth and development of rubber is 445-500 plants per hectare (intercrop). Often the lessors specify this density in their agreement and the lessees are bound to follow. In such situation, the investment incurred is estimated as Rs.50,000 per hectare. But the Large Farmers taking the advantage of remote location and terrain of land, reduce the planting density to an average 375 rubber plants per hectare. This leads to a reduction in the cost by 33 per cent per hectare. Due to the proximity of location, often the small fragments of land are easy to supervise and monitor, and hence, SF holdings are frequently monitored, while it is not the case with LF.

As of system III, the owner undertakes rubber

Table 4. Lease rent rates for pineapple cultivation in system II (Rs/ ha/ yr)

		MF	SF	LF	Average
Ist year	Cash Rent	37500(50)	43750(46.66)	49038 (56.66)	43846 (51.27)
	Management Cost	37500(50)	50000(53.33)	37500 (43.33)	41666 (48.72)
	Total	75000	93750	86538	85512
IInd year	Cash Rent	37500(51.72)	43750 (49.29)	49038 (66.23)	43846 (52.29)
	Management Cost	35000(48.27)	45000 (50.70)	25000 (33.76)	40000 (47.70)
	Total	72500	88750	74038	83846
IIIrd Year	Cash Rent	37500(51.72)	43750(49.29)	49038 (66.23)	43846 (52.29)
	Management Cost	35000(48.27)	45000 (50.70)	25000 (33.76)	40000 (47.70)
	Total	72500	88750	74038	83846
Overall Lease Rent	Cash Rent	112500(51.13)	131250(48.38)	147114 (62.70)	1,30,288(53.84)
	Management Cost	107500(48.86)	140000(51.61)	87500 (37.29)	1,11,666(46.15)
	Total	2,20,000	2,71,250	2,34,614	2,41,954

Figures in parentheses represents share of cash and management cost to the total

Table 5. Lease rent rates for pineapple cultivation in system III (Rs/ ha/ yr)

		MF	SF	LF	Average
Ist Year	Cash Rent	54166 (68.42)	50000 (66.66)	87500 (77.77)	63888 (71.87)
	Management Cost	25000 (31.57)	25000 (33.33)	25000 (22.22)	25000 (28.12)
	Total	79166	75000	112500	88888
IInd Year	Cash Rent	54166 (73.03)	50000 (71.42)	87500 (81.39)	63888 (76.15)
	Management Cost	20000 (26.96)	20000 (28.57)	20000 (18.60)	20000 (23.84)
	Total	74166	70000	107500	83888
IIIrd Year	Cash Rent	54166 (73.03)	50000 (71.42)	87500 (81.39)	63888 (76.15)
	Management Cost	20000 (26.96)	20000 (28.57)	20000 (18.60)	20000 (23.84)
	Total	74166	70000	107500	83888
Overall Lease Rent	Cash Rent	162498 (71.42)	150000 (69.76)	262500 (80.15)	1,91,666 (74.67)
	Management Cost	65000 (28.57)	65000 (30.23)	65000 (19.84)	65000 (25.32)
	Total	2,27,498	2,15,000	3,27,500	2,56,666

Figures in parentheses represents share of cash and management cost to the total

planting and then lease out for intercrop pineapple on the condition of management of rubber during lease period, and a cash rent. The average rent in this case is Rs.2,56,666 per hectare. About 25 per cent was effected as cash in the first year and in the subsequent years the payment is equally distributed (Table 5). Among the farm size groups, the rent paid by the LF are found to be the highest, which amounts to Rs.3,27,500 and is estimated as 28 per cent more with respect to the average rent. The cash component to the total rent is also more for LF (80%), whereas for both MF and SF the share is found to be on par (70%). Pineapple cultivation is highly profitable when it is taken up in large area, where the economies of scale operate. The high demand for such large farm lands escalates the unit rent rate. The nearness to market and availability of other facilities also add to the rental value.

On comparing the three systems of rent payment, it can be seen that there is variation in the rent rates. When the payment is effected as advance full cash payment (system I), the average rent per crop cycle is Rs.2,01,094, which is less than the other two systems. On an annual basis it amounts to Rs.67031 /ha/yr, while in the other two systems the cash component is comparatively less.

In system II, where rent payment involves cash in addition to planting and management cost, the contribution of cash component to total rent is 52 per cent, whereas in system III, the cash component is about 75 per cent of the total rent. The cash payment is fixed while the planting and management cost can be varied depending on the selection of planting material and its density. Hence, situation II is more flexible than the third situation (Fig. 1).

Several micro level studies from across the country reports considerable variation in the rent levels, due to land quality variation and demand factors (Cheriyan, 2003; Nair et.al, 2004; Latha and Madhusoodanan, 2004). Our study also supports

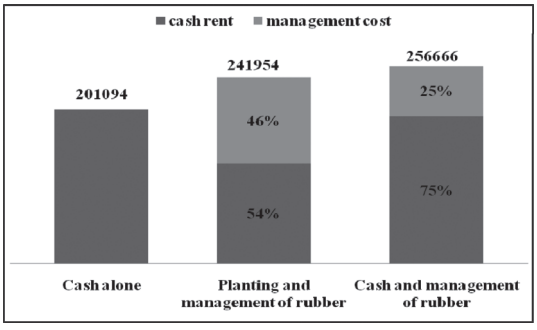

Figure 1. Comparison of total rent associated with the three systems of pineapple cultivation

this. Further, it is observed that the lease rent amount is also influenced by the lease conditions. Since the supply demand gap in lease land market is rather high, the lessees are left with little choice in deciding the rent conditions. Institutional mechanism to fix the rent and monitor the situation is also proposed.

A wide variation in the lease rent (cash and management cost) is observed between the different cultivation systems that exist in the Muvattupuzha region. When remote location and prevalence of absentee landlordism favour a group of cultivators, transport and market facilities support the other. The quench for productive land and supply-demand gap influences the lessor to fix high rent irrespective of the land area. Such discordance in the lease conditions followed in the region can be attributed to the lack of a legal framework for leasing. Hence, in the context of a changed social structure providing a legal protection to lease land farming is suggested.

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