CHAPTER 7

CONCLUSIONS

Land is an important factor for rural livelihood, but there is unequal distribution of land among the rural households. While few own hundreds of acres of land, most of them do not have even a cent land. There is large inequality in the distributed of land among the rural households in India. Second, the nature of ownership of land also plays an import role in which access to land can be obtained; it is the core of the livelihood of a majority of poor who do not have sufficient land for cultivation. In the context of this inactive land market temporary land transfers its nature and impact is important. Tenancy arrangements facilitates transfer of land from owners, who are unable or do not want to cultivate their land due to economic or personal reasons, to those who want to augment their land resources to make best use of the labor and other available resources in their household. Historically, there are many views on the existence of tenancy system in the agricultural sector. According to the neo-classical view, imperfect market for household resources is one of the reasons for the existence of tenancy. Another important reason expressed by institutional economists is that informal institutions are substitute for formal markets and could be the reason for the existence of tenancy. Marx expressed that class structure or unequal distribution of resources is one of the reasons for the inception of the tenancy system in the rural economy. Present study makes an attempt to analyse the existence of tenancy in rural areas as a rational response to missing markets where there is unequal distribution of irrigation, land, labour and agricultural implements. In contrast, there is a need for resource adjustments in the different imperfect or missing markets. A rural household having surplus labour, animal power and agricultural implements but not having land in relation the resource adjustment takes place in the form of leasing-in land. While the households who have excess land in relation to lack of other family resources their lease-out land, given that
the land and labour are made adjustments based on these missing markets. In this context, 
land tenancy has played a significant role in a less developed economy like India. The 
main objective of the study is to analyze whether the sources of irrigation have any 
association with the extent of lease and forms of lease. In addition, the work focuses on the 
agents of leasing-in and leasing-out land in study villages across different agro-climatic 
regions. The nature of irrigation as a one of the determine factor to the extent and forms of 
lease.

Analysis was conducted at two levels state level and village level; at state level (based on 
the NSSO data) the proportion of land reported under tenancy has been different in the 
states. For the recent year 2002-03, the proportion of land under tenancy was highest (16.8 
per cent) in Punjab, followed by Haryana (14.4 per cent), which are highly canal-irrigated 
states. Similarly, the states that reported the lowest extent of land under tenancy were 
Rajasthan (2.8 per cent), followed by Madhya Pradesh (3.6 per cent), Karnataka (3.6 per 
cent), and Kerala (4 per cent), which represent the less-irrigated states. The trend on the 
terms of lease was also observed in the study, and it was found that most of the states, such 
as Andhra Pradesh, Haryana, Kerala, Punjab, and West Bengal, have moved towards fixed 
rent form of lease, while some states such as Bihar, Orissa, Uttar Pradesh, Rajasthan, and 
Assam still have sharecropping as a dominant form of lease; in states such as Kerala (though 
lease is legally banned) and Maharashtra, “other terms” of lease are observed to be 
dominant, which is reportedly not a proper form of lease. High irrigated states are having 
large extent of land under tenancy system. High tenancy states such as Punjab (16.8 per 
cent), Haryana (14.4 per cent), U.P (9.5 per cent) and West Bangal (9.3 per cent) where 
irrigation also high (Punjab (95 per cent), Haryana (70 per cent), U.P (67 per cent) and West 
Bengal (43 per cent). It implies that the irrigation plays an important role in the extent of 
lease and form of lease. With reference to form of lease, fixed rent is high in the states like 
Haryana (81 per cent), Punjab (80.7 per cent) where irrigation is also high.

The study villages are known to show heterogeneity. Such heterogeneity is reflected in 
terms of vary in extent of leased-in land and forms of lease. Some villages are high extent of
lease to total operated land in Mentipudi (52.54 per cent) and Kothapalli (66.18 per cent). Contrastingly in Arepalli (5.4 per cent) B. Koduru (7.62) and Tatiparthy (8.45 per cent) which are less percentage of extent of lease-in land due to lack of irrigation (dry villages). In some villages, the extent of leased-in land is not significant amount (Seethampet (15.86 per cent) and Chinnapur (17.8 per cent). Arepalli, Chinnapur, Nagaram, Seethampet, B.Koduru and Tatiparthy do not have a significant amount of land under tenancy. It was found that canal irrigation areas also have a large share of land under tenancy. The nature of irrigation plays an important role in the extent of leased-in land and form of lease, which is found to be varying in the study villages. The villages where irrigation is through canals, there is more percentage of operated land under tenancy, as well as a high proportion of pure tenants. The fixed kind of lease system is high in canal irrigated villages. However, Jonaki village which is being irrigated by tanks has a high extent of leased-in land (30.14 per cent) and sharecropping as a pre-dominant form of lease.

Empirical evidence suggests that the regions with high irrigation also witness higher extent of land under tenancy. Across the regions, the extent of land lease and forms of lease are observed to be different, and contribute to different sources of irrigation. The two coastal villages of Mentipudi and Kothapalli are 100 per cent canal-irrigated which are dominated by fixed kind form of lease, while Seethampet and B.Koduru are mainly irrigated through tube wells where fixed cash as a dominant form of lease. In Arepalli, canal and tanks are the predominant sources of irrigation; in Chinnapur canal and wells; in Nagaram tank and wells; and in Jonanki, tanks are the predominant sources of irrigation.

We used correlation analysis to see variables co vary, and quantify the strength of the relationship between the variables. The used variables are proportion of leased-in extent, share of canal irrigation, one form supply side factor of lease that share of non-cultivating peasant households and another from demand side factor of lease that share of agricultural labour households. The correlation analysis reveals that the percentage of non-cultivating households and share of land under canal irrigation are significant positive relation with the extent of leased-in land in the year of 1981-82. Furthermore, the share of land under canal irrigation is positively correlated with the extent of leased-in land for all the three years
The variables such as percentage of agricultural labour households and percentage of pure tenant households were found to be in positive correlation with the extent of leased-in land, though not statistically significant. Rank correlation analysis was carried out for three years across 15 major states—the states we classified for the sake of analysis. The results also showed same relationship between canal irrigation and extent of leased-in land that is statistically significant for the three periods in the highly irrigated states, while in the less irrigated states, there was a negative correlation between irrigation and extent of leased-in land. The other variables used for the analysis, such as proportion of agricultural labourers, pure tenants, and NCPH were not statistically significant. It was observed that canal irrigation in the highly irrigated states was highly correlated and significant for the three decades. The regression results also show same results that the share of canal irrigation is positively significant with extent of leased-in land at 1 per cent level. This means that for one unit increase in canal irrigation there will be 7.4 units increase in the extent of leased-in land in the state level.

At village level, the sample villages were selected from different agro-climatic regions, and were found to be different in terms of the extent and forms of lease. With regard to irrigation, it is observed that canal-irrigated (highly irrigated) villages, which are also rice-growing villages, have high tenancy, while less-irrigated villages have low tenancy. The highly irrigated villages have fixed rent as a dominant form of lease, while the dry villages have sharecropping as a dominant form of lease; except in Seethampet, Tatiparthy and B.Koduru, which have peculiar characteristic features influencing the form of lease: Seethampet is a commercial village, where tobacco is the major crop cultivated in the leased-in lands; Tatiparthy is a drought-affected village, cultivating dry cash crops such as castor; and in B.Koduru, the big landlords have leased-in land from marginal and small holders (reverse tenancy). It is also observed that the nature of the crop (cash crop) influences the form of lease in the villages. Fixed rent kind of lease was the preferred form of lease among all categories of households in Mentipudi and Kothapalli, whereas in the village of Seethampet, fixed cash is the predominant form of lease preferred by all households except the poor peasant households, which preferred sharecropping. In Arepalli, fixed kind is the predominant form of lease and is preferred by the poor and middle
peasants; but two middle peasant households have opted for fixed cash as a form of lease. In Tatiparthy Village, which is a drought-prone village, the predominant form of lease among the poor and middle peasant households is fixed cash, and there were no rich peasants in the land lease market. In villages such as Chinnapur, Nagaram and Jonanki, sharecropping is observed to be the preferred form of lease among the poor and middle peasants rather than the fixed form of lease; however, the rich peasants did not prefer sharecropping in these three villages. In B.Koduru, one rich peasant household has leased-in land (78 per cent) from the poor peasants for fixed cash.

The study has found that the leasing-out land agents are: non-cultivating peasant households—these households have been leasing-out land massively (70 per cent of the leased-out land) in all the study villages. In B.Koduru, the poor peasants leased-out their land to one big landowner. However, in Seethampet and Arepalli, land was leased-out by the rich peasant households, while in Chinnapur a significant amount of land was leased-out by the poor and middle peasants. The leased-out agents are not significant in all the study villages; for example in B.Koduru 23 marginal farmers (mala caste households) have leased-out their land to one landlord (forward caste).

One more interesting point is that there is more pure tenancy in public irrigated villages such as Mentipudi (51 per cent of the pure tenant households), Kothapalli (77 per cent of the pure tenant households), and Jonanki (39.53 per cent of the pure tenants households). The landless and poor peasants are predominant classes leasing-in land in Kothapalli, Mentipudi and Jonanki, while in Tatiparthy, Arepalli, Nagaram and Chinnapur, it was observed that middle peasants are predominantly leasing-in their land; rich peasants are observed to be dominant leasing-in agents in B.Koduru and Seethampet. However, the proportion of tenants is high in public irrigated villages such as Mentipudi, Kothapalli and Jonanki. Across castes, the Kapu castes are dominantly lease-in land compared to the malas (SC), madigas (SC) and the Schedule Tribes (ST). A few mala (SC) households in Mentipudi (16 per cent) and Kothapalli (30 per cent) have leased-in land, while Chinnapur accounted for about 50 per cent of the mala and madiga (SC) households leasing-in land.
However, the study also found intra-village variations in terms of the agrarian structure, class and caste distribution of the study villages. Among the different social caste groups, the mala (SC) households owned 0.43 average land; while the madiga (SC) households owned 0.85 average land; the Schedule Tribe households owned 0.86 average land; and the other caste groups owned 2.58 average land in the nine study villages. Another important characteristic, such as cropping pattern, also seems to be varying across the different study villages. The climatic conditions, however, do not vary much in the study villages, though the nature of crops is observed to be different across the study villages. In the coastal study villages of Mentipudi, Kothapalli and Seethampet, which have flat and alluvial lands, the fertile lands are used to cultivate crops such as paddy as a mono crop in Mentipudi and Kothapalli; there are two crops cultivated per year. In Seethampet, which is irrigated through tube wells, tobacco was the major crop produced. Another two study villages, namely Jonanki and B.Koduru, from Srikakulam District cultivate paddy as a major crop, along with other crops such as chillies and jowar, which are cultivated in dry lands. In Arepalli, Chinnapur and Nagaram, paddy is cultivated as a major crop, along with other crops such as turmeric, maize, jowar and chillies. Castor and jowar are the major crops cultivated in Tatiparthty. The study has found that the extent of tenancy and the proportion of pure tenants is high in public irrigated villages. Forms of lease are found to be varied in the study villages: fixed kind was the dominant form of lease in canal-irrigated villages, where paddy is cultivated as a mono crop. Fixed cash is high where private irrigation is a major source of irrigation; and sharecropping was seen to be dominant in villages where tank irrigation was high. Nature of the crop also is a determinent factor of form of lease in the study villages cultivating cash crops; in such villages fixed cash is observed to be the dominant form of lease.

In this study, regression analysis is used for focus on the relationship between the extent of leased-in/or out land as a dependent variable and sources of irrigation, households resources like able workers, own land, draught animals, ploughs, bullock carts, pump sets, sprays, tractors and village resource output value per acre, rent value per acre, share of NCPH and poor peasant households as independent variables. More specifically, this analysis helps to understand how the extent of leased-in/out land changes when any one of the independent variables is varied. Village
level data regression results shows that share of public irrigation (canal and tank) have high positive significant influenced on extent of leased-in land in Mentipudi, Kothaplli and Jonanki villages. It is implies that only in villages Tatiparthy, Seethampet and Nagaram where there is less irrigation has negative and insignificant influence on extent of leased-in land. The extent of land was accounted less in these dry villages which are dominated by tube well irrigation as a major source of irrigation. The results show that NCPH’s (Non-Cultivating Peasant Households’), output value per acre and irrigation have high positive influence on leased-out extent; the value was found to be significant in all the study villages; however, the value of the output per acre and irrigation were not be found to be significant in Tatiparthy and Nagaram where irrigation is very less. The variables like able workers, animal power and owned land were not significant enough to influence the extent of leased-out land in the analysis. Similarly, we observed that the output value per acre has a positive sign and is statistically significant in all study villages except Tatiparthy, Nagaram and B.Koduru. The rent value per acre was negative and statistically significant in public irrigated villages such as Mentipudi, Kothapalli and Jonanki. It has a positive significance in Seethampet, Tatiparthy, Nagaram and B.Koduru. The proportion of poor peasants was found to be positively significant in Arepalli and Chinnapur; it has a negative significance in Seethampet and B.Koduru where the proportion of rich peasants is high.

The binary probit regression analysis was done in the study to understand factors affecting household’s decision to leased-in/ out land in the study villages. The results of show a positive sign for the coefficients such as the percentage of canal irrigation and tank irrigation factors affecting the landless households’ decision to lease-in land. The results show that landed households mostly preferred to lease-in land in well and tube well irrigated villages. The estimated coefficients of the village dummies with reference to Mentipudi, were positive; they had insignificant values for Kothapalli and Jonanki, while the rest of the study villages showed negative and statistically significant results. The probit regression results show that the factors effecting the households’ decisions regarding leasing-out land, and variables such as percentage of canal and non-cultivating households are positive and significant.
The study results show that the decision of a household regarding to leasing-in/out land is different across the study villages due to imperfect or missing market for some household’s resources like bullocks, tractors etc. In canal irrigated villages, farmers are using tractors instead of human labor and bullocks in agricultural production. All the tenants have been using tractors particularly in ploughing operations and the important of plough and bullocks with human labour became negligible. This is one of the incentives for the landless labor to enter into land lease market without plough and bullocks in canal irrigated villages. However, there are available markets for new technology, fertilizers, pesticides and HYV seeds in order to increase productivity. This can influence leasing behavior of a rural household, and landless households who having labour power without other resources to enter into the land lease market. In the case of backward villages where public provision of irrigation is less and not yet developed markets for technology. Here, the household resources like ploughs and bullocks in combination with human labor became importance and missing market for tractor. Farmers depend on human labour and bullocks which can influence leasing behavior of the households. The households who owned resources like land, plough, bullocks and agricultural implements, they can enter into land lease market. This might be reason land less labours can not take leasing-in land in unirrigated villages. Thus, missing markets is one of the reasons for leasing behavior of rural households in the areas not irrigated while the presence of landless labour households without alternatives sources of employment and sizable presence of non cultivating households are the dominant reason for lease in the irrigated areas.

Tenancy is an important production arrangement in agriculture because the tenancy system facilitates transfer of land informally. This system does not provide adequate incentives for investment for new technology or promoting land development to increase production and yield. Poor tenants are inefficient to introduce new technology or promoting adequate incentives on agriculture. However, pure tenants are not market friendly because their produce gone for self-consumption and rent. It implies that such a tenancy system is big constrained for agricultural growth in long-run.