CHAPTER-3

RESEARCH METHODOLOGY

The present study is a macro study of certain micro units. It is an empirical, evaluative and intensive study of the different socio-economic aspects of agrarian reality as observed in the selected villages of the IADP Districts of Aligarh & Karnal.

The sociology of economic policy implies the sociological forces that influence certain instruments of economic policy and their implementation process in the attainment of specified objectives. It is the structure and function of rural society that determines the operational direction of such forces.

It is an inter-disciplinary study encompassing the domains of economic and sociology. It is a synthetic study of economic aspects of social structure and sociological aspects of economic structure of the selected villages.

The villages of Aligarh and Karnal were selected because they have been IADP Districts. Many other development and poverty alleviation programmes have been implemented in these districts. Under the Sixth and Seventh Five Year Plans IRDP is being vigorously implemented as an anti-poverty programme. These districts have well developed infrastructural facilities. They have been the hinterland of Green Revolution. Our objective of selecting these villages was to observe the extent of poverty and inequality among the agrarian classes in the districts. We wanted to examine how the stratificational factors of class, caste and power, and the attitudinal and behavioural factors of rural bureaucracy, the
middleman and the rural elite influence the process of percolation of development benefits among the agrarian classes of the villages. Our objective was to examine how inspite of well developed infrastructural facilities and Green Revolution in the districts and a vigorous anti-poverty programme, a major segment of rural society has failed to rise above the poverty line.

All the selected four villages are ecologically similar. The fertility of the land is similar, intensity of irrigation is high and institutional support is substantial. However, inspite of all these positive features, there is mass poverty and inequality. It is mainly because of structural-functional factors which have been sidestacked by the planners.

In this study an attempt has been made to study (1) the pattern of agrarian structure in relation of poverty, inequality and distribution of development benefits (2) The association of inequalities in the distribution of development benefits with stratificational factors i.e. caste, class and power (3) The correlation among stratificational factors and (4) The role of rural bureaucracy in the distribution of development benefits.

THE SAMPLE:

We studied the agro-economic features of the two districts of Aligarh and Karnal and with the help of the project authorities, listed the blocks in the two districts, where the IADP, IAAP, IRDP, NREP, MNP etc. were launched and where the work has continued since they were launched. Out of the two separate lists of blocks in the two districts, the blocks which seemed to be unique or distinctive in agricultural features from the norms were removed.
From the blocks in the lists, one block was selected randomly in each of the districts. Two lists of all villages of the two blocks were prepared. Out of these lists after discussion with the block authorities villages where some unusual features were noticed were left out. Again, very small villages having less than 150 households and very big villages having over 350 households were also eliminated from the list.

Thus Adaun and Imlani villages from Dhanipur Block and Berthal and Sikri villages from Nilokheri Block respectively in the Districts of Aligarh and Karnal were selected.

The study of four villages was considered adequate in view of the relative homogeneity of the blocks. So the sample of four villages is fairly representative of the chief characteristics of the agrarian social structures prevalent in the two districts. The villages are composed of multi caste groups with a sizeable number of scheduled caste population. Almost all the major occupational groups - farmers, agricultural labourers, artisans, traders and money lenders are represented therein. The agrarian structures in all the four villages present a skewed distribution of landholdings, where, inspite of certain institutional reforms, land is concentrated in a few hands of dominant castes. In the villages of Berthal (K) and Adaun (A) there is one caste dominance, whereas in Sikri (K) and Imlani (A) there is dominance of two castes. There were 1140, cultivating as well as non-cultivating, households in these villages. All of them have been studied intensively. In this regard, village and household schedules were prepared for eliciting relevant information.
VILLAGE SCHEDULE:

It was designed to accommodate information in a detailed way about the village primary statistics, development, schemes, population, land utilisation, cropping pattern, crop rotation, irrigation, credit and marketing, panchayats - their structure and function, sources of income and pattern of expenditure, caste composition, occupational groups, amenities and infrastructural facilities available in the villages.

HOUSEHOLD SCHEDULE:

It constituted the nucleus of the study. It contained information like family composition, asset structure, details of households, land utilisation, intensity of cropping, intensity of irrigation, cropping pattern, cost of cultivation, extent of adoption of improved practices of farming, details of marketing and capital expenditure, credit needs, levels of debts, borrowing and cost of credit and membership of village institutions, caste, class and power position of the family etc. The information thus collected forms the raw material for all the economic and socio-logical analysis found in the study. The working heads of the households were interviewed for the purpose assuming that they might be better informed about the development benefits received by the respective households owing to their involvement in the decision-making processes.

Besides, all rural bureaucrats concerned with the rural development programmes, more particularly IRDP, were interviewed for the purpose.

About 10 to 12 weeks were devoted to collecting data in each village. The realities of agrarian structures and the process of implementation of development programmes (IRDP) have been observed
face to face in the real context. Such observations bear great value for proper understanding of the rural scene.

**TABULATION:**

The entire data was tabulated on a master sheet and summary tables were prepared out of it. For assessing the caste, class, power, status of the family multi-stage stratified purposive random sampling techniques were used in the study. Data for the study was collected during September 1978 - August 1979 and October 1983 - September 1984. In all cases, the data was collected personally by the researcher at the place of work or at the residence of the informants. Certain operational difficulties were overcome with the help of local residents and influential persons from the villages and outside.

Our major emphasis was on discussion. The problem under study was a highly complex one which could not be studied properly by filling in formal questionnaires. It needed an indepth understanding of the village economy and its social structure as its major objective was to build up an understanding regarding the inequitable power structure with all its socio-politico-economic ramifications in the villages. It was necessary to have a clear knowledge of the attitudes of the panchayat members, village leaders, administrative functionaries etc. It was also essential to gain perception of the nature and extent of economic disparities and the resultant problems, fears, hopes, expectations of the exploited and the neglected segments of the rural society.
The crux of the research is to substantiate the thesis that poverty is not only a problem of production economics but of sociology of distribution as well. Sociological factors, i.e. Caste, Class and Power, rural bureaucracy, the middleman, the rural elite tend to influence the pattern of income distribution and development benefits and in consequence the levels of living of different agrarian classes. The flamboyant models of economic development formulated by developments economists for the betterment of rural masses are meaningless unless due attention is paid to the structure and function of rural economy.

**TOOLS AND TECHNIQUES:**

Interview schedule was employed in this study to obtain information from the respondents. Based upon the study of relevant literature, discussion with the Block change agents, interview with the villagers and the researchers own experience in the field, two draft schedules were edited, modified and finalised. The first appendix contained questions basically concerned with the agricultural aspects of rural life. It was concerned with question on Crops, Cropping Pattern, intensity of Cropping, pattern of consumption, intensity of Irrigation, distribution of land & income, poverty line etc. The second Appendix contained questions on respondents' caste, class and power position, amount of development benefits received, perception about the distribution development benefits and the levels of living of agrarian classes, the characteristics of households below the poverty line etc.
A separate interview schedule was used to obtain information from the Block extension staff on the problems. It consisted of three parts (1) identification (2) perception of groups benefitted and (3) identification of beneficiaries.

All the agencies at the village, block, district and state levels possessing relevant information on the problems were approached and the data connected with the block and the sample villages was collected from the records for the reference period. The information given by the respondents was suitably supplemented and edited through personal observation and cross checks. The help of the B.D.O., A.B.D.O., officers of I.A.D.P., I.R.D.P., V.L.W. Lekh.Pals, Gram Pardhanas and other village leaders was sought.

OPERATIONALISATION OF CONCEPTS:
CASTE: In order to study caste hierarchy, a large number of judges representing different caste groups were selected in each village. They were asked to rank the status of all the castes of their respective villages in the four hierarchical groups. These were given scores 1 through 4.1 for the lowest and 4 for the highest castes. Based upon median and quartile values of ranking of each caste, all the caste groups were divided into 4 hierarchical stratum i.e. highest, high, low and lowest.

CLASS: We have studied class hierarchy by using composite index based on land ownership, income and occupation. As a first step, respondents' ranking of each of the three measures was obtained as follows:
i) **LAND OWNERSHIP:** As shown in the revenue records, the total land owned by all the members of the household was taken into account. The total variation between the highest and the lowest amount of land owned by the respondents in each village was divided into 10 equidistant categories. These were assigned scores 1 to 10; 1 for the lowest and 10 for the highest land size category.

ii) **INCOME:** The total net income earned during the previous year from various sources by all the earning members of the households was taken into consideration for the purpose. It consisted of (i) farm income and (ii) Non-farm income. The farm output minus the cost of all materials and paid out labour. The non-farm income consisted of the value of salary, rent, profit, interest, wages etc. the income received by a household in the year was rounded to the nearest multiple of \( \text{Rs. 500/-}. \) The total variation in the household income in each village was divided into 10 equidistant categories. These were assigned scores 1 through 10, 1 for the lowest and 10 for the highest income category.

iii) In order to obtain ranking of occupation, a large group of villagers belonging to different occupations and caste groups were selected in each village. They were asked to rank all the occupations followed in their respective villages into 6 hierarchical orders. These were assigned to rank all the occupations into 6 hierarchical orders. These were assigned scores 1 through 6, 1 for the lowest and 6 for the highest ranked occupations. Based upon the total values of ranking, all the
occupations were divided into 10 equidistant categories scores 1 through 10 were assigned to them: 1 for the lowest and 10 for the highest ranked occupations. If the members of a household follow more than one occupation, the scores of all such occupations were averaged to obtain occupational scores of that household.

The single index approach makes use of only a single variable as a sole indicator of one's class position. In view of the problem of status-inconsistency and absence of universally effective single determinant of class, single index was not used for study. Also classes based on land are not exclusive to each other and occupation, inspite of its simplicity, has not been considered suitable as its various aspects are not always correlated. Social researchers have resolved these problems by having a composite view of one's statuses based on two or more status giving variables. This provides an overall view of one's class position.

Using the economic conception, two approaches to study class have been noted: (1) single index, and (2) composite index. We have employed composite index for the study of class hierarchy and three variables i.e. land, income and occupation were taken as indicators of one's class position assuming that they are relatively more stable. Such an approach has made it possible to have a picture of class structure independent of the subjective view of caste.

**COMPOSITE CLASS INDEX:**

As a second step, scores received by each respondent on three measures were totalled to obtain his composite class score. The
maximum scores that one could obtain on the three measures were 30. Based upon the total scores obtained by the respondents in each village, median and quartile values were computed. Accordingly, all the respondents were categorised into highest, high, low and lowest classes. Their broad categorisations were households above poverty line and below poverty line.

**POWER:**

We have used the positional approach in the study of power. In all, 7 formal institutions entrusted with power and authority were considered for the purpose. They were village panchayats, panchayat samiti, standing committees of the zilla parisheds, cooperative societies and political party. The inclusion of political party was based on the assumption that a man can possibly acquire a certain measure of power by value of his position in the party hierarchy, irrespective of his caste or class. Hunter has shown how political parties patronise local influentials which ultimately results in strengthening the latter's position, economic or otherwise. Recognising that individual's power varies with the nature and number of positions he holds, office bearership, membership and non-membership of each institution were assigned scores 2, 1 & 0 respectively. Like caste and class positions, power positions of not only the respondent alone but of all the members of his family were taken into consideration. The scores, thus, received by a respondent were totalled. Using median and quartile valued, all the respondents were divided into highest, high, low and lowest power groups. These were grouped into
higher and lower power groups wherever it was considered necessary to do so for statistical analysis. In fact, one's power position depends not only upon his own position but also upon the positions held by his family members and accordingly the family tends to exercise the power of its members in securing development benefits.

DEVELOPMENT BENEFITS:

The term "Development Benefits" used to denote a composite measure comprising of two primary components: (i) Adoption of improved technology and (ii) Material assistance. As a first step, respondents' benefit scores on each of these two measures were obtained as follows:

(ii) Adoption of Improved Technology:

The Prime objective of economic policy is to diversify agricultural economy and raise its productivity levels in order to improve the quality of rural life. In this regard, 12 practices which have been strongly advocated by the extension agents covering agricultural and agro-industrial areas were taken into account for the study of adoption of improved technology. The respondents' adoption index was defined as the percentage of the recommended practices adopted by him during the last one year to the total number of practices applicable to his situation. For instance, of the 12 practices, 8 are applicable to the respondents and if he adopts six out of these 8 practices, his adoption score would be $\frac{6}{8} \times 100 = 75$. The scores thus received by the respondents were rounded to the nearest multiple of 10 and 1 score point was contributed by each unit of 10 towards composite development benefit scores.

MATERIAL ASSISTANCE: The amount of loans and grants, in cash or kind, subsidy was used as an indicator of material assistance. Of the two, grant and subsidy were conceived as a better measure of development benefit as the loans borrowed by a respondent are repayable. Accordingly, a unit of grant was roughl
treated as three units of loan. The material assistance, thus received by a respondent was rounded off to the nearest multiple of Rs.500/- and 1 score point was assigned to each unit of Rs.500/-. The total variation between the lowest and the highest material assistance scores obtained by the respondent in each village was divided into 10 equidistant categories. These were assigned score 1 through 10; 1 for the lowest and 10 for the highest material assistance category.

**COMPOSITE DEVELOPMENT BENEFIT INDEX**

As a second step, the scores obtained by a respondent on the above two measures were summed up. The maximum scores that a respondent could obtain on two measures were 20. Thus the respondent's composite development benefit index was defined as the percentage of the scores he actually obtained to the maximum possible scores of 20. For example, if the respondent obtained 8 scores, out of the maximum scores of 20, his composite development index would be \( \frac{8}{20} \times 100 = 40 \) per cent. Based upon the scores thus obtained by all the respondents in each village, median was computed and the respondents were accordingly classified into high and low development benefit categories.

**SUPPLEMENTARY BENEFIT MEASURES**

In order to further substantiate our hypothesis, two supplementary measures of development benefits, namely, increase in assets and benefits from social amenities were also used. To have an estimate of the increase in the value
of assets during the reference period, we have considered agricultural as well as non-agricultural assets. Besides, respondent's own estimates of his assets, key persons were also consulted in assessing the value of assets in order to avoid discrepancy, if any. The actual value of assets was rounded off to the nearest multiple of Rs.500/- and I score point was assigned to each such units. (It is likely that the adoption of improved technology combined with material assistance might have helped in increasing the income and thereby the assets of the household, the increase in assets, therefore, provides some evidence of the increase in income).

There has been a considerable emphasis on developing social amenities in the villages for the benefit of the community as a whole. These include such programmes as schools, street lights training, health services etc. The benefits received from such programmes were measured as the percentage of the programme for which the respondent reported benefits to the total number of such programmes applicable to his village. Based upon the scores obtained by all the respondents in each village, the median was computed. Accordingly, the respondents were divided into high and low benefit categories.

**Power:** Two conceptions of power can be noted in social science research: (1) generalised and (2) restricted.
As a generalised concept, power is conceived as a phenomenon of inequalities in several "political resources" such as wealth, income, education, esteem etc. Inherent qualities of men were also added to such a list of resources.

In a restricted sense, power has been approached in three ways: (1) reputational, (2) decisional or historical or event analysis, and (3) positional. As the prestige dimension has already been considered in the study of caste, we followed positional approach. The positional power which is often formally structured and legitimatised is referred as authority. It is this approach of power with which we are concerned in the present study.

**METHOD OF ESTIMATION OF CONSUMPTION PATTERNS**

We have used consumption expenditure data rather than income data in our analysis of consumption mainly because the estimates of consumption expenditure are likely to be more accurate than the income estimates in rural areas.

We used different reference periods for different sets of consumption items so that recall would not create any serious problem in estimation. For example, the
preceding week was the reference period for the items of daily/weekly purchase such as milk, fruits, vegetables, fish, meat, tea, coffee, oil, ghee, sugar etc. The preceding month was the reference period for items like cereals and pules, coal and other fuel, etc. etc. The preceding year was the reference period for expenditure on health, education, social functions, house rent, travel etc. and on consumer durables like utensils, clothing, furniture, radio, bicycle, fans, etc. etc.

Consumption of each item was divided into two parts. Consumption of homegrown quantity and consumption of purchased quantity. The homegrown quantities were converted into value terms by using the prevailing retail prices of the items in the local market and the figure of the total value of consumption was arrived at by adding the values of homegrown and purchased quantities of items.
NOTES AND REFERENCES:

1. Using as many cards as there were villages in each zone, the name of each village was entered on a separate card. These cards, which were uniform in all respects, were thoroughly shuffled and a child was asked to draw one card from each such lot.

2. The decision to include all the households in the study was guided by two main reasons: (1) to obtain a complete picture of stratification system of the village as a whole, and (2) to avoid any chance of exclusion of beneficiaries or non-beneficiaries so as to permit thorough investigation of the problem.


4. Such an approach was preferred assuming that the hierarchy of individual castes provides ambiguous tentative and arguable picture. Moreover, the position of each caste, particularly the one statistically insignificant, is misleading for our purpose.

5. The facts incapable of being verified from the revenue records or Patwari were verified by the presidents of Panchayat and the cooperative society of the concerned village. This is a general practice followed in advancing loans on the basis of landownership.

6. The concept of income has been used here in a restricted sense. This consisted of (1) farm income and (2) non-farm income. The farm income was viewed as the total value of farm output minus the cost of all material and paidout
labour. The non-farm income consisted of the value of salary, rent, profit, interest and wages etc.

7. The inclusion of political party was based on the assumption that a man can possibly acquire a certain measure of power by virtue of his position in the party hierarchy irrespective of his caste or class (Beteille, 1969). Hunter (1969) has shown how political parties patronise local influentials which ultimately results in strengthening the latter's position, economic or otherwise. Also see Rao (1963 : 10)

8. In fact, one's power depends not only upon his own position but also upon the positions held by his family members and accordingly the family tends to exercise the power of its member in securing development benefits.

9. This procedure is based upon the method employed by Desgupta (1965) and Sengupta (1967). Freeman (1961) and Bose and Desgupta (1962) have also studied adoption by simply counting the number of improved practices adopted by a respondent at a given point of time. Scholars have added to it a few other aspects such as potentiality, time, amount of difficulties, etc. to measure adoption level.

10. There were two main reasons for doing so: (i) the respondent pays a lower rate of interest on the developmental loan borrowed by him from the institutional agencies and thus, he saves a heavy amount of interest which he has to pay to the private money lenders, and (ii) the larger amount of loan enable the respondent to make higher investment which is likely to give more yield and income.

11. It is likely that the adoption of improved technology combined with material assistance might have helped in increasing the income and thereby the assets of the household. The increase in assets, therefore, provides some evidence of the increase in income.