CHAPTER-3
AGRARIAN STUDIES AND ISSUES IN INDIAN CONTEXT

3.1 A Historical Perspective of Agrarian Reform

India’s modern history is closely and in different ways connected with the battle for ownership and utilisation of agricultural land. That seems natural in a country, where the overwhelming majority of the population lives on the land and from farming and the whole internal and export economy is still largely dependent on the production of this sector. British colonial rule based its fiscal system upon a change of the agrarian structure and of land tenure; slowly a class of ‘large proprietors’ was created. On the other hand, social and later national opposition against colonial rule and its underlings was accompanied by the aggravation of the socio-economic conditions of the masses of impoverished agrarian and landless population, which was caused by worsening of the tenancy situation due to tax-farming, share-cropping, narrowing man-land ratio i.e. more people per unit of land. These poorer rural sections, landless labourers, tenants, sharecroppers, small holders formed an essential part of the mass basis of the Indian National Congress in its struggle first for self-rule and internal autonomy (swaraj), later for full independence. A few leaders advocated an alternative concept for the conservation of the social and power structure that gives first priority to promotion of production and wasteland reclamation as cure for the hunger for land. Whether agrarian structural reform or promotion of production ought to be given priority is a basic issue of India’s development strategy in general and of the strategy for overcoming the slow progress or quasi-stagnation of farm production in particular. In this out drawn struggle for land-titles and land-use the central government under Prime Minister Indira Gandhi took new initiative in the late sixties and early seventies to induce the state government to increase their activity in the promotion of agrarian reform. The central government is only entitled to enact general legislation and directives while the real competence both in legislation and implementation of land-reform lies with the States (Bergmenn, 1984)
3.2 Issues of changing land holding pattern

Agrarian reorganization in India has failed to make any considerable impact on the socio-economic conditions of the working cultivators (Ray, S.K. 2008). The broad highly skewed nature of size distribution of ownership holdings has by and large remained unchanged overtime, notwithstanding the progressively downward shift in the distribution (NSSO). It is the background of the last four decades experience that the need to reformulate the land policy of India should be considered. With increasing pressure on land, the operating land base of many working cultivators is further reduced. Land is divided into small fragments, each owned or leased by cultivators whose objective is subsistence. The size distribution of land holding, cultivation practices and product sharing, operated concertedly to hold down farm income. Overtime, a large number of farms has become disincentive-ridden due to size disability. A substantial portion of such cultivators seek to supplement their farm income by working as hired labours in competition with even poorer landless workers.

Changes in the agrarian structure, viewed through changes in the size distribution of ownership or operational holdings at different points of time, do not give precise idea of the dynamics of the change process. The still photographs of the structure at different points of time depict the combined outcome differently and even countervailing processes are not very helpful in understanding the dynamics of change. The dynamics can be better understood if the movement upward or downward of a representative set of households in different size classes of holdings over a period of time is documented (Dantwala, 1986).

In India, we get a picture that conceals significant differences in the composition of agrarian structure in different States. There is no denying the fact that ownership is very unevenly distributed. ‘It is obvious that even under the new technology, very small or tiny holdings do not become viable’ (Bhalla and Chadha, 1983).

The principal aspect of the agrarian structure is the increase in the number and area under the small and marginal farms. In this context, the issue is being raised whether for the overall deterioration in the structure; the blame could be exclusively
fastened on agricultural policy. Another aspect of the agrarian structure which engaged the attention of the economists for sometimes is the supposed tendency of the agrarian structure in India towards capitalism. So, the factors which go into the shaping of the agrarian structure originating in a variety of sources should be examined. Both the market and non-market forces in the land transaction are here imperfect. In this context, the interesting question arises whether the land market is a more efficient allocator of land than the non-market mechanisms (Deshpande, 1982).

Laxminarayan and Tyagi (1982) made a useful attempt to find the basic features of changing agrarian structure in India at the all India as well as state level on the basis of the data from the various rounds of the NSS and Agricultural Censuses etc. The study brings out that although there does not appear to be a marked change in inequality in the ownership of land as measured by concentration ratio, there is a perceptible decline in area held by large holdings and an increase in area held by small and marginal holdings. In other words, the number of small and marginal holdings as well as that of landless labourers has increased significantly. Though patron-client relationship in its traditional form is slowly cracking up in villages, the basic exploitative structure continues with traditional land owning classes. Moreover, assets held by cultivating households are not evenly distributed in relation to area cultivated by them.

3.3 Tenancy and contractual relations in land and labour

One of the crucial issues in the analysis of changes in agrarian organization is the nature and extent of tenancy relations prevailing in different parts of India and whether changes in tenancy relations are symptomatic of larger changes prevailing in Indian agriculture. Specifically, the issue of tenancy is linked to an exploration of the development of capitalist relations in Indian agriculture. But the links of tenancy with the capitalist development in Indian agriculture has been the subject of an intense debate (Srivastava, 1989). The post–independence agrarian reforms were essentially based on a presupposition of peasant-based agriculture. In the current phase of liberalization, in which a close integration of Indian agriculture is envisaged with the world market and agri-businesses are coming to play a larger role, the legislative
frameworks governing land use, ownership and tenancy are coming under considerable scrutiny (Srivastava, 1989).

Land market in India operates largely through tenancy rather than through outright sale or purchase since ownership of land is considered to be one of the most important sources of security and social status by the cultivators (Bardhan and Rudra, 1978). The literature on the institution of tenancy particularly on the issues pertaining to relative efficiency of different tenurial arrangements has proliferated during the last few decades. Temporary transfer of land takes place through the institution of tenancy which is one of the most important devices to facilitate the adjustment of resources in factor markets where the endowment of resources greatly influences the decisions of cultivators to enter the land-lease market (Johnson, 1950).

A number of empirical studies, based on sample surveys, have examined various aspects of tenancy relations like magnitude, type, relative efficiency of different land tenure systems, and so on. The studies in eastern Indian States during the seventies concluded that tenancy in particular share tenancy, in conjunction with exploitative interlinkages in credit and labor markets acts as a formidable barrier in the introduction of new agricultural technology (Bardhan, 1973; Prasad, 1974; Bharadwaj and Das, 1975). Recent studies for these States have, however, reported qualitative changes in tenancy relations (Chadha and Bhaumik, 1992; Swain, 1999). Likewise studies in agriculturally developed States or regions like Punjab, Haryana and Western Uttar Pradesh, have brought out increasing incidence of self-cultivation, emergence of fixed rent tenancy, participation of medium and large households in the lease market as leasees, etc (Singh, 1989; Bhalla, 1983; Srivastava, 1989; Siddiqui, 1999). It is, however, important to know as to what extent the changes in different aspects of tenancy relations, reported by different field studies, have gained ground at the macro level. The available studies do not answer this question satisfactorily (Sharma, 2000). Against this background, it is very much necessary to know about the incidence of tenancy in terms of mixed holdings, entirely leased-in holdings and leased-in area declined significantly over time and across the States. To what extent the share tenancy has been replaced by fixed rent tenancy is important here. However, the
extent of the participation of marginal and small households in the lease market both as leasees and leaser is also crucial here.

Thus, it is clear that, in India, despite legal restrictions on leasing in most of the States, there is an active land lease market. To this extent, tenancy laws of various States remain largely ineffective. The available data further indicate that the proportion of leased in area increased in most of the States during 1982 to 1992. The regions which have mainly rain fed agriculture follow sharecropping as the major form of lease, as the risk of crop loss gets distributed between the landowner and the tenant, while in the irrigated and developed regions, the system of sharecropping lease is giving way to a system of lease for either fixed cash or fixed produce (Haque, 2000). The forms of tenancy which exist on the ground are not in accordance with the regulatory framework, tenancy is largely unrecorded, and is, also, therefore, under-reported in the various land holding surveys carried out by the National Sample Survey (NSS). Even micro-studies are not always successful in detecting tenancy and it is stated that the magnitude of tenancy revealed is often proportional to the length of the stay of the researchers in the field. Careful fieldwork over a long period of time normally shows a much higher magnitude of tenancy than that brought out by short-period surveys (Srivastava, 2000).

Traditional tenancy relations involve the leasing out of land by large landowners to peasant producers, thereby appropriating their labour surplus as rent. But, with rising capital intensity of production and emergence of economies of scale in agriculture, large capitalist cultivators may lease in land from others, thus also sidestepping ceiling legislation. The phenomenon of large cultivators leasing in land (sometimes from small landowners, through ‘reverse leasing’) has been observed in India since the Eight Survey (1954-55), and has been considered to be quite widespread in some of the north-western and western States (Vyas, 1970; Laxminarayan and Tyagi, 1982). This phenomenon is considered to have accelerated during 1981-82 and 1991-92, with both the percentage of operated area leased-in and proportion of tenant holdings increasing significantly in the large holding size category.
It is generally taken for granted that farmers who take land on lease are the rural poor and those who lease out land are the rural rich. This presumption is not always reflected in the actual situation which is prevailing in land lease markets. With the development of different types of high yielding technologies which require larger capital resources, and tiny land holders moving out to take up wage labour in agricultural and non-agricultural sectors, the situation is changing. One comes across a large number of small and marginal farmers who give land on lease and take on lease. Similarly more and more big land owners are not only leasing out land but also are taking land on lease. The new technology has given ample scope to large landowners to lease-in land from small holdings with a view to enhancing their income. Bardhan (1976) provides a convincing answer to the question that why large land owners take land on lease. According to him, the larger are the capital requirements of cultivation (either in the form of fixed capital like bullocks, tractors, pumps and tube wells or in the form of circulating capital for purchasing current inputs like fertilizer), the big tenant has decisive advantage over the small in the context of highly imperfect credit market.

The effect of different factors on the magnitude of tenancy was studied for the States of eastern India by Sharma (2000) using regression analysis with proportion of leased-in area as dependent variable and factors like poverty, landlessness, number of bullocks, household size, proportion of irrigated area, fertilizer consumption, extent of mechanization , rural non-farm employment , wages, etc., as independent variables. The results show that factors like poverty, bullock, household size, landlessness, etc., did not affect the proportion of leased–in area; the regression coefficients associated with these variables neither had expected signs nor were statistically significant. In comparison, the factors associated with new agricultural technology like proportion of irrigated area, fertilizer consumption and extent of mechanization affected the proportion of leased-in area positively and significantly .Regarding his findings are that the effect of the proportion of irrigated area had a positive and significant effect on the proportion of operated area leased-in under share tenancy. The effect of level of wages and rural non-farm employment was negative but statistically insignificant.
Likewise the factors like irrigation, fertilizer consumption and the extent of mechanization had a positive and significant effect in inducing the households of higher farm size category to leased-in land. The regression coefficients associated with these variables had expected signs and were statistically significant as well.

3.4 Agriculture and its policy perspective

Indian agriculture has undergone some major structural changes in recent years and this has enhanced the market induced vulnerability of a section of the rural population (Vyas, 1979). Over a period of time, Indian agriculture has been progressively acquiring the ‘small farm’ character. By 1995-96, nearly 36 percent of the cultivated area was operated by small and marginal farmers, an increase from the 29 percent in 1985-86. However, the forces which shape the agrarian structure in so far as they affect growth and equity may be demographic pressure, market process involving purchase and sale of land, land reform, supply system of credit and other inputs, marketing and other extension service and technology particularly in regards to its capital and its intensity (Vyas, 1979).

In Indian literature of agricultural economics, the farm size-productivity relationship debate is one of the most important debates. The debate on this inverse farm size-productivity relationship, which started with the publication of Sen’s (1962) paper in The Economic Weekly, though concluded in the mid-seventies, continues to attract the attention of scholars even today. Most of the studies during the first phase of the debate (1960-75) were based on the pooled data emanating from the Farm Management Survey Reports (FMSR). During this phase, a majority of the scholars after analyzing pooled or aggregate date from FMSR regarded this inverse farm size-productivity relationship as a ‘stylized fact’ and more or less a universal phenomenon. When the debate concluded in the mid-seventies, there was a near consensus among scholars that small farms are more productive as compared to their large counterparts (Sharma and Sharma; 2000). In fact, the impact of the debate was so pervasive that Michael Todaro observed: “Evidence on a wide range of third world countries ............... clearly demonstrates that small farmers are more efficient producers of most agricultural commodities” (Todaro, 1981).
Likewise, while commenting on the policy implications of the inverse farm size-productivity relationship, Berry and Cline (1979) remarked:

“The central policy implications of the analysis are that land redistribution into the family farms (assuming it to be small) is an attractive policy instrument for raising production and improving rural employment and equality of income distribution”.

The widespread empirical evidence on this inverse farm size-productivity relationship provided theoretical and logical support to the numerous land reform measures and small farm bias in development strategy in India and other developing countries.

A number of explanations have been put forward to explain the inverse farm size-productivity relationship. These can be classified into three categories: Firstly, explanations that attribute higher productivity on the small farms to the use of better quality inputs, for example, higher fertility on the small farms, superior and better techniques of production used by these farms, high management efficiency, higher impact of indivisible factors of production on the small farms, the effect of fragmentation on the small farms and disincentive of tenancy, absentee landlordship etc. Secondly, the explanations which invoke the intensity of input use on the small farms like predominance of family labour which is cheaper on the small farms, more intensive use of labour, capital and current inputs on such farms, higher intensity of irrigation, the dominance of high value and more productive crops in the cropping pattern and the feedback of higher earnings on the production of labour on the small farms. Thirdly, a class based political economy explanation of inverse farm size-productivity relationship had also been advanced by some scholars (Patnaik, 1987; Bharadwaj; 1974)

Of course, there were a few others who argued that inverse relationship couldn’t be considered universally valid (Rudra, 1982; Bhardwaj, 1974). The second phase debate on the farm size-productivity commenced around the eighties when the scholars increasingly started questioning the validity of inverse relationship either analyzing the old data set from FMSR using more appropriate statistical tools or by incorporating some new variables like land quality, etc. or by using more recent data
set. The basic argument of these studies is that with the spread of new agricultural technology, the inverse relationship has either weakened or even has got reversed. A study by Chadha (1978), using disaggregated data for 61 villagers from different parts of Punjab, concluded that in the central and south district, which had come under the spell of Green Revolution, the inverse relationship had disappeared.

From the foregoing discussions, the conclusions were a mixed lot. While some scholars found inverse relationship to be true, some other observed no relationship between farm size and yield, inputs used and cropping intensity (Rao, 1967). In brief, when the debate concluded in the mid-seventies, there was a broad consensus among scholars that the small farm is more productive, some dissensions and disagreements notwithstanding.

So far as the productivity and adoption of technology and tenurial status of farmers are concerned, a study related to Punjab, Tamil Nadu and Maharashtra by Mukherjee (1970) found no significant difference in the rate of adoption between the owners and the tenants. Similarly findings of uniform adoption by tenants and owners were also confirmed by Muhiah (1971) based on a study for Tamil Nadu and Mandal and Ghosh (1976) based on sample selected from West Bengal, Bihar and Orissa. But these findings regarding adoption and tenurial status of farmers contradict those of Parthasarathy and Prasad (1978) related to farmers in Andhra Pradesh. It was observed that the ‘association between tenure and adoption was significant’.

Bharadwaj (1974), using the evidence from the State of Maharashtra, examined the relationship between the levels of tenancy and input use and output produced per unit of land, and came to the conclusion that ‘with increasing levels of tenancy output per acre showed a tendency to decline and at a lower levels of tenancy inputs were applied relatively more intensively’.

Agriculture being a biological operation and on-the–farm inputs being divisible, there is no evidence of significant economies of scale. Moreover, small farmers are better placed on account of adequate availability of family labour and closer supervision of farm operations. The experience of Green Revolution in the country has demonstrated that given the access to technology, inputs and credit, small farmers can
fully participate in growth by adopting new technology. This experience underlines the need for public investment in agricultural research to evolve land-saving technologies and activities, adequate provision of extension services and institutional credit for small farmers to meet the growing requirements of an input-intensive agriculture. However, small farmers and indeed farmers in general, do face problems in marketing their produce, especially in the context of diversification of agriculture. Despite a steep decline in the contribution of agriculture to GDP, the labour force dependent on agriculture is still quite high, resulting in an increase in rural-urban differential in labour productivity and incomes, while the growth of rural non-farm enterprises alone provides an ultimate solution to this problem.

During the first fifteen years of planning (i.e. from 1951 to 1965) institutional reforms of agriculture, styled as the Integrated Rural Development Approach, constituted the mainstay of India's agricultural policy. This included encouragement of co-operative farming, community development programmes and land reform. For several reasons, including the failure of co-operative farming to take place, growing scarcity of food, etc. there was a major change in India’s agricultural policy in the mid-1960s from the Integrated Rural Development Approach to a Technology Oriented Agricultural Production Approach. The new strategy emphasised the application of modern science and technology to agriculture supported by substantial investment in modern inputs, and price incentives for farmers to adopt them. Thus the main strand of the strategy of agricultural development in India since the mid-1960s is a superior agricultural technology based on modern scientific research (Bezbaruah, 1994). This new strategy of agricultural development is based on some newly developed crop varieties generally known as the High yielding Varieties (HYVs). As their name suggests, the new varieties are capable of giving yields much higher than those of the traditional varieties, especially when they are used in combination with a number of complementary inputs, such as fertilizers and water. In raising crop-yields per unit of land, and in making it possible to raise cropping intensity of land, HYV seed-fertilizer-water package has the same effect on agricultural production as that of an increase in the land resources. This land augmenting character of the new technology makes it
very appropriate for Indian conditions, where cultivable land is becoming increasingly scarce with the continued rapid population growth (Bezbaruah, 1994).

Since the beginning of the 1990s, Indian economy has entered in a new phase of deregulation, liberalization, privatisation and globalisation. These policy changes have important implications for agriculture. There are three important directions in which reforms in agricultural sector have been initiated. In the first place, restriction on the movement of food grains from one region to other has been removed. An all-India market in agriculture products has emerged. Secondly, agricultural trade policy is liberalised, and exports are being encouraged. Indian agriculture is slowly but progressively getting integrated with global economy. Thirdly, far reaching reforms have been introduced in the credit delivery system. At the same time important productive and supportive measures e.g. rural poverty alleviation programmes, agricultural price support policies, etc. have continued. Indian agriculture has responded to these measures in a positive manner.

3.5 Agrarian studies in Assam

The economy of Assam is predominantly agrarian and hence agrarian issues constitute the core of the economic development of Assam. Agriculture of Assam has been extensively studied by many scholars, but these studies have not dealt some aspects of the agrarian structure and relations and its impact on agricultural productivity. Some of the studies relating to the agrarian structure of Assam are as follows.

Dutta (1968) has studied the land problems and the land reform measures enacted in Assam since 1947. He describes the historical background to land systems in the State beginning with the annexation of Assam by the British and lists the several land tenures then existing. He was of the view that the fragmentation of land holdings stood as a serious obstacle to agricultural development and fuller utilization of land. The importance of consolidation of holding was realized in India long ago but, unfortunately no measure was taken in Assam for consolidation of holdings and as a result the process of fragmentation was going on at a rapid pace throughout the State. The agrarian structure of Assam has developed many defects which are obstacles to
the improvement of agricultural efficiency as well as economic lot of the farmers. In the study, land reform measures are expected to create conditions for evolving as speedily as possible an agrarian economy with high level of efficiency and productivity and to eliminate all elements of exploitation and social injustice within the agrarian system.

Bezbaruah (1994) has studied the performance of agriculture in Assam in the context of the technological transformation of agriculture in the four agro climatic zones of the Brahmaputra valley. According to Bezbaruah, the extent of adoption of the new agricultural technology differs from farmer to farmer depending on the socio-economic and physical conditions of farming. His study clearly demonstrates that the farmers in Assam in general are not averse to changes and on the contrary, they are willing to innovate and experiment. The overall agricultural productivity in the State has not improved very much despite the widespread adoption of HYVs by farmers and is owing to a number of constraints.

Dutta (2003) in his study on sharecropping compiled most of the theories and then applied them with real world evidence from Karimganj district of Assam. In his study, a mixed pattern of results is observed favouring the proposition that labour is over-used and fertilizer is under used by both tenants and owners. The belief that resource use efficiency of tenant would be less optimal than that of owner cultivator is not proved conclusively. The level of both labour and fertilizer use, however, is found higher for owner cultivator.

Agrarian institution of tenancy has been approached from different perspectives by different schools of thought both theoretically as well as empirically with wide variability in conclusions and policy prescriptions. In this backdrop, Kuri (2004) made an in-depth study on the tenancy relations in backward agriculture with special reference to upper Assam. Kuri has analyzed the relative productive efficiency of sharecropping vis-à-vis owner cultivation using field survey from the selected villages of Assam. The empirical evidence and the subsequent economic reasoning suggest that the Marshallian and related disincentive effects of sharecropping are of limited importance in the study area.
Interesting as the findings of such studies are, no study could be found to have gone into the issue of productivity in relation to the pattern of land holdings across the size-class distribution of both ownership holdings and operational holdings. In view of this conceived gap in research, a study on the agrarian structure and relations in Assam is proposed where in the prime focus will be on the above issue. Given the theoretical background and debates and empirical findings on agrarian structure and relations and its prevalence in various forms and transformations in the stagnating agriculture in Assam, a study on the proposed area can be both theoretically interesting and relevant for practical policy making. The existing agrarian structure and its relations will provide an opportunity to match the grassroots reality with theoretical constructs and the expected findings can provide inputs for policy formulation for more efficient utilization of the scarce resources of agricultural land in Assam and its realizable productivity.

3.6 Summing Up

Modern study of agrarian structure and relations is one area where theoretical and empirical works have blended extremely well. In response to the theoretical research of the eighties began a second round of empirical research which was now more focused because it had a theoretical base which the seventies did not have. The second wave of empirical research has given up plenty of micro insights into institutions and more of agrarian economic relations. A relatively low land-man ratio, unequal distribution of land ownership, a high degree of subdivision and fragmentation of holdings, predominance of small farms operated mostly by owner cultivators, the limited role of tenancy and high dependence on wage labour for agricultural operations are the distinguishing characteristics of the Indian agrarian economy. The broad, highly skewed nature of size distribution of ownership holdings has, by and large, remains unchanged over a period of four decades, notwithstanding the progressively downward shift in the distribution. The supposed tendency of agrarian structure towards capitalism is another aspect of agrarian structure. Land market in India operates largely through tenancy rather than through outright sale or purchase. Despite legal restrictions on leasing in most of the states, there is an active
land lease market. To this extent, tenancy laws of various States remain largely ineffective. The regions which have mainly rain fed agriculture follow sharecropping as the major form of lease. The studies in eastern Indian States during the seventies concluded that share tenancy in conjunction with exploitative interlinkages in credit and labour markets acts as a formidable barrier in the introduction of new agricultural technology. In agriculturally developed States, agrarian changes have brought out increasing incidence of self-cultivation, emergence of fixed rent tenancy, participation of medium and large holders in the land lease market as lessees. The ‘reverse tenancy’ with rising capital intensity of production and economies of scale in agriculture has been observed since 1954-55 with sidestepping the tenancy legislations. Some studies have examined the relationship between the levels of tenancy and input use and output produced per unit of land and have come to the conclusion that with increasing levels of tenancy output per acre showed a tendency to decline and at a lower levels of tenancy inputs were applied relatively more intensively. There was a major change in India’s agricultural policy in the mid-1960s from the integrated rural development approach to a technology oriented agricultural production approach. The new technology having the effect as that of land-augmenting character emphasised the application of modern science and technology to agriculture supported by substantial investment in modern inputs and price incentives for farmers which is appropriate for the land scarce agriculture with increasing population pressure. Changes in the agrarian structure, viewed through changes in the size distribution of ownership or operational holdings at different points of time, do not give precise idea of the dynamics of the change process. The still photographs of the structure at different points of time depict the combined outcome differently and even countervailing processes are not very helpful in understanding the dynamics of change. This can be better understood if a representative set of households in different size classes of holdings over a period of time is documented.