SECTION-I

Chapter-I

CONCEPTUAL FRAMEWORK
AND METHODOLOGY

Conceptual Framework

The Research Design

Source and Techniques for Data Collection
This chapter provides the conceptual framework and puts forth the methodology for the present study.

**Conceptual Framework**

Agriculture is one of the prime components of economy in developing countries. These countries are characterised by a very small non-agricultural sector. They are largely concerned with processing of agricultural produce and meeting the requirements of agricultural inputs as well as people engaged in agriculture. Development literature frequently emphasises the importance of a strong agricultural base as the essentially foundation for economic progress (Schultz, 1964; Weitz, 1971; Mellor, 1976; Independent Commission on International Development Issues, 1980), particularly in less-developed countries where it is usually called upon to play a fundamental role in the over-all socio-economic development process.

It is argued that solution of food, employment and poverty problems of India mainly lies in extension, intensification, commercialisation and diversification of agriculture. Kuznets (1960, pp.59-60) made an important exposition that there is no case of successful development of a major country in which a rise in agricultural productivity did not precede or accompany industrial
development. According to him the contribution of a sector to economic development is made in three ways: (a) product contribution (b) factor contribution (c) market contribution.

In all these three ways, agriculture helps other sectors in the economy to grow. Thus, if agriculture itself grows it makes a product contribution, if trades with 'others' it makes a market contribution, if it transfers resources to other sectors, it makes a factor contribution. The market contribution of agriculture in particular creates linkages both forward and backward between them.

Emphasising the role of agriculture in development process Byres (1972) indicated that agriculture must perform two crucial functions. On the one hand it must generate and release in sufficient quantity and on reasonable terms the surplus that is necessary if growth is to take place outside the agriculture and on the other, it must contribute to the creation of home market to accelerate the process of household earnings.

Agriculture remained the bottom base of economy and society of India since the dawn of human habitation. This rooted the people in the ground what Raza (1981, p.86) called as first step in any meaningful cultural advancement. The role of agriculture in development has often been a debatable question in the form of "agriculture versus industry" priority. Some scholars opine that any
kind of development was preceded by a major change in agriculture sector as well as rise in its production and productivity while others argue that their future rests on rapid industrialisation. The recent experience of relatively developed Indian states of Punjab and Haryana throws some light on this issue. In these states agricultural development based on the irrigation-fertilizers high yielding variety seeds has been the factor behind impressive changes in economy and society. Indeed both agriculture and industry have to function as complementary to each other. In the earlier stages a greater stress may be placed on agriculture and industry should get priority as soon as some solid advancement in agriculture has been made.

To visualise the process of agricultural development, some scholars have reflected on the meaning of agricultural development. Most of the studies dealing with agricultural development implicitly considered it synonymous with the increase of agricultural productivity (Nath, 1969; Sharma, 1971; Shenoi, 1975; Grigg, 1982; Gupta, 1982; Bhalla & Tyagi, 1989). Raza (1978) took a more comprehensive view of agricultural development. He visualised agricultural development in terms of agricultural productivity, production conditions, agrarian relations and agricultural change (Kundu and Raza, 1982, pp.38-76).
In a comparative study of regional disparities in agricultural development within Punjab, Haryana and Bihar states, Gupta (1982) discussed three factors (i) Productivity (ii) Technology (iii) Institutional factors. The study revealed two important dimensions pertaining to agricultural development. First, in the extension of regional disparities in agricultural development technological factor was more crucial than the institutional dimension and second, dimensional imbalances were more pronounced in underdeveloped states of Bihar than in relatively developed states of Punjab & Haryana.

Krishan (1980) attempted a more comprehensive and penetrating probe into the concept of agricultural development. He made a clear distinction between crop productivity and agricultural development. He brought forth the other important dimensions of agricultural development like, agricultural diversification, commercialisation of agriculture, degree of equity in farm income, nature of agrarian relations and maintenance of ecological balance. He envisaged agricultural development as "quality of agricultural system of a region in terms of productivity, diversification, and commercialisation consistent with a desired state of agrarian relations and ecological balance."
Agricultural development thus is a multi-dimensional concept of which productivity or agricultural output is the most important dimension. The other important aspects are like improvement in agricultural conditions of the working population.

The technology intensive Green Revolution initially remained confined to about one third of the country due to infrastructural and institutional constraints. The chief benefitted states were of Punjab, Haryana, western Uttar Pradesh and coastal Andhra Pradesh. It has affected the different regions/states differently by virtue of their varied resource endowment, rate of adoption and socio-economic infrastructure. These states/persons who were endowed with the requisite resources, made a rapid growth, those who lacked these resources could not join this process of growth. Imbalances/disparities have cropped up as a necessary outcome of induced mechanisation and irrigation based HYV technology of agricultural production.

Thus Green Revolution brought in its trail widespread disenchantment caused by widening disparities in production and income between different regions and sections of people in India which is perhaps the most widely debated issue.

So far as the nature of disparities in the levels of agricultural output (or income) per capita and yield per hectare is concerned, the studies by Sen (1969), Krishnaji (1975), Prasad (1979), Mishra (1985)
show as to how regional variations in the spurt of new technology and in the extent of irrigated area cause such variations in the level and rates of growth in agricultural output and yield per hectare.

A study by Bhalla & Alagh (1979) has revealed that Punjab & Haryana have recorded a remarkable growth of output and yield per hectare but the states like Orissa, Maharashtra & Andhra Pradesh are decelerating with negative growth rates. According to Krishna Bhardwaj (1982), its benefits appear to have accrued to the districts within the states where there was either good rainfall or where irrigation already existed or was created by private investment.

It is important to underline here that during 1980-83 to 1992-95 at all-India level agricultural growth associated with high growth of yield permeated to all the regions in India. This period however saw a slight slow down of growth in Punjab but a significant acceleration in the growth rate in Haryana and Uttar Pradesh. The most significant development was a notable acceleration in agriculture output and growth of yield in the eastern region specially, creditable was the performance of West Bengal (Bhalla and Singh, 1997). Thus agricultural growth became regionally much more diversified after eighties.
Apart from production and yield doubts began to be raised that only a section of agricultural population derived maximum advantage and bulk of the agrarian population suffered. These great imbalances created wide gaps between the employer (landlord) and the employee (labourer). Oommen (1984) called this category as rural poor. Contradicting this belief, some studies dealing with the benefits of green revolution, supported the view that the agricultural development of 1960s was an overall development of agrarian sector. All the agrarian classes were benefitted in the phase of green revolution (Bhalla, 1974; Bhalla, 1981; Pandey et al., 1983; Chadha, 1984).

The impact of agricultural development by analysing the income, employment, wage levels and consumption pattern of the landless agricultural labour households in Haryana was studied in relation to the changing agrarian structure (Bhalla, 1974). Bhalla argued that in the real sense, the living conditions of the agricultural labourers improved due to increase in the real wages. The new technology had undoubtedly improved the inherent bargaining position of agricultural labourers in the green revolution area of Haryana. In practice also there was ample evidence that they were individually more self-assertive than they used to be, but given those facts viz. that they could earn much more than they did, that their standard of living in real terms had also improved, that even casual
labourer enjoy much greater continuity of employment than before and that large members have shifted from casual labourer to permanent labour status (Bhalla, 1976).

While analysing the growth rate in Haryana’s agriculture and how far this process helped the agricultural labourers Sheila Bhalla (1981) admits that it is not possible to compare the condition of the landless agricultural labourers due to non-availability of time series data. But the only feasible comparison could be made on a regional basis between the living conditions of the landless agricultural labourers in the region where the green revolution is more advanced with those that are still lagging behind. It was argued that in many parts of Haryana the agricultural labourers are better off than the marginal cultivators who operate less than 5 acres of land. The marginal farmers were working hard to supplement their income through non farm sources such as dairying, poultry, farming etc. (Bhalla and Chadha, 1983).

The comparison with pre-green revolution period revealed that real wages of landless labour in Punjab have recorded a rise because in the area of green revolution the bargaining power of landless labourers has improved as a consequence of greater demand for hired labour. The combination of HYV seeds use and higher cropping intensity increase the use of hired labour in general (Bhalla, 1979). While
studying landless and the poor agricultural labourers in the green revolution region of Punjab (Chadha, 1986) concludes that in terms of real wages and man-days employed, there is improvement due to green revolution. Further it is argued that in quite a few places, sharing on new inputs between landowners and share croppers has become popular resulting in the sharing of benefits from new technology by landowners as well as tenants (Rao, 1975).

While adopting the green revolution as a policy it was hoped that with improved farm production, not only a lasting solution would be found for the perpetual problems of rural poverty and hunger but also it would generate a new resource base - a launching pad for rural industrialisation that would create new employment opportunities and would improve the quality of life at the grass-root in an appreciable manner (Dhanagare, 1987).

Haryana is one of those few states where new agricultural technology has spread more widely than others and therefore the experience of its farmers should provide us a better picture of, how poverty among farmers changes with the spread of new farming technology. There has been an increase in the level of poverty among farmers during seventies. After 1979-80 poverty shows a downward trend. Incidence of poverty is the highest among small farmers followed by medium farmers. Poverty does not prevail among big
farmers. Poverty is inversely related to the level of irrigation in the region. For instance poverty is found to prevail most in low irrigated zone and least in well irrigated zone. This implies that an improvement in the irrigation facilities is likely to reduce poverty among farmers (Paul, 1989). It is important to note here that Haryana and Punjab are the states wherein the incidence of rural poverty is found to be lowest in rural India.

Further with the advent of the new technology the scope for non-agricultural employment in the village has widened as shops are set up for selling fertilizers, seeds, insecticides and farm equipment for repairing machinery and for various processing activities.

On the other hand, some social scientists argue that initially the green revolution measures were considered to be 'scale-neutral'. It was therefore, expected that whether it is HYV seeds, pesticides, insecticides and fertilizers, mechanization of farm operation and other farm subsides, small landholders would benefit as much as larger land owners would, if not more. The agricultural development bureaucracy working at grass roots, however, has had different perception. Their understanding rarely confirmed to the notion of scale neutrality and their actions almost always reflected a pro-rich policy of rural development (Ahlawat, 1988). The new technology strengthened the
politically dominant rich land-owning families and bred a sense of discontent and helplessness among the agricultural labourers and marginal peasants or the rural poor (Oommen, 1984).

Frankel (1971) while analysing the effects of green revolution, pointed out that the real wages of agricultural labourers have declined. Landed peasantry and big land-owners gained the fruits of agricultural development whereas the landless labourers suffered the most. This created a gulf between the two. He further showed that the phenomena of agricultural development was limited to few pockets in India and to call it as the all-India pattern of agricultural development would be a misnomer. Deva (1980) has critically investigated how the national seed project as a part of green revolution measure is pro-rich. Deva’s conclusion suggests that the agricultural development through the application of new scientific knowledge was just a euphemism for using the public sector to promote the private seed industry in which the benefit of the new scientific knowledge went invariably to the upper caste rural rich farmers. It seldom reached poor tenants and low caste farmers who needed it most.

In the wake of green revolution in Punjab farmers gained more than labourers in terms of income, overall literacy rate and living standards. The farm labourers were found conscious of such disparities and the resultant exploitation. The system of inequality
prevailing at the pre-green revolution time was socially legitimised from the Jajmani system. But the newly emerged economic and political situation changed their relation from obligatory to instrumental ones. In instrumental relations, the occurrence of such tension between the employee and employer was natural. In green revolution the increase in yield and profitability from farming would affect owner-tenant relations: the farmer would like to create conditions so as to evacuate the tenants and resume land for cultivations leading to the displacement in employment of the tenants and swelling the rank of labourers. While landowners would be substantially benefitted from the green revolution, tenants would rather suffer (Dak, 1982).

Comparing the income distribution and consumption units of both rural rich peasants and agricultural labour household in 1955 and 1970, Epstein had concluded that rich have grown more affluent and poor have become poorer. Agricultural real wages had declined mainly because of increase in the number of labour households and steady price rise resulting in rises in cost of living. Wages, however have lagged behind (Epstein, 1972; 1978).

While looking at regional variations in agrarian social structure from 1968 to 1986, Ahlawat (1989) pointed out that the trickle down effect of green revolution was partially visible in
Haryana regarding the improved daily wages for agricultural labour which increased by 88 percent. However, this so-called gain was totally offset by the rise in prices (by about 93 percent over the same period) in spite of substantial increase in agricultural production. Increasing price was one of the factors nullifying the effect of increased wages (Gough, 1971). Mencher (1980) examined the condition of agricultural labourers in Kerala and found that although the wage rate is high, the number of days for which employment is available for the agricultural labourers is small.

Some scholars, who have examined the impact of the green revolution on the weaker sections, have argued somewhat optimistically, that conditions of rural poor particularly agricultural labour do not necessarily deteriorate. On the contrary, general prosperity ushered in by modernisation of agriculture in the green revolution areas, percolates to the grass roots in the rural society. Where this percolation process is asserted by the rich through manipulation and mechanisation, the agricultural labourers there tend to get better organised and become more militant to fight and thereby stand to benefit through higher wages and improved working condition. On the other hand, the growing capitalist penetration of countryside the process of depeasantrization has been accelerated and
consequently large number of small and marginal farmer or poor peasants have been pushed into the rank of landless labourers (Oommen, 1971, 1975).

The process of proletarisation, the improvement that the green revolution is expected to bring into the condition of wage labourers appears to be a distant mirage. At least the position of the rural poor, particularly agriculture labour, as a class is not likely to be altered substantially vis-a-vis rich farmers who virtually monopolise economic resources and control credit institutions in the countryside. Mechanization of farm operation appears to brighten the employment opportunities and wages in green revolution areas, but migration of workers from less favoured areas such as Bihar, eastern Uttar Pradesh, Orissa, Rajasthan have tended to depress the bargaining power as well as wages (Palmer, 1976; Dhanagare, 1984; Bagchi, 1982).

Chandan (1979) analysed aspects of green revolution in Punjab and found that farm mechanisation has led to unemployment. The introduction of mechanised threshers, and in some area, of combine harvesters, tended to remove the family terms of harvest labour from the scene. The substitution of chemical fertilizers for manure and the introduction of weedicides tended to narrow the range of operation formely available to women. The new operation involving the use of machinery such as the spraying of pesticides,
were allocated to male workers. There development tended to depress women's state directly, in a situation of virtually labour requirement. This labour saving mechanisation gave an unambiguous advantage to medium and large scale operation holding (Bhalla, 1989).

Mechanisation, particularly tractorisation, being highly indivisible helped big farmers (surplus producers) and displaced labour and bullock power (Nigam, 1991) but so far, double cropping resulting from adoption of modern technology has created more employment opportunities. Threshing wheat by mechanical threshers is also generally undertaken by hired labour. Mostly victims of threshers accidents were found to be hired labourers, resulting in loss of limbs or even life in recent years (Singh, 1990).

Mechanisation in Haryana has lightened the workload of men, for example, the use of tractor which has replaced the plough and the oxen. But the women continue to load the tractor, as she had once loaded the cart significantly and thus her workload has not been reduced due to technology (Chowdhary, 1993). Overall the impact of mechanisation on the composition of labour depends on the type of mechanisation. Introduction of combine harvester however, is likely to have a major displacing effect for both females and male casual labour (Agarwal, 1985).
All types of irrigation and bio-chemical inputs are major contributors to an increase in labour input in total crop production mainly through increase in cropping intensity and cropping pattern shifts. The proposition of hired labour in total labour tends to increase and that of family labour declines with the advent of the new technology (Basant, 1987).

Attempts to change the structure of the economy through land reforms have been half-hearted and measures to increase production through ‘institutional neutral’ technology have been of special benefit to the richer sections of the society (Agarwal, 1990).

Changes which are impelled by the growing rationalisation of the productive system take the form of shift from subsistence tenancy by poor peasants to business tenancy or self-cultivation based on hired labour by the erstwhile landlords. These changes cause widening of disparities between the poor and large farm sector. They also result in ‘immiserisation’, if not, ‘depeasantrisation’ of small and marginal farmers in many areas. Joshi pointed out that the breakdown of the customary arrangements between the rich and the poor, the substitution of compulsions of commodity goods by motivation of private gain, and the growing reorganisation of the land system on capitalist principles — all have contributed in recent years towards the obsolescence of the model of ‘shared poverty’. Mass poverty is
thus the consequences of the very process of structural changes in agriculture which destabilises the small peasant structure on a vast scale (Joshi, 1982).

One of the central questions during the post green revolution has been the regional differences in agricultural development on account of resource endowments and varying levels of investments in rural infrastructure in India (Alagh, 1979).

In the North-West Sociological Conference at Jammu University in October 2000 some salient features of the aftermath of green revolution had emerged as:

(i) The economic conditions of vast majority of farmers has deteriorated and these cannot be improved with the existing cropping pattern and the technology which has already been exploited to 73 percent potential.

(ii) The family income of about 48 percent of the farmers from crops plus dairying is lower than the income of the lowest pay scale for unskilled workers in the state.

(iii) About 23 percent of the agrarian population is below the poverty line.

(iv) The water table in northern Haryana mainly in Ambala, Kurukshetra, Karnal is going down at the rate of 0.20 cm per annum.
On the other hand water table has risen in the canal irrigated areas resulting in the rise of salinity and water logging in around 19000 hectares area of the state.

The agrarian crisis in Punjab, Haryana further suggests that rising debt due to high farm inputs and low returns, is leading to steady rise in suicide among small and marginal farmers (Ahlawat, 1998).

Another important agrarian transition during the post-green revolution is the fundamental change in the social relations of production leading to freeing of agricultural labour from all kinds of patronage and institutionalized dependency relations.

Some scholars did argue that such a change was under way in Indian agriculture, particularly in the regions where green revolution had been a success. Breman, for example, reported that in south Gujarat the traditional dependency and bondage relations were undergoing a fundamental change (Breman, 1974). In a later study he again argued that the inter-generational bondages characterised by extra economic coercion no more existed in south Gujarat and the existing system of attached labour was not similarly an unfree relation (Breman, 1985). Contributions were made on production relations in Haryana by Bhalla (1976) and Bhaduri (1984).
Bardhan (1984) contended that the feudal institution of bonded labour marked by hereditary and long-term indebtedness entering continuous and exclusive work for the creditor employer and some form of extra-economic coercion is very different from the present day forms of attached labour which is 'voluntaristic' rather than a coercive arrangement. The modernization of 'agricultural technology' Bardhan reported, 'had in fact increased the demand for attached labourers as they were seen to be useful in overseeing the work of casual labourers. He not only finds attached labour functional for the modern capitalist forms of agriculture but also claims that attached labourers enjoyed superior status compared to their counterpart casual daily wagers. Brass (1990) on the other hand, has contested the claims made by earlier scholars and has strongly argued against their theoretical formulations that try to provide positive conceptualisations of attached labour and consequently eliminate the elements of unfreedom in the relationship. He observed that initially the labour may willingly offer himself for work it does not follow that the production relations will be correspondingly free in terms of the worker's capacity to re-enter the labour market.

Jodhka (1994) studied three villages of a developed district (Karnal) of Haryana. He argues that attached labour functioned more as a labour mortgage system where the labourer, in some sense had to
give up his freedom in order to avail an interest free credit. Though it is voluntary arrangement in the sense that labourer chooses to enter the relationship, it cannot be compared with employment in the organised sector as has been argued by Rudra (1987). Jodhka says that the labourers is compelled to choose an alternative that he not only dislikes but also finds economically less rewarding. And the source of his compulsion lies in his weak economic position. Hence, the indebtedness and consequent compulsion to continue working as attached labourer does imply that there are elements of dependency and unfreedom in relationship.

He further suggested that it should not be considered that nothing has changed as far as dependency relations are concerned. There has not been a formal change in the system of attached labour, substantially also the relationship has changed considerably. Development of capitalism in agriculture has been accompanied by a near total erosion of the ideology of patronage and loyalty. This also has eroded the unquestioned power of the dominant castes and landlords in the rural Haryana.

For nearly three decades now the green revolution measures have been experimented with by the states in different parts of India. Not only that, in the name of spreading the green revolution technology, even the transnationals have been permitted to operate in
rural areas through the official cover (Bagchi, 1982). However, in most parts, the green revolution has failed to raise the incomes of rural poor appreciably and to contribute substantially to their affective purchasing power. On the contrary, in many parts, the real earnings of agricultural labourers and poor peasants have been lower at the beginning of the 1970’s than in 1960-61 (I.L.O. 1977).

The main thrust of the green revolution has been towards productivity and growth. The policy makers were concerned primarily with augmenting per acre yield. The assumption underlying the planners’ priorities was that growth in itself would suffice since it would slowly have percolation effects and would in turn help in resolving problems of unemployment and poverty in rural India.

It can be concluded that through the process of agricultural development the state of Haryana has experienced transformation in its rural areas in the past decades due to increased irrigation, HYV seeds, fertilizers, and technological innovations. The green revolution package was able to increase the growth rate of output and per capita income, albeit differentially. It has also been noticed that a 1.00 percent point increase in the agricultural growth rate is associated with increase in industrial growth of 2.37 percent point and in the state income of 1.49 percent point. It follows that agricultural development
is basic to the overall process of development. The present study is an
endeavour to study the changes brought in Haryana’s agricultural
development in the post green revolution period.

The Research Design

For the present study the exploratory type of research design
has been employed. This would help us to analyse the basic issues
raised earlier; like nature of cropping pattern, mechanization, land
management, employment pattern, wage rates, incidence of
indebtedness, agricultural prosperity, and government upliftment
policies for agricultural sustainability.

To glean into the socio-economic condition of landed
peasantry and the landless agricultural labour household and their
relationship in the wake of green revolution multi-stage sampling was
employed. In the first stage the 16 districts (as per 1991 census) of
Haryana were ranked on computing standard scores of the chosen
indicators of agricultural development through Z-score transformation
method:

\[
Z \text{ score } = \frac{x - \bar{x}}{\sigma}
\]

where, \( Z_i \) is the standardized score for the \( i^{th} \) observation.

\( X_i \) is the original or raw score

\( X \) is the mean for all values of \( X \)

\( \sigma \) is the standard deviation of \( X \).
The indicators both input and output are listed below:

**Input Indicators (Agricultural Infrastructure)**

1. Percentage of gross irrigated area to gross cropped area.
2. Percentage of area sown more than once to net sown area.
3. Percentage of area under commercial crops to total cropped area.
4. Consumption of fertilizers (kgs) per hectare of gross cropped area.
5. Number of tubewells and pumping sets per '000 hectare of net area sown.
6. Number of tractors per 100 operational holdings.

**Output Indicators (Agricultural Productivity)**

1. Agricultural produce (kgs) per hectare of gross cropped area.
2. Agricultural productivity per cultivator in rupees.
3. Agricultural productivity per hectare of gross cropped area in rupees.

Two regions were demarcated, one relatively more developed and the other less developed agriculturally.

Agriculturally more developed region comprised of Kurukshetra, Karnal, Kaithal, Panipat, Yamunanagar, Sonepat, Ambala and Sirsa districts.
Agriculturally less developed region constituted Jind, Hissar, Faridabad, Rohtak, Mahendergarh, Bhiwani, Gurgaon and Rewari districts.

Interestingly the districts falling in the less developed category had better crop diversification than the more developed districts exceptions being Yamunanagar and Faridabad.

From among these two regions demarcated on the basis of agricultural development, Sirsa (agriculturally developed) and Bhiwani (agriculturally backward) districts were selected. The former is the only district in Haryana where the first ranking crop is cotton followed by wheat, rapeseed and mustard. Bhiwani is the only district where Bajra is the first ranking crop followed by Gram, rapeseed and mustard. Thus the two districts selected, besides being at different levels of agricultural development also typify two different agro-ecological zones.

From these two districts of the state. Sirsa district is termed as agriculturally developed and Bhiwani as less developed. While selecting villages from these two districts all the villages of the districts individually were ranked on the basis of population in 1991. From this rank order first-half in hierarchy in the districts were called as large villages and second-half as small villages. From each of these
categories one village was randomly selected. The villages selected from Sirsa district were Alikan and Saharni and from Bhiwani district were Makran and Sanwer.

The selections of the agricultural household, both cultivators and agricultural labourers, was done on a first phase of census of household. All the landed cultivators and agricultural labour households were included in our sample from the small villages chosen from the two districts of each region. These two villages were Saharni from Sirsa district and Makrani from Bhiwani district. From the big villages, namely Alikan and Sanwer 50 percent of agricultural labour and landed peasantry were drawn on the basis of simple random sampling.

The data has been analysed at two levels: the state and at the level of four sample villages derived from two different regions. At the level of state the focus has been on the pattern and trends of developments in the agricultural sector and the role of state in promoting agriculture. Detailed analysis of agrarian structure and relations between the landed and landless peasantry have been examined through field survey at the village level.

Source and Techniques for Data Collection

The study is based on both primary data obtained through field survey and secondary data from a variety of authentic government
sources. Some of these data are available in published form while the remaining were noted from the files in government offices. All possible efforts were made to get data for synchronous years. In a few cases, where requisite data were not existing or were missing from the official records. Information from the closest year was procured.

Historical data were collected through the following sources:

(i) District Gazetteer
(ii) Census Reports
(iii) District Survey Reports
(iv) Patwari records of land consolidation and land revenues
(iv) Statistical abstracts of Punjab & Haryana

The study is not planned as traditional community study with systematic ethnographic coverage, rather, an attempt has been made to understand and raise certain issues regarding agrarian society which helped in investigating in-depth the socio-economic condition of agricultural labourers and the landed agricultural households due to the adoption of new agro-technology in the developing rural economy of Haryana.
Conclusions

In essence, the study purports to examine the change experienced by the state of Haryana in its agricultural sector in the post green revolution period. What were its main thrusts in the sphere of agriculture? What were the spatial manifestations of the evolving scenario? Whether the dynamic agricultural development since 1960’s was sustainable? How far the agrarian social structure experienced change in the socio-economic aspects? How has the adoption of new agro-technology impacted upon the relations between the landless agricultural labourers and landed agricultural households. These are the questions this dissertation posses to itself. But before this is done, it is essential to acquaint ourselves with the land, people and economy of Haryana. The next chapter tries to accomplish this.