1.1 Motivation

This thesis analyses the nature of deprivation and the extent of inequality in ownership of assets by rural households in Uttar Pradesh. Economic well being of a household in an agrarian economy is crucially linked to ownership of assets. Ownership of assets, most importantly of land, is an important determinant of the location of a household in the system of agrarian relations. In an agrarian economy, whether workers in a household sell their labour power or deploy it in their own household enterprise depends crucially on the extent to which they own various means of production.

In an economy characterised by widespread unemployment, ownership of productive assets can provide reliable sources of livelihood. Typically, unequal distribution of assets forms the structural basis for an unequal distribution of incomes. Assets can not only be deployed in household enterprises, they can also be rented out. In an agrarian economy, for example, it is common to find rental markets for land and machinery.

In addition to their productive potential, assets also have collateral value and can be sold in the market. Thus, ownership of assets also provides a certain degree of security against adverse economic shocks.

This thesis combines a study of asset holdings with an analysis of land relations. This
was found to be necessary because land is the most important component of asset holdings of rural households. In an agrarian economy, land is also the most fundamental means of production without which no agricultural production can take place. A study on asset holdings, therefore, needs to specifically look at the pattern of ownership of land. Further, using primary data from a village in Western Uttar Pradesh, this thesis examines the part played by ownership of assets in determining terms of tenancy contracts through which different households obtain land.

The thesis uses secondary data from the All India Debt and Investment Survey as well as primary data from two villages in Uttar Pradesh. The primary data used in the thesis were collected from two villages: Harevli, in Bijnor district of Western Uttar Pradesh, and Mahatwar, in Ballia district of Eastern Uttar Pradesh.

1.2 Asset Inequality

Literature on asset inequality have focussed on two issues. One set of studies has focussed exclusively on measurement of the extent of asset inequality both within a country and across different countries. These studies have also looked at decomposition of inequality between and within different sections of the population and different regions. The other set of studies has focused on the impact of asset inequality, primarily on economic growth.

1.2.1 Extent of Asset Inequality

Almost all studies that have attempted to measure asset inequality have found that inequality in ownership of assets was very high, and in general, considerably higher than income inequality.
There are a number of cross country studies on asset inequalities. Davies, Sandstrom, Shorrocks and Wolff (2006) reported that the Gini coefficients of net worth (defined as the value of all physical and financial assets less liabilities) for the year 2000 for different countries were in the range of 0.65 to 0.75 while the income Gini coefficients were in the range of 0.35 to 0.45. Davies et al (2006) estimated the world distribution of wealth based on Household Balance Sheet (HBS) data and Household Sample Survey data for a large number of countries. The authors reported wide inter country differences in the level of household wealth in terms of purchasing power parity. While per capita mean wealth for the richest country (United States) was $144,000, for the poorest country (among the countries which were studied) it was only $6,500 (India).

Asset composition also varied considerably across countries. Real assets, particularly farm assets, were more important in less developed countries while financial assets and share-holdings were the largest in countries like USA and UK where the financial markets were highly developed. However, there were some exceptions to this general trend. South Africa, in spite of being a developing country, had high preference for financial assets and it was found that the share of non-financial assets were usually low in the total household assets. Japan, in spite of being a developed country, had a high preference for liquid assets. Wealth concentration, though generally very high, varied across countries. The top one per cent of households in Ireland owned 10.4 per cent of total wealth while in Switzerland they owned 34.8 per cent of total wealth. When the estimates of the distribution of wealth across the global population were considered it was indicated that only $2,161 was needed to be a part of the top 50 per cent of per-capita wealth distribution while it needed $61,000 to be a part of top ten per cent. To be a member of the top one per cent of per-capita world wealth distribution $500,000 was needed. Globally it was estimated that the
top ten per cent of the wealth owners owned 85 per cent of assets.

In the United States, the Survey of Consumer Finance (1983) and Survey of Income and Programme Participation (1983) collected detailed data on household wealth and were the earliest "initiation of systematic data collection on household wealth" (Torche & Spilerman, 2007). The authors have estimated the extent of wealth concentration in Latin American countries. Even though housing was the most widespread asset in Latin America and the home ownership rate was as high as 75 per cent in some countries, there was high concentration of housing wealth and the Gini coefficient of housing wealth was higher than the Gini coefficient of income. In fact, in all the countries where wealth data were available, the Gini coefficient for household wealth exceeded the Gini coefficient for household income. However, there was one methodological problem in the estimation of housing wealth which the authors have admitted. Since there was no direct measure for home value, rental value as estimated by the home owners was used as its proxy as a result of which there could be systematic over or under estimation of rental values. Moreover, rental value fluctuates from region to region while the real value of a house is more or less similar across all regions. As far as land concentration was concerned, the study revealed two distinct patterns of land inequality. On the one hand some countries experienced high concentration among landholders but relatively widespread access to land while on the other hand in some countries access to land was restricted but there was relatively low inequality among landholders. The authors explored the roots of wealth inequality in Latin America in a historical perspective. Their analysis revealed the influence of unequal distribution of assets in the colonial period on the rise of institutions through which the "Latin American elite successfully maintained the privilege" of ownership of assets. In Brazil one of the features of colonization was the ownership of large scale sugar, tobacco and coffee estates by a small elite in
which large number of slaves mostly African with minimum human capital used to work. This resulted in a massive concentration of resources particularly land which continued well after slavery was abolished. Likewise in other parts of Latin America colonization resulted in wealth concentration which was maintained after the end of colonial rule through the institutional mechanisms. In sharp contrast to Latin America, parts of North America and Canada where population consisted mostly of European descent with roughly similar human capital, the agrarian system provided the basis for relatively small landholders.

There are two studies that have used AIDIS data (48th and 59th rounds) to look at inequality in ownership of assets in India. Subramanian and Jayaraj (2006), reported that in 1991-92, the wealthiest 1 per cent of households in India owned 16.7 per cent of total value of assets. The incidence of assetlessness among SC/ST households was thrice that of other households. The authors observed that “the ratio of the incidence of non-SCST ‘richness’ to that of SCST ‘richness’ is 15”. The authors further noted that the share of assets across wealth deciles had hardly changed between the two survey rounds.

Jayadev et al. (2007), based on AIDIS data (48th and 59th rounds) examined wealth disparities across Indian States between the two survey rounds. The authors observed that the faster growing States in terms of income were the ones which experienced larger increases in wealth inequality. The authors found that the top 10 per cent of the population (in terms of monthly per capita expenditure deciles) experienced much higher increases in wealth levels than the rest of the population. The annual growth rate of average per capita assets for this 10 per cent of the population was 3.4 per cent during the period, which was the highest across all the deciles. Across social groups the authors noted that “the wealth hierarchy matches the caste hierarchy”, with the
average values of assets owned by the SC and ST households being the lowest in both
the survey years, while that of other households being the highest.

While these studies have looked at overall levels of inequality in ownership of assets
and disparities across social groups, the limited secondary data used in these studies
did not allow an examination of disparities in ownership of assets across economic
classes. There is only one study, based on primary data from a village in Tamil Nadu,
where disparities in ownership of assets across economic classes have been analysed.
Ramachandran (1990), in a study of Gokilapuram in Madurai district, found very
high concentration of asset ownership in the hands of landlords. For the village as a
whole, the value of Gini coefficient of all assets was 0.87. Among the various
categories of assets, the concentration of assets was particularly high in case of
ownership of agricultural machinery and equipment. The author noted that “the
combined asset of 257 agricultural labour households (40 per cent of all households
in the village) were only 60 per cent of the assets of each major landlord household”.

1.2.2 Impact of Asset Inequality

Studies on the impact of asset inequality have found a negative impact of asset
inequality on growth and, in this context, the theoretical models have discussed the
link between household access to assets and economic growth. The importance of
asset ownership was studied by Aghion and Bolton (1997) who analysed wealth
distribution and growth based on credit market imperfections. In their model,
individuals were assumed to be able to engage in productive projects and the
probability of success was the private information of the individual. The lenders gave
incentives to the individuals by demanding collaterals. So, entrepreneurs with
sufficiently high levels of personal wealth were able to finance their projects which
was more evident in case of project indivisibilities. Therefore, initial wealth distribution determined how many individuals were able to undertake investments which was linked to overall growth of the economy.

Durlauf (1994) showed that, even in absence of credit market imperfections, wealth inequality inhibited economic growth through endogenous stratification of the community. The author illustrated this with the help of an example where educational system, a public good, was provided through local financing. In such a situation, according to the author, the individuals would be sorted into communities differentiated by their wealth position thereby leading to a permanent differentiation of development of human capital in the society. This would have negative influence on economic growth.

Birdsall and Londono (1997) reported that at least 13 cross country studies have found a negative impact of inequality on economic growth. They further pointed out that the literature suggested that the negative impact was more on account of land inequality than on account of inequality of incomes. In their own study, which was based on the data set prepared by Squire and Deininger at the World Bank, Birdsall and Londono (1997) concluded that highly skewed distribution of existing assets inhibited economic growth in the Latin American countries. Their analysis of cross country overall growth rate indicated a negative relationship between economic growth and income inequality which according to the authors reflected “differences in a fundamental element of economic structure, namely the access of different groups to productive assets”. When a measure of land distribution was added as an independent variable in the regression model along with a measure of income inequality it was found that both these variables had negative effects on economic growth. The effect of asset inequality on growth dominated the effect of income
inequality, which lost its statistical significance in a joint regression. The degrees of
the impact of land inequality and inequality of human capital on economic growth
were different for different sections of the population. For the poorest 20 per cent of
the population it was found to be twice as great as compared to the population as a
whole.

Deininger and Olinto (2000), suggested that high inequality of asset ownership
reduced the effectiveness of policies aimed at increasing aggregate growth through
investment in education. Moreover, their results suggested that inequality affected
growth not only through investment but had an independent impact on efficiency of
resource use. Blanchflower and Oswald (1998) concluded that, even in industrialized
countries, where credit market constraints were less severe, initial distribution of
assets (as measured by inherited wealth) was a key variable for individuals' ability to
start up enterprises and climb up the income distribution which in turn would
enhance economic growth.

Siddiqui (1999) arrived at a very similar conclusion while examining the effects of
the “new technology” on process of differentiation of a sample of 120 households in
Muzaffarnagar district of Western Uttar Pradesh. The period of analysis of the study
was 1981 to 1997. The author noted that since the “new technology” was introduced
in an unequal society, it furthered the process of accumulation of wealth by the rich
who already had greater access to resources. The poor households which did not own
sufficient assets, particularly productive assets like agricultural machinery, were
unable to take advantage of the new technology. As a result, the gap between the rich
and the poor were further widened with the introduction of “new technology”.

8
1.3 Asset Holdings and Well-Being of Households

Assets are the most important indicators of material well-being of households, particularly in rural areas. In contrast to research on household incomes, empirical studies on household assets are relatively scarce. One of the reasons for this scarcity is, of course, lack of reliable data on household wealth. Even when data on household wealth are available, these need to cover a sufficiently broad class of asset indicators to allow for differentiation across all households in terms of economic well-being. Mc. Kenzie (2005) pointed out two possible problems that might arise in using asset data. If an insufficient number of asset indicators are used then households will be clustered in small number of groups. For example, in a situation where data are available on ownership of only one asset, there will be one group of households owning it and another not owning it. This was referred to as the problem of “clumping” and this limits the amount of useful information that can be inferred from the asset index. The second potential problem pointed out was that of “truncation” of asset distribution which might arise in the absence asset indicators that allows for differentiation between very poor and poor or between very rich and rich households.

1.3.1 Livelihood and Poverty

The importance of ownership of productive assets in poverty alleviation has been long recognised. Public programmes based on this understanding have been of two types. First, a large number of countries have implemented different types of land reform programmes directed towards providing ownership of land to rural households. Redistributive land reforms were also implemented in post-independent India, though the success in their implementation varied across States (Appu, 1996). In States where land reforms were implemented to a substantial degree, they had a
significant impact on poverty alleviation, and had a positive impact on the general well-being of the rural households. The most commonly cited examples on this are from the States of West Bengal and Kerala.¹

The second type of public interventions were those where non-land productive assets were provided to the poor households through the policy of public subsidy or cheap credit. The most well known example of this comes from India, where an Integrated Rural Development Programme, IRDP, which was started in 1978. The objective of IRDP was to provide credit-cum-subsidy for acquiring income generating assets by the poor households. The programme was targeted to small and marginal farmers, agricultural labourers, artisans, and other poor households. This scheme, which was a flagship programme of the government in the 1980s, was the subject of a number of official and independent scholarly evaluation.²

The general conclusions of these evaluations were that, in absence of an adequate asset base, in particular, in absence of landownership, households were unable to productively deploy the assets provided to generate substantial and sustained income. Most studies found that income generated were meagre and poor households were unable to hold on to these assets (Dreze, 1990). Subbarao (1985) found that incomes from milch cattle provided under IRDP were low in four out of five districts that he studied. In the only district where milch cattle had yielded a satisfactory rate of return, there was a milk chilling plant, and as a result, there was a considerable demand for milk. The inability to hold on to the assets could be for various reasons. Kurian (1987), for instance, mentioned that in cases where hundreds of milch cattle

were distributed in drought affected areas without enough grazing facilities to feed the animals. As a result the many households had to sell their cattle. Swaminathan (1988), based on a survey of two villages in Tamil Nadu found that after six years since the initiation of IRDP the upward mobility of the assisted households in terms of assets was no better than that of the sample of unassisted households.\(^3\) Studies have also found serious problems of corruption and mis-targeted implementation of IRDP (Dreze, 1990).

In addition to studies to evaluate public programmes directed towards redistribution and provision of productive assets, there have been a few studies that have looked at impact of asset holdings, or of ownership of specific assets, on household incomes. In particular, several studies have looked at the impact of ownership of land on livelihood options and income levels.

Barrett et al. (2001), analysed the influence of resource endowments on livelihood strategies of households in rural Africa. The study analysed the diversification of livelihood strategies in response to exchange rate devaluation in Cote d'Ivoire. This study was based on farm management and household survey (FMHS)\(^4\) of 120 rice farming households for three consecutive years, 1993-95. Devaluation and other macro-economic policy reforms significantly increased the real return from crop cultivation (including paddy) and depressed real returns to non-farm activities. This induced increased cultivation of rice and other tradable crops. Although return to rice cultivation increased in real terms, the average per capita real incomes for rice farming population declined because of sharp decline in incomes from non-farm and off-farm activities. Those households which had relatively poor land endowments,

---

3 Cited in Osmani (1999).
4 The survey was conducted by West Africa Rice Development Association (WARDA).
and were depended primarily on wage labour in agriculture or non-agriculture appeared stuck in poverty trap. Households with sufficient land endowments, which depended entirely on crop cultivation, experienced an increase in mean real income by 8.1 per cent. Lack of endowment of land restrained such households from adopting more lucrative and less risky livelihood strategies. In other words, “poor endowments of productive, non-labour assets such as land or livestock commonly force poorer households to hire themselves out to work others' fields or to herd others' animals for low wages”, and therefore, not in a position to take advantage of the macro-economic policy incentives. This study pointed out that lack of ownership of key assets like land and livestock limited the livelihood options available to the households.

Among the various forms of assets, land is by far the most important means of production in rural areas. Various studies have highlighted the importance of access to land in determining the livelihood options for the households, and their consequent impact on well-being. Studies have pointed out land concentration as the most important hindrance in improving the well-being of rural households. Ireson (1987), examined the effects of land concentration, and interactions between farm size and technology on increasing or decreasing concentration of farm income in three Mexican states for the period 1950–1970. The study found no correlation between farm size and technology adoption suggesting that technology used might have been associated with a complex of farm resources rather than simply with land. Moreover, the study revealed a strong positive relation between concentration of farm income and initial land distribution. Therefore, the author concluded that “it is not mechanization with large farms but, rather, mechanization in a context of unequal land distribution, that leads to production concentration”. In other words, the study found evidence of rising concentration of farm income if land was unequally
distributed or if mechanization was introduced with unequal land distribution.

Epstein (1973), based on a study of two villages in Karnataka, observed that high inequality in access to irrigated land resulted in sharp concentration of income. Households with good endowments of irrigated land could take advantage of high prices of sugarcane by shifting more irrigated land for sugarcane cultivation. Households which did not own any land at all or owned only unirrigated land could not cultivate sugarcane and hence could not take advantage of the high price offered on it.

Not only is land the most important means of production, it is an asset which has got immense economic value as collateral in obtaining credit from formal sources of credit. Ownership of significant quantities of land may allow households to obtain credit from the formal sources and thereby invest in productivity augmenting techniques, which will result in an increased income from crop cultivation. Therefore, the dependence of the households on wage employment as livelihood strategy is reduced to a considerable extent. Davis et al. (2007), based on rural income generating activities (RIGA) database, among other things, analysed how livelihood strategies for rural households depended on ownership of certain types of assets (in particular land). The general results of the analysis suggested that the probability of participation in on-farm activities increased with an increase in landownership. Further, returns on crop production were higher for households owning more land. In a majority of cases, landownership was negatively related to participation in and returns from both agricultural wage and non-agricultural wage employment,

5 RIGA database was constructed from a pool of several dozen Living Standards Measurement Study (LSMS) and other multi-purpose household surveys and made available by the World Bank through a joint project with FAO. RIGA database consisted of representative household surveys in 15 countries, from four regions of the developing world.
suggesting that lack of ownership of land pushed households into wage employment. In one-third of countries (in this analysis) the size of landownership was negatively related to participation and returns to non-agricultural self employment.

Ownership of certain non-land means of production like farm assets (tractor and accessories, and irrigation equipment) are also important for livelihoods. Although ownership of such assets is typically restricted to a few households, their services are available to a much wider group through the rental markets. However, there is a marked difference between the owners and those dependent on rental markets in terms of access to such assets. As Chopra (1984) observed, “ownership creates an independence from the market and also enables the owners to extract rental incomes”. The owners of such assets can use them at the most appropriate time and at a relatively lower cost. Chopra (1984) further observed that “this results in differences in net value of agricultural output and hence in household incomes, even where there is uniform adoption of technology and use of inputs”.

In case of certain non-land means of production like draught animals, rental markets may not exist in certain areas. Ownership is the only way of getting access to them, and it determines the extent of participation of rural households in crop cultivation. Bell (1976), based on his study of Purnea district in Bihar, argued that the non-existence of rental market for hiring of draught animals provided a possible motivation for land leasing. Households which owned surplus draught animals in relation to their ownership holdings preferred leasing in land since the surplus draught animals could not be hired out. Conversely, households which owned more land in relation to ownership of draught animals leased out their surplus land. Pant (1983) arrived at a similar result utilizing the data obtained by village level studies.
(six villages located in the semi-arid tropical zone of India) initiated by ICRISAT. The study was aimed at determining to what extent resource endowments of households influenced the extent of land leased in. Among the various types of endowments, the study also focussed on endowments of draught animals. The analysis revealed that the extent of ownership of draught animals had a positive influence on the extent of land leased in by the households.

Ownership of assets is particularly important for poor households to come out of poverty trap, and it plays an important role in poverty alleviation programmes. Zezza et al. (2007), based on rural income generating activities (RIGA) database, described the asset position of rural households in a sample of developing countries, and analysed the heterogeneity of access to assets. The study revealed that most of the households had no land, or only small plots of land, and the existence of landlessness was most prevalent in Asian and Latin America. Landholdings in most countries were small with a vast majority of households holding less than one hectare of land. The concentration of landholdings were the highest in the Latin American countries, with 70-80 per cent of land being held by the top quintile of landowners. Land rental markets were particularly widespread in South Asia, and played and important role in reallocating land use towards smaller landholdings, and thereby allowing poorer households to put together more economically viable farm units. In every country greater land size was associated with greater mechanization. This, in other words, implied that smallholders could not afford to pay for mechanical inputs. As far as ownership of animals was concerned, majority of rural households in the countries

---

6 International Crop Research Institute for the Semi Arid Tropics.
7 The various dimensions of heterogeneity considered in this study were rural vs. urban, across expenditure quintiles, across gender, across countries and regions. The physical assets considered in this study were land and livestock. Various dimensions of heterogeneity considered in this study were rural vs. urban, across expenditure quintiles, across gender, across countries and regions.
analysed owned some farm animals.\textsuperscript{8} Like in the case of landholding, holdings of farm animals were highly concentrated, and this was particularly true in Latin American countries. Overall, the study revealed that small land and livestock holders not only lacked access to other forms of assets, but also lacked access to modern inputs and markets. Given the importance of crop production for most rural households, the study observed that access to key assets like land was important for rural poverty alleviation strategy.

Finan et al. (2005), using data collected by the Mexican Program for Education, Health, and Nutrition (PROGRESA) analysed the conditions under which access to land reduced poverty in Mexican rural communities. Results showed that an additional hectare of landownership increased the earnings of agricultural workers on an average by 1.3 times. Moreover, the importance of land in reducing poverty depended crucially on factors like education and access to infrastructure, and therefore, the study prohibited any absolute statement about the poverty reduction value of land.

To sum, a large number of studies from India and other countries have suggested that ownership of assets, in particular, land, is a very important determinant of livelihood options available to rural households and the levels of incomes they have.

1.3.2 Cushion Against Vulnerability

Assets act as a cushion against income vulnerability, and households can fall back on them at times of income shortfalls, either by selling them or by using them as a

\textsuperscript{8} In the countries analysed, between 46 to 85 per cent of rural households owned some livestock such as cattle, horses, goats, sheep, chickens etc.
collateral to obtain credit. Households owning fewer assets are more vulnerable to adverse economic shocks. Ownership of sufficient assets therefore becomes essential to meet contingencies. Chambers (1992), identified various kinds of contingencies like physical incapacity (for example, sickness and accidents), disasters (like fires and floods), social needs (dowry and funerals). He argued that such contingencies can have "irreversible ratchet effects". Since households are forced to mortgage or sell their assets, they lead to downward shifts in net asset position of the households Hirway (1986), observed that non-participants in the IRDP "want the schemes not for income generation but to acquire a cheap and subsidized asset which also has a good resale value". There was evidence of seasonal depletion of assets in various village-level studies reported by Harriss (1992). The assets which were seasonally depleted by the households included grain inventories, small livestock and trees.

1.3.3 Dignity and Freedom

Ownership of assets is also associated with personal freedom and dignity. Srinivas (1976) noted: "landownership and wealth were occasionally able to mitigate if not overcome the effects of birth in a ritually low caste... No wonder then, that there was a general scramble for land. The rich competed among themselves to acquire more land, for a variety of reasons, economic, political and social... The poor, and the low castes, wanted land for it meant freedom from hunger and bondage to patron, and also self-respect". The desire of the poor households to command and own assets, among other things, stems from the fact that without assets they are powerless, subservient, and exploited. In other words, households not owning sufficient assets are not only economically vulnerable, socially too, they are looked down upon. Chambers (1992) noted that "vulnerability and security are linked with independence

and self-respect”. Hirway (1986) reported that poor and indebted households, owning little assets, not only distaste the high interest rates which they had to pay to their lenders, but also the abuses and insults which they received from them. The indebted households hated “touching the feet of the lenders and swallowing insults and abuses”.

1.4 Social Discrimination and Economic Disparities

Caste relations play an extremely important role in the rural economy of India. Recent literature shows that social discrimination on the basis of caste has very important implications in terms of economic disparities. Thorat (2002) argued that the caste system predetermined the social and economic rights of an individual by birth through fixation of occupation and its “hereditary continuation” and imposing a “hierarchy of occupation”. A number of studies have revealed that the less privileged social groups were worse off than others on the measured indicators of social and economic well-being across the country. Thorat (2002) noted that the caste system often laid down the foundation for unequal distribution of economic rights related to property, employment, and education among caste groups. Citing various regional studies, he pointed out that it was extremely difficult for the untouchables to switch over from their traditional occupation to some other occupation, particularly in the rural areas. Based on employment and unemployment survey (NSS, 1993-94), he calculated that only one-fifth of Scheduled Caste (SC) households in India cultivated land, while this percentage was more than double for non SC/ST households. Moreover, he noted that “about one-fourth of SC households seem to be engaged in self-employment activities as compared to more than half for others, in rural area”. The extremely low proportions of SC households involved in cultivation and self employment indicated that access to land and capital was very low among SC
households, which, in turn, indicated that SC households had to resort to manual wage employment for their livelihood (60 per cent of SC households in rural India were employed as manual wage labour as compared to only one-third for others [Thorat, 2002]). Hasan and Mehta (2006) using NSS 55th round (employment-unemployment survey, 1999-2000) data have shown that relative to the national average, Scheduled Caste (SC), Scheduled Tribes (ST), other backward classes (OBC), and Muslims were significantly under-represented in higher education, and low economic status of disadvantaged groups explained much of their under-representation in higher education. Mehrotra (2006) noted that the educational level of SC and OBC population was much lower than that of upper castes in India and the situation was much worse in Uttar Pradesh. He cited a NCAER (1993) survey which revealed that in Uttar Pradesh only 32.5 per cent of SC and ST population (taken together) in the age group of seven and above were literate, while the corresponding figure for all Hindus was 48 per cent. Kozel and Parker (2003) observed that low-caste status operated as social barrier from many socio-economic opportunities, and social identity was a strong predictor of who was and who was not poor. Based on field studies carried out in Uttar Pradesh and Bihar for the purpose of their work, the authors noted that SC and ST households possessed fewer private assets, and in particular, less and poorer quality land, and, therefore, most of them depended on earnings from casual labour. They further pointed out that “individuals from low caste households work disproportionately in low-paid, low-status jobs as agricultural labourers or low-skill labourers in the non-agricultural sector”. Lanjouw and Stern (1991) observed that in rural Uttar Pradesh, the incidence of higher poverty among the SC was a reflection of their low educational standards, vulnerability to caste-based discrimination and poor endowment of productive assets. Mohanty (2001) observed that Scheduled Caste and scheduled tribe population were the most

disadvantaged in respect to land which was “the pivotal property in terms of both income and employment, around which socio-economic privileges and deprivations revolve”. Citing the draft of Ninth Five-Year Plan, the author noted that as high as 90 per cent of scheduled tribe and 77 per cent of Scheduled Caste population in the country were without productive assets and sustainable employment opportunities, and 48 per cent of Scheduled Caste and 51 per cent of scheduled tribe population in the country were below poverty line.

The remarkable similarity in all the studies mentioned above was the persistence of disparities across social groups. In this backdrop, an analysis of disparities in asset ownership across social groups becomes necessary.

1.5 Land Relations in Uttar Pradesh

Land is the most important and fundamental means of production owned by the rural households. A study on asset holdings of rural households, therefore, needs to lay special emphasis on land relations. In this section, a brief review of literature on evolution of land relations in Uttar Pradesh is provided.

1.5.1 Evolution of Agrarian Relations During the Colonial Period

During the colonial period, there were three types of land revenue systems in Uttar Pradesh viz. taluqdari, zamindari and bhaichara. The Taluqdari system was the land revenue system in the Awadh region (presently Central Uttar Pradesh). In rest of the Uttar Pradesh, both zamindari and bhaichara co-existed together although the extent of land under different systems varied across regions. Bhaichara was the dominant
system in the Western region (Upper Doab region) while zamindari was more prevalent in the Eastern region of the state (Singh, 1992).

Taluqdars were non-cultivating large landowners having permanent heritable proprietary rights in their estates. They were responsible for the payment of fixed land revenue to the government which was realized as rent from their tenants. To realize the rents, the taluqdars could seize and sell the crops of the tenants and in extreme cases could also evict tenants from their estates (Whitcombe, 1971). When the colonial rulers annexed Awadh in 1856, taluqdars were considered to be the natural ally of the colonisers and several enactments were passed which “buttressed the already privileged position of the taluqdars” (Jassal, 1980). Between the taluqdar and tenants, there existed different layers of sub-proprietors which only added to the total appropriation from the peasantry.

The bhaichara system was a system of owner-cultivation by the members of the community (mostly Jats and Tyagis in the Western region) which settled in an area after occupying and colonising it and dividing the land among themselves (Neale, 1962). The peasant proprietors had individual and hereditary rights on the land. The peasants were not free to alienate their land and they paid their rents to the state through the village head man. Land was mostly cultivated by the family members of the peasant proprietors who were assisted by the riaya (non-peasant castes like Chamars) and over whom the peasant proprietors exercised direct social and economic control (Singh, 1992). The necessity for the bhaichara system was primarily to protect the peasant proprietors who were exposed to waves of invasions by different groups or clans and “it was necessary for bhaichara system to continue for the purpose of resisting the encroachments from predatory hordes”.11 However,

11 This was the observation of M. H. Elliot, the first settlement officer of Merut during the colonial
none of the attacking clans could wholly uproot the existing groups from the soil. Hence, in those districts which were subject to repeated invasions (the western district of Uttar Pradesh), the society was intermingled but vertically stratified with the most recent group of conquerors at the top. The North-Western Province (NWP) came under the British rule during 1801-1803 and scarcity of large landholders in the western region meant that the British had no option but to deal directly with the bhaichara community and the village-level zamindars (Whitcombe, 1971).

Benaras division came under the British rule in 1775 and permanent land revenue settlement on the Bengal pattern was put in place. The permanent zamindari settlement in the eastern region of the state was characterized by high and inflexible revenue demand, stratified rural society comprising of several layers of tenants and sub-tenants and almost complete alienation of the cultivators from the land (Whitcombe, 1971).

Thus the historical process of development of agrarian societies across different regions of Uttar Pradesh varied on account of differences in revenue settlement systems practiced by the colonial rulers. The zamindari land revenue system of Eastern Uttar Pradesh was fundamentally different from the bhaichara system of Western Uttar Pradesh, which provided some kind of tenurial security for cultivators and witnessed the rise of a class of rich occupancy tenants. This class of independent tenants had an incentive to invest in land and improve productivity. In contrast, in the Eastern Uttar Pradesh, tenurial insecurity, exorbitant rent and the lion’s share of the produce being taken away by the layers of intermediaries discouraged any kind of productive investment by the tenants.

rule and this observation was cited in Singh (1992).
1.5.2 Land Relations in the Post-Colonial Period

Uttar Pradesh, which had experienced substantial peasant mobilisation during the independence struggle, was one of the fore runners in the legal enactment of land reform programmes. Attempts were made to wipe out or at least reduce the extreme inequality of landholdings through various rounds of land reform legislations, which attempted to abolish the zamindari system, absentee landlordism, and also to bring about tenancy reforms in order to implement the policy of land to the tiller. This was done in different stages starting with the Uttar Pradesh Zamindari Abolition and Land Reforms Act, 1951, which abolished all intermediary rights in land, and brought the actual tiller of the soil in direct contact with the state and therefore certain types of land rights were recognised. This Act, to some extent, removed the disincentive for investment in agriculture and provided the necessary precondition for agricultural growth. Uttar Pradesh consolidation of Holdings Act, 1953 was successful to some extent despite all its malpractices, and made investment on land more viable and profitable, which contributed to increased agricultural production (Singh, 1992). This programme was initially undertaken in the agriculturally more progressive Western districts of the state and subsequently extended to the Eastern districts. It is argued that this consolidation of land holdings was among the important factors which contributed to agricultural dynamism in Eastern Uttar Pradesh (e.g. Singh, 1992).

Uttar Pradesh Imposition of Ceilings of Land Holding Act, 1960 was a failure because it provided a fairly liberal ceiling and allowed for a large number of exemptions. As a result of this, the landlords took full advantage of the various loopholes in the Act and various studies (e.g. Joshi, 1996) indicated that a large number of bogus transfers took place defeating the main purpose of the Act. Therefore, despite early enactment of various land reform legislations, the agrarian structure of Uttar Pradesh remained highly unequal, with very high degree of
concentration of land.

The empirical literature on land relations in post independence Uttar Pradesh has centred around the distributional aspects of landholding among the different size classes, and social groups, and the changing nature of tenancy relations in different regions of the country. A number of studies based on primary village level surveys, not only in Uttar Pradesh, but also in different parts of the country, have analysed the nature of tenancy relations and their changing patterns. This discussion mainly focusses on the village level studies based on Uttar Pradesh.

An important aspect of the agrarian structure in Uttar Pradesh is the continuation of the practice of sub-letting of land which was prohibited by the U.P. Zamindair Abolition and Land Reforms Act, 1951, except in certain specific circumstances. It is clear that tenancy continued to be a widespread institution in Uttar Pradesh despite the statutory barriers on it.

Ballabh and Pandey (1999), in their study based on two villages in Eastern Uttar Pradesh, reported a change in the tenancy system during the period 1982 to 1996. In one of the village (Ecauna in Deoria district), the proportion of land under share-cropping fell from 45 per cent in 1982 to 30 per cent in 1996. There was a corresponding increase in the area under owner cultivation. Also, the fixed-rent tenancy which was almost non-existent in 1982 was slowly evolving in the village during the period. The most important reason for this change in tenancy relation according to the authors was the construction of a river embankment which eliminated the occurrence of flood in the region. The authors argued that share-cropping in the village was primarily a device to share the production risk, and therefore, share cropping declined when the risk was reduced to a considerable extent.
because of construction of the embankment. Decline in production risk also contributed to decline in other risk-reducing farming practices like mixed-cropping. In contrast to this, in the another village studied by them in Maharajganj district, which was not exposed to frequent natural calamities, share-cropping remained to be of marginal importance. Authors used evidence from these studies to argue that prevalence of share-cropping was related to the extent of production risks in the area.

Siddiqui (1999), in a study based on two villages in Muzaffarnagar district (Western Uttar Pradesh) observed that with the introduction of new technology, land relations became more complex along with the increasing disparity in the ownership of land and other forms of assets. Historically, the agrarian structure of the region was dominated by peasant-cultivation (Whitecombe, 1971) and the phenomenon of leasing out land by the landowners was almost non-existent. In fact, during the study period (i.e., 1981-1997), the author did not find even a single well-to-do peasant leasing out land. On the contrary, in the village where the new technology started making inroads since the mid-sixties, there was an increasing trend where small peasants were leasing out land to rich peasants, because of their inability to undertake self cultivation due to lack of asset ownership. In the other village, where the new technology was adopted much later only in the early eighties, rich peasants leased out land to small peasants in order to ensure labour supply during the peak season. Village level data collected during the fieldwork suggested that in both the villages, small peasants experienced a decline in their land ownership while the rich peasants experienced an increase. However, the large peasants (those owning more than 15 acres of land according to the classification made by the author) also experienced a decline in landownership (the reason for this was not analysed in the study). Though land leasing was historically a very marginal phenomenon in the region, whatever
little existed prior to the application of new technology was in the form of share-cropping where the cost of inputs and the produce were shared equally. With the advent of new technology, resumption of self cultivation by the rich peasants and leasing out by the small peasants worsened the distribution of operated area. Apart from the usual resource constraint that the poor peasants faced, there was a growing demand for wage labourers in the region which accelerated the process of reverse tenancy. In both the villages the poor peasants were losing out to the rich peasants in terms of undertaking cultivation themselves. The new technology proved to be too costly for the poor peasants and therefore they had to lease out land and became wage labourers in order to earn their livelihood. Thus the new technology alienated the small peasants from the decision making process of crop cultivation and increased the dependence of the poor peasants on the rich peasants through wage employment.

Srivastava (1989) noted that the changing lease arrangements had increased the control of the production process by the landowners and these changes in lease arrangements were taking place chiefly for labour-intensive crops, and that too in the cropping season when non-agricultural employment was low. Srivastava’s study was based on three villages in Uttar Pradesh: one in Western Uttar Pradesh and two in Eastern Uttar Pradesh. Although the rich farmers and the rich peasants were the predominant lessors in the lease market in all the three villages, important inter-village differences did exist. Lessors were much more differentiated in the village in Western Uttar Pradesh compared to the two villages in Eastern Uttar Pradesh. In the Western UP village, a number of poor peasants also leased out land. On the other hand, in the Eastern Uttar Pradesh villages, landlords were the main lessors and constituted an important rentier class. As in the case of lessors, in the case of lessees too, the village in Western Uttar Pradesh was much more differentiated, and the
middle peasants leased in more than 60 per cent of the total leased out land. Workers and poor peasants leased in most of the land in the two Eastern Uttar Pradesh villages, where it was noted that almost 100 per cent of the households belonging to the category of workers and poor peasants leased in land. As regards the period of leasing, 60 per cent of the leased holdings were held under seasonal leasing arrangement in the Western Uttar Pradesh village, while in the Eastern Uttar Pradesh villages, the bulk of leasing arrangement was for a period of 3-5 years. As far as the nature of tenancy was concerned, though crop sharing was predominant in all the three villages, cash-rent was becoming more and more important in the Western Uttar Pradesh village. Also unlike the two villages in Eastern Uttar Pradesh where crop sharing was on a 50-50 basis, the landowners' crop shares in the Western Uttar Pradesh village was as high as 75 per cent of the crop output. In this village the landowners contributed three-fourth of the cost in over 60 per cent of the cases and in fact landlords directly participated in the decision making process regarding material inputs and labour. In 74 per cent of the cases, the landlords took unilateral decisions regarding cropping pattern. Based on this study the author concluded that the reduction in the period of tenancy which was being experienced in the Western Uttar Pradesh village was due to penetration of capitalist development in the area, and this had increased the tenurial insecurity particularly among the poorer classes. The author therefore noted that with the capitalist penetration, there was a shift in the purpose of leasing out - from leasing out as a means of appropriation of rent to leasing out as a means to control the production process, and thereby further capitalistic accumulation. The tenants (belonging to the category of poor peasants) were being converted to piece-rated labourers.

Sharma and Dreze (1998), have discussed certain critical issues related to tenancy,
based on field study in Palanpur in Moradabad district of Western Uttar Pradesh. One of the important observations in the study was the rising incidence of fixed rents (mostly in the form of cash advances) which accounted for 25 per cent of total leased area in 1993 as compared to only 14 per cent in 1983-84. An analysis of this development threw light on some important aspects of land leasing. Until the early 1960s, the rural socio-economic structure in the village consisted of landlords (a large number of them belonging to the Thakur caste), and tenants consisting of poor households which owned little or no land at all. Historically, a very large proportion of households in the village had been involved in tenancy contracts, either as tenants or as landlords. Amongst the various reasons cited for the existence of land leasing, the most important one was the existence of transaction cost (particularly the supervision cost) coupled with the fact that tenants were relatively better endowed with cheap labour. Share tenancy had been the most important leasing agreement compared to the fixed rent and the wealthy landowners could postpone the rental income until after the harvest, and being less risk averse, could share the risk of cultivation.

However, the nature of tenancy relations and the associated factor adjustments in Palanpur underwent drastic changes since the adoption of modern farming practices (from the mid sixties onwards). The new farming practices undoubtedly increased the yield of certain crops but this had taken place along with an increased requirement of non-labour inputs (irrigation and fertilizer in particular). Obviously, the poor households, and in particular the landless ones, were pushed out of lease market because of their inability to provide these costly non-labour inputs which had become an important contributory factor in the production process. The outcome of all this was that it was no longer the case that poor tenants leased in land from rich
landowners. Instead the authors noted a growing convergence in the socio-economic status of the landowners and the tenants. Among other parameters, this convergence was highlighted in terms of similarity in per-capita income of the landowners as a group and tenants as a group. One of the important outcomes of this convergence was that the choice of tenancy partners was not only biased in favour of one’s own caste, but also in favour of one’s own class of landownership. Even a tiny plot of land appeared to be an essential pre-condition for leasing in. It may be recalled that one of the primary reasons for the existence of share-cropping in Palanpur prior to the introduction of mechanized inputs in to agricultural operation was the difference in resource endowment (both labour and non-labour) between the landowner and the tenant. After the introduction of new technology, increasing number of tenancy contracts took place within households having similar resource endowments.

1.6 Gaps in the Literature

It is clear that very few studies have analysed deprivation and inequality in ownership of assets by rural households in India. In India, studies on deprivation and inequality have mainly been based on data on household consumer expenditure.

Studies on asset poverty have been done only for developed countries and have mainly focussed on financial assets. In developing countries like India, financial assets constitute a very small portion of total assets owned by the rural households. Also, given the nature of financial system, it is impossible to collect reliable data on financial assets owned by households. Therefore, developing the concept of asset poverty incorporating physical assets, and empirical estimation of incidence of asset poverty across socio-economic groups assumes importance in the context of study on
asset deprivation.

Secondary data on asset holdings in India mainly come from the decennial All India Debt Investment Surveys (AIDIS) conducted by the National Sample Survey Organisation. While these surveys provide detailed data on asset ownership, they provide limited information on other socio-economic variables. As a result, it is not possible to study disparities across economic classes or the importance of asset holdings in determining the nature of production relations using data from AIDIS. Studies based on AIDIS data have primarily focussed on measuring overall levels of inequality and disparities across social groups (Subramanian and Jayaraj, 2006, Jayadev et al., 2007).

There have been very few studies that have collected and used primary data at the level of the village to study ownership of assets. A primary data based study at the level of a village can examine deprivation and inequality in ownership of assets across economic classes and social groups. Such a study can also be used to analyse the institutional systems by which households access productive assets like land. A village-level study can also throw light on whether and how asset poverty creates barriers for households to participate in different agrarian markets.

1.7 Objectives and Chapter Outline

This thesis attempts to study following issues.

First, level of inequality in ownership of assets in rural Uttar Pradesh and its variation across social groups and economic classes.
Secondly, level of asset poverty in rural Uttar Pradesh and its variation across social groups and economic classes.

Thirdly, regional differences in asset poverty and inequality in ownership of assets.

Fourthly, composition of asset holdings and the distribution of major types of assets across social groups and economic classes. In particular, the thesis examines in detail the distribution of land holdings and disparities in ownership of land.

Fifthly, the thesis looks at how the ownership of assets influence participation of rural households in land tenancy markets.