METHODOLOGY

CHAPTER III

METHODOLOGY

This chapter presents the detailed sequential procedure adopted for carrying out the present study as shown below :

1. Research Design
2. Theoretical framework of the study.
3. Variables.
4. Operational Definitions.
5. Development of the instrument.
6. Selection of the sample
7. Method of Data Collection.
8. Analysis of the Data.

1. Research design

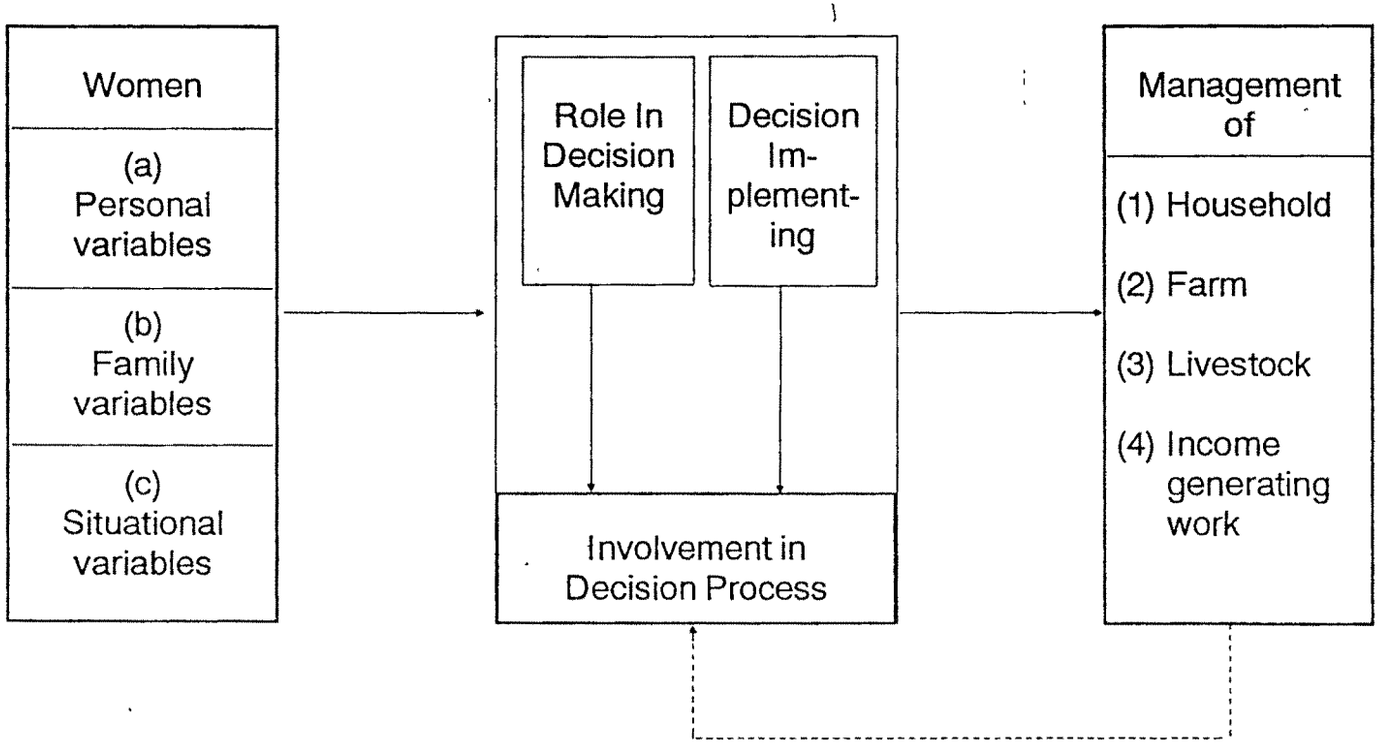
The main aim of the study was to find out the extent of women's involvement in decision making process. A descriptive research design was planned for the study.

2. Theoretical framework of the study

Decision making process is the crux of management. Management process is influenced by involvement of the manager in decision making process. It is theorized that in rural households, women are actively involved in management of household, farm, livestock and income generating activities and decision process. Further it is proposed that the women's involvement in decisions consists of her (a) role

Figure 1

Theoretical framework of the involvement of women in decision making process in the family



in decision making and (b) decision implementing which are influenced by personal, family and situational variables. (Figure 1)

3. Variables

Women's involvement in Decision making depends on a number of factors which either directly or indirectly affect the extent of involvement. A detailed list of variables included in the study are described below :

It was certainly not possible, theoretically or otherwise to postulate any definite cause effect relationship between any two variables, in particular, in a situation where a number of other factors like attitudes, customs, traditions, beliefs, superstitions influenced the behaviour of individuals to a most pronounced degree. The variables selected for the present study alongwith the rationale for selecting these variables have been presented in the following discussion (Figure 2).

1. DEPENDENT VARIABLES

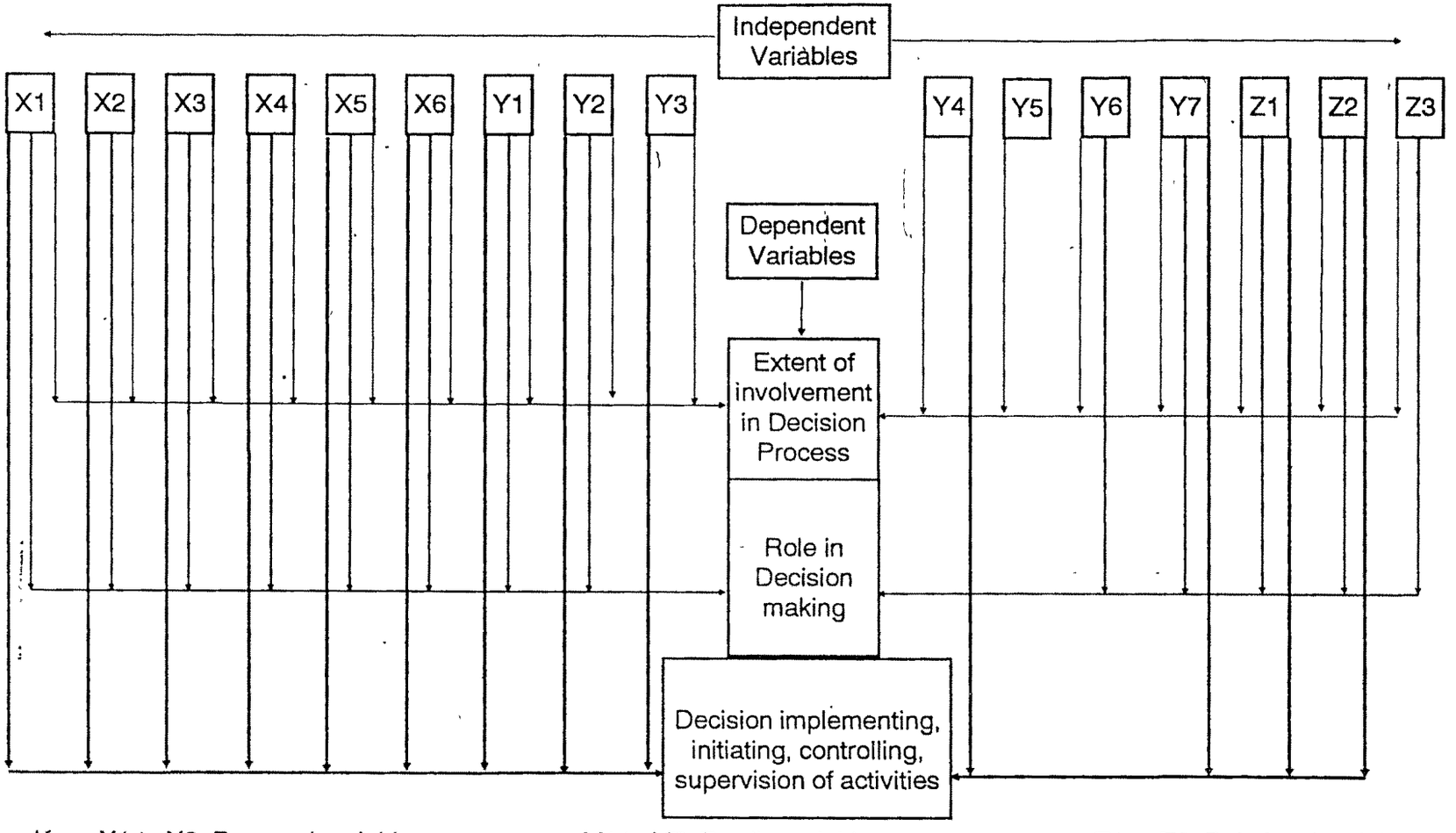
In this study the extent of women's involvement in decision making process is the dependent variable, which is determined by the role played in decision making and decision implementing.

2. INDEPENDENT VARIABLES

The personal, family and situational variables.

Figure 2

Schematic representation of interaction of variables



Key : X1 to X6 Personal variables Y1 to Y7 Family variables Z1 to Z3 Relational variables

Personal variables

This includes the personality traits of respondents(X_1), age(X_2), education level(X_3), Employment status(X_4), women head of the family(X_5) and caste(X_6).

1. Personality traits

Personality traits include qualities such as self-confidence, communicating skills, resourcefulness, risk taking, tactfulness, practical sense, sociability, open mindedness, intelligence, knowledgeable, rationality and leadership.

2. Age of women

Age was found to be a factor influencing the extent of women's involvement in decision making (Talwar, 1984; Kaur, 1983; Agarwal, 1979). Data on the relationship of age of women and extent of their involvement in decision making of particularly women residing in hill regions was lacking. Thus, it was thought appropriate to study this variable.

3. Educational level of the women

Education is a very important variable which may influence the occupational status of the women. It was found in a few studies (Talwar, 1984; Agarwal, 1986; Sethi, 1982) that education and occupation status of the women are some of the factors associated with the extent to which women were given a chance to participate in decision making process in

the family. Thus, it was essential to select this variable for the present study.

4. Employment status of the women

Employment status of the woman is whether she is gainfully employed or not employed affects the decision making of women in the family (Talwar, 1984). It is directly associated with the chance given to women in the family to participate in decision making. Thus, it is included in the present investigation.

5. Women head of the family

Women who headed the families were found to be more involved in decision making (Halim and Ali, 1986; Ahsan et al., 1986). Therefore it was found to be important variable to be included in the present study.

6. Caste

In higher caste families women mostly do domestic work rather than field work, while lower caste women participate in agricultural operations more than in domestic work Purohit, (1991). Since caste has influence on participation in activities, therefore it was included.

Family variables

These include size of land holding(Y_1), type of family (Y_2), size of family (Y_3), family income (Y_4), educational level of head of the family (Y_5), occupation of head of the

family (Y_6) and socio-economic status of the family (Y_7).

1. Size of land holding

This variable was assumed to be an important variable affecting the extent of women's participation in farm activities and various farm related decisions. Therefore, to establish this relationship the variable was selected.

2. Type of family

The family type seemed to have a definite bearing on the extent of women's participation in various farm, livestock and income generating activities as revealed through researches (Sirohi, 1985; Laxmi Devi, 1984). Therefore, it was considered important to be incorporated in the investigation.

3. Size of family

Family size was found to be associated with the participation in different activities, (Agarwal, 1989). Therefore, this variable was included.

4. Family income

It was envisaged that the family income may affect the participation of the homemaker in various activities. Hence this factor was found to be of crucial value to the study.

5. Educational level of head of the family

It was observed that the literacy level affects the attitude of people towards, women's position in the family, which in turn affects the opportunity given to women to participate in various decisions.

6. Occupation of head of the family

It was postulated that occupation of head of the family may affect the involvement of respondents. If the head of the household will be dependent on son's family, in such case, he may not dominate in decisions and the daughter-in-law may have some say in decision making in the family.

7. Socio-economic status

The socio-economic status of the family tends to affect the respondent's participation in various activities and decisions (Dubey,1981; Sunita, 1977; Haddax, 1965; Arya, 1964; Ghosh, 1985; Bajwa, 1984; Sirohi, 1985). Therefore, this variable was considered to be an important one for the study.

Situational variables

These include the relational position of the respondent (Z_1), her ordinal position in the family (Z_2) and exposure to developmental programmes (Z_3).

1. Relational position

It is generally expected that the daughter-in-law and that too the youngest one of the family was given less chance to participate in decisions, specially the major decisions (Dhesi et al 1974). Therefore, relational position being an important variable was included in the present study.

2. Ordinal position

Ordinal position of the respondent is another important variable which may influence the role played in decision making and decision implementing. The elder women of the family participate more in the decision process than the younger ones (Kaur 1983). Thus, the variable was included.

3. Exposure to developmental programmes

It was assumed that those respondents who were involved in various developmental programmes, may participate more in decision making and tasks performance.

4. Operational definitions

Certain concepts were operationally defined for the measurement of variables of the study.

i) DECISION MAKING PROCESS : The choice made and implemented in allocation and utilization of resources and execution of the action in various activities.

Data : The active involvement of women in decision making, frequency, the procedure of carrying out the decision and putting it into actions, its delegation, control and supervision in implementation.

ii) ROLE IN DECISION MAKING : The extent of women's participation in decisions making related to allocation and management of resources.

Data : Types of decision making Frequency and extent of participation

iii) ROLE IN DECISION IMPLEMENTING : It is concerned with the extent to which women participate in the execution of decisions.

Data : To what extent women initiate, control, supervise and evaluate work related to various activities.

iv) MAJOR DECISIONS : The crucial decisions with long time consequences, for the decision maker.

Data : Frequency of involvement in major decisions, like education and marriage of children, buying of land and agricultural implements, buying of animals.

v) MINOR DECISIONS : The decisions made often and because of the major decisions with short time consequences.

Data : How often women are involved in minor decisions i.e., type of school for the children, type of seeds to select, disposal of milk and purchase of raw materials etc.

vi) JOINT DECISIONS : Decisions where more than one person is involved.

Data : Extent of involvement of women in joint decisions.

vii) INDEPENDENT DECISIONS : Decisions which are made by an individual person.

Data : Frequency of independent involvement of women in decision making and implementing.

viii) HOUSEHOLD MANAGEMENT : Acquisition, allocation and effective utilization of human, non human and community resources to perform multiple role in the family.

Data : How frequently women executed the activities, what resources were controlled and used for these activities.

ix) FARM MANAGEMENT : Women's participation in decisions related to various farm activities.

Data : Extent of participation independently or jointly in decisions related to farm.

x) LIVESTOCK MANAGEMENT : It concerns with women's participation in decisions relating to care of livestock.

Data : Role played in decisions relating to care of livestock.

xi) MANAGEMENT OF INCOME GENERATING ACTIVITIES : It relates to the role played by women in the choice of income generating activities.

Data : Information on frequency of decisions making on type of income generating activity/activities, production size, acquisition of raw materials control and marketing of finished products etc.

xii) PERSONAL CHARACTERISTICS OF THE WOMEN

Data : This includes the age of the women, their educational level, occupation and the personality traits of the women.

xiii) WOMEN HEAD OF THE FAMILY : Women head of the family is the female who is major decision maker.

Data : Extent of involvement of head of the family in decision making and decision implementing.

xiv) EMPLOYMENT STATUS OF WOMEN : Whether the women are gainfully employed/self employed or not employed.

Data : It includes the details of women's employment.

xv) WOMEN'S POSITION IN THE FAMILY : The importance given to the women in the family, in terms of seeking their advice as a resourceful member of the family.

Data : Ordinal and relational position of women in the family in terms of eldest, middle and youngest wife, daughter and daughter-in-law.

xvi) MONETARY CONTRIBUTION MADE BY WOMEN AND ITS CONTROL The amount of money earned by the women.

Data : The amount of women contributing to the family and the control she has over her earnings.

xvii) DEMOGRAPHIC CHARACTERISTICS OF THE FAMILY

Data : Type, size, income, socio-economic status, size of land, educational and occupational level of the head of the family.

5. Development of the Instrument

SELECTION OF THE TOOL AND TECHNIQUE

The interview schedule was found to be the appropriate tool which would adequately gather information pertaining to the research work. Hence, for the present study the interview schedule using the interview technique, formed the tool and technique for collecting information.

CONSTRUCTION OF THE INSTRUMENT

The precoded interview schedule was constructed keeping in view the objectives of the study. It comprised of two parts. Part-I contained the census information of the hill region selected for the study, questions to elicit information about the back-ground characteristics of the sample and the households. Part-II dealt with the detailed information regarding the extent of women's involvement in various decisions and initiation, control and supervision of activities. It also included the questions related to the relational position and ordinal position of the women, importance given to them as resourceful members of the family, the degree of control they had on financial matters, the range of freedom they had been given to handle their own earnings, and the extent of opportunity they got to participate in major problems of the family (Appendix 1). The instrument prepared initially was distributed to a panel of judges for establishing its content validity. The judges were experts from the Department of Business Management, Department of Agricultural Economics, and Department of Family Resource Management of Punjab Agricultural university, Ludhiana. Since the study had to be undertaken on rural sample, the interview schedule was translated into Hindi with the help of the language Department, G.B. Pant University Pantnagar, Nainital (Appendix 2).

DEVELOPMENT OF THE RATING SCALE TO MEASURE THE EXTENT OF WOMEN'S INVOLVEMENT IN DECISION MAKING PROCESS.

The objective of assessing the extent of women's involvement in decision making process required standardized scale to measure it. Therefore a five point continuum rating scale was developed to measure the extent of women's involvement in decision making process. An exhaustive and detailed list of statements on various decisions i.e., minor, major, group and individual decisions was framed in the area of household, farm, livestock management and income generating activities.

Item collection

Items relevant to study on various types of decisions related to household, farm, livestock management and income generation work were developed. The statements were formulated on the basis of the literature reviewed and the practical problems encountered by women, in relation to household management and the decisions related to it. The most important consideration while collecting and framing the items was that it should be within the level of rural homemaker's understanding. All one hundred and sixty eight statements were developed on four areas. These statements were then thoroughly screened and cited so as to make them more simple, clear and meaningful to elicit maximum information.

Content validity of the rating scale

A list of 182 decision making process were given to ten experts selected from the four faculties of Maharaja Sayajirao University, Baroda to establish its content validity. These experts were from the Faculty of Management Studies, Faculty of Social Work, Center for Advanced Studies in Education (CASE) and the Faculty of Home Science. The experts were requested to indicate the clarity of each phrase. They were also requested to check each phrase and indicate to which type of decision category it belonged, i.e., major, minor, individual or group decision. The operational definition of each of the decisions were provided to the judges. The following criteria served as the basis for the selection of statements for the scale.

1. Items on which there was agreement of seventy per cent or more judges on clarity.
2. Those items on which seventy per cent or more judges showed agreement as regards the type of decision.

Besides this, those statements which were not clear were reworded to make them clear enough to be included in the scale. Other suggestions given by some of the judges were also incorporated, like avoiding repetition and double-barreled items. As per the judgment of panel of experts on the rating scale fourteen statements were eliminated. Out of the original one hundred and eighty two, one hundred and sixty eight statements were included in the rating scale for

the pilot study, which were translated in Hindi to establish reliability of the scale and pretested on a sample of 30 families from the village Shantipuri of Kicha Block of District Nainital.

Development of the personality trait scale

A two point likert type scale was developed to measure the personal traits of the rural women. It was found that the extent to which women were given power to participate in decision making process depended on some of their personality characteristics (Cronwell and Olson 1975). Therefore, twelve traits considered to be important for rural women, which help them to take decisions on any area were selected.

Item collection

Statements relevant to above mentioned traits were formulated. Statements were developed on the basis of the literature reviewed and were screened and cited bearing in mind that statements should be simple, clear and short. The personality trait scale thus prepared initially consisted of seventy five statements.

Content validity of the personality trait scale

The tool with seventy-five statements was given to ten experts selected from Faculty of Education and Psychology, Center for Advanced Studies in Education (CASE) and the Faculty of Home Science, Maharaja Sayajirao University of Baroda. They were requested to judge the clarity and

relevance of each statement. The screening of items was done on the basis of the following criteria.

1. Items selected by seventy per cent or more judges on clarity of the statement and relevance to the problem being studied were retained in the scale.
2. Those items which were reported as not clear by seventy per cent or more judges were reformed to make them clear and were included in the scale.

At the same time some statements were modified as suggested by the judges; repetition of words and statements was avoided. As per the suggestion of the judges, out of seventy-five statements only forty-eight statements were kept and twenty-seven statements were deleted.

Pilot study

A pilot study was conducted to establish the feasibility of the instruments on a sample of 30 families from Niwadkeda village of Rudhrapur block of Distt. Nainital. Data were subjected to statistical test for establishing the reliability of the instruments for constructing the final instrument. The reliability of the Hindi version of the scale was estimated. Minor changes were made in the scale on the basis of the pilot study which was then utilized for the final data collection. To establish the reliability of the instruments, the following procedure was adopted.

Scoring of responses on the personality trait scale

The responses of homemakers on each item on personality trait scale was quantified by assigning scores, where score 2 was assigned to response 'like me' and score 1 was assigned to response 'unlike me' which indicated that either the personality trait was possessed (like me) or not possessed (unlike me) by the respondents. Therefore, since the scale consisted of both positive and negative statements, the scores given to statements were

Type of statement	Response	Score
Positive	'like me'	2
Positive	'unlike me'	1
Negative	'like me'	1
Negative	'unlike me'	2

The test-retest method was followed to find out the reliability coefficient where 30 respondents were interviewed and again after the gap of 21 days the respondents were again interviewed where a set of another 30 schedule with same statements was used.

Item analysis for the personality trait scale

Personality trait scale was analysed quantitatively by doing item analysis to increase its validity and reliability. Item analysis was done to eliminate inconsistency of items. Item discrimination was determined. The responses of the respondents were scored by allotting weightage to the items

as discussed earlier, in the first test. The weighted score for each item in the first test and retest for all respondents was totaled up. The total scores of thirty respondents of the first test was arranged in descending order and then the upper 33 per cent i.e. 11 and lower 33 per cent i.e. 11 were taken as the criterion groups to evaluate the individual statement.

Each item was analysed to determine how effectively it helps to differentiate between the high and low scores. The 't' value for each item was computed to find out the discriminating power of each item. Only those items which showed a significant difference between high and low scores were retained for the final scale. Out of forty eight items, twenty four items were retained in the personality trait scale after item analysis. Correlation was computed by finding the scores of the respondents in test and retest i.e., scores in the test were taken as 'x' and scores of the retest as 'y' by using the formula of reliability.

Reliability coefficient of personality trait scale

Test retest technique,as discussed earlier was applied to determine the reliability coefficient of the personality trait scale. The scale (Hindi version) was used to collect the responses from the respondents. The reliability coefficient was estimated by using the formula :

$$rxy = \frac{\Sigma xy}{N\sigma x\, \sigma y}$$

The reliability coefficient of the personality trait scale (Hindi version) compute was 0.71.

6. Selection of the sample

6a. SELECTION OF THE LOCALE

The Nainital district is divided into three regions i.e., the Hill region, Tarai (Plains) and Bhabhar (valley) region. Each of these regions had consisted of 6, 3 and 6 blocks respectively (Figure 3). The present study was carried out in the hill region of Nainital district of Uttar Pradesh. The main reasons for the selection of this region were, the villages were backward, not much research work were carried out in the region and the region was easily approachable being close to the university campus. On the contrary most of the researches and extension work were carried out in the Tarai and Bhabar region of Nainital District.

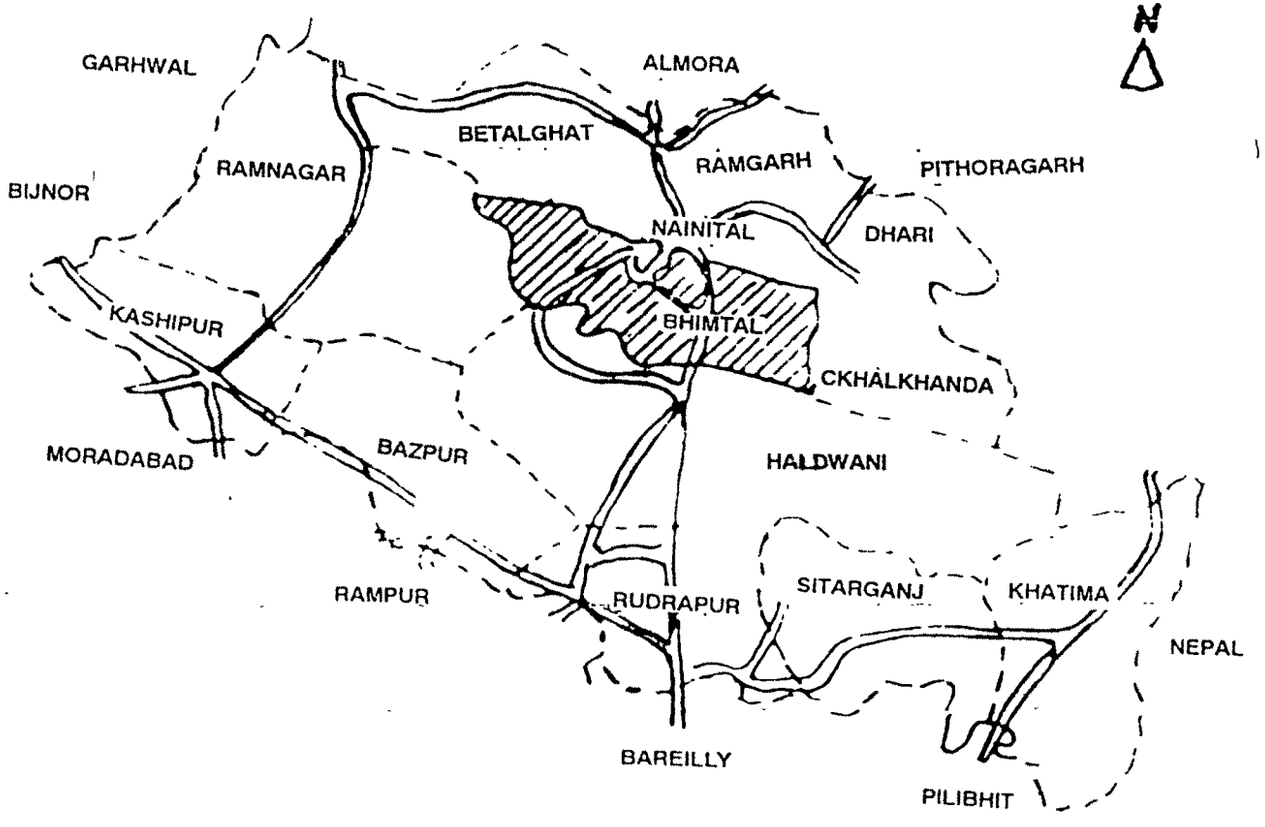
1. Population

The hill region of Nainital District selected for the study was inhibited by a large number of families engaged in agricultural activities. The total population of the district is 11.4 lakhs (Census 1981).

The population of the three selected blocks viz. Bhemtal, Betalghat and Dhari was found to be 30.7 thousands, 29.8 thousands and 19.4 thousands (Table 1) respectively.

Figure 3

Location of selected blocks



Source : Economic and Statistical Organization state planning department. Government of Uttar Pradesh

Table 1

The Estimated Rural and Urban Population in 1981 in Nainital District

Year/Developed blocks	Population					
	Total	Men	Women	Rural	Urban	Development in %
1	2	3	4	5	6	7
1961	574320	334197	240123	462142	112178	73.10
1971	790080	439506	350574	615201	174879	37.87
1981	1136523	617386	519137	824010	312443	43.85
Developed Blocks 1981						
1. Okhalkanda	29804	15359	14445	-	-	34.42
2. Betalghat	29838	15474	14364	-	-	26.11
3. Ramgarh	28080	14813	13267	-	-	10.37
4. Bhemtal	30721	15913	14808	-	-	19.63
5. Dhari	19455	10404	9051	-	-	19.55
6. Kotabagh	29126	15462	13664	-	-	23.20
7. Haldwani	63007	33514	29493	-	-	45.59
8. Ramnagar	45909	24398	21511	-	-	32.67
9. Kashipur	47944	26918	21026	-	-	29.13
10. Jaspur	56399	30585	25814	-	-	39.40
11. Bajpur	59276	32327	26949	-	-	5.71
12. Gadarpur	69468	36786	32682	-	-	41.46
13. Rudhrapur	78031	44017	34014	-	-	25.53
14. Khatima	96708	51070	45638	-	-	48.54
15. Sitargang	86472	46420	40052	-	-	38.14
Rural population	77023	413460	356778	824080	-	31.13
Total forest area	53842	32385	21457	-	-	93.54
Urban population	312443	171541	140902	-	31244	78.66
Total	1136523	617386	519137	824080	31244	43.85

Source : Economic and statistic organization state planning Govt. of Uttar Pradesh 1989.

A large number of people were found to be staying in rural areas. Out of 11.4 lakhs of total population of the district Nainital 8.3 lakhs of the people were residing in the rural areas. There was an increase in the population which was found to be 7.9 lakhs in (1971) and increased to 11.4 lakhs in (1981). The rural population which was 8.3 lakhs in (1981) increased to 10.9 lakhs in (1991).

2. Agriculture

Majority of the rural families were involved in agriculture. Out of 325299 hectare of total area which was under cultivation wheat was produced on 1,22,688 hectare, rice on 1,10,709, sugarcane on 43,759 hectare, other main crops like peanuts on 19,442 hectare, soyabean on 12,821 hectare, pulses on 8,007 hectare and corn was produced on 7.821 hectare of land. Women had a dominant role in production of the above crops.

3. Irrigation

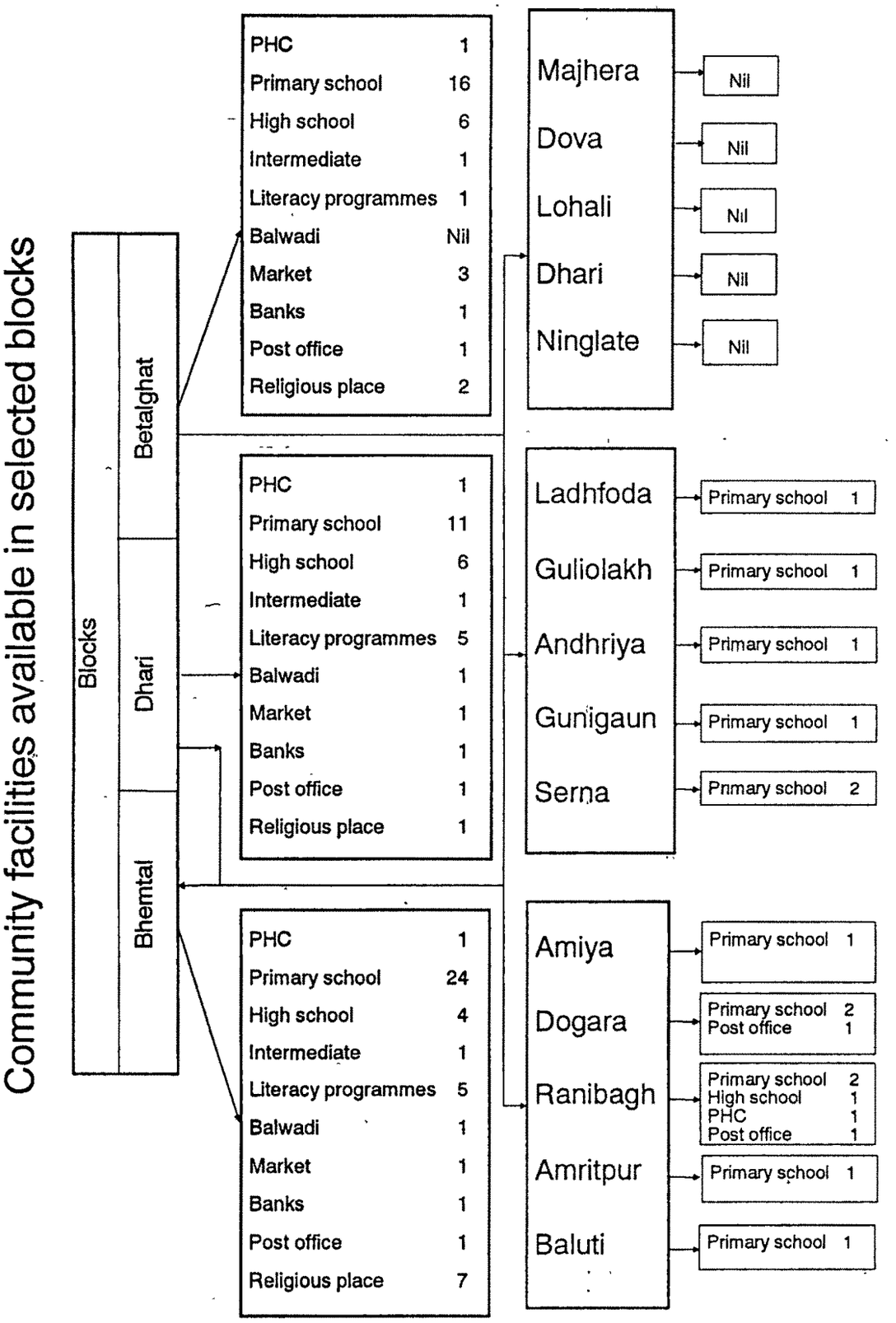
Out of total 10,000 per cent of irrigated land, 45.63 per cent of land was irrigated by tubewells and 44.09 per cent by canals. The source of water for irrigating for 6.63 per cent of land was wells. Only 3.65 per cent land was irrigated by ponds and lakes.

4. Community facilities

Census survey was carried out to find out the types of community facilities available in selected villages in each

Figure 4

Community facilities available in selected blocks



of the selected blocks.

The Bhemtal block had Primary Health Center, 2 banks, one post office, 24 primary schools, 4 high schools, 1 intermediate college, market facilities, parks, lake and many religious places. There was Primary Health Center, bank, post office, 11 primary schools, 6 high schools and one intermediate college in Dhari Block. This block had a big market and two parks. Betalghat block had Primary Health Center, a bank, post office, 16 primary schools, 6 high schools, one intermediate college. Three markets for buying daily requirements. Two public parks and two very famous temples were there for the rural and urban folk (Figure 4).

The village Baluti which comes under Bhemtal block had only one primary school for the children. Most of the children goes to Jeolikot for their education. The mushroom plant and Horticulture farm in this area provided employment to large number of villagers. Amritpur village had only one primary school, due to this children goes to Ranibagh, which had two primary schools and one high school. Village Ranibagh had Primary Health Center and a post office. There were two primary schools and a post office situated in Dogara village. And only a Primary school was found in Amiya village.

In the selected five villages of Dhari block, village serna had 2 primary schools, village Gunigaun had one primary school and one primary school was available in

Gul iolakh. But there was no school found in Andhriya and Lodhfoda villages. As far as the literacy programmes available in the 5 selected villages of Betalghat block, it was found that none of above villages had any facilities available to the people. For all purposes people had to go to either the block or the towns known as Garmpani and Kherna. The reason was that above villages were very far from the main road and situated on high hills.

5. Women development programmes

There were 537 mahila mandals existed in Nainital district in 1988, which increased to 759 in 1990, but decreased to 500 in 1991. These mahila mandals frequently arranged various short training courses for the rural women, at block level. Besides this, there were 800 adult education centers, 600 education centers and 525 Balwadis/Anganwadis. Many rural women who were educated were employed in village Balwadi/anganwadi, for the youth there were 426 yuvak mandals (Table 2).

Table 2 Position of Women development and Welfare Programmes in District Nainital

programmes	Year			
	1988	1989	1990	1991
1	2	3	4	5
1) Adult education center	600	700	800	800
2) Education centers	510	521	600	600
3) Balwadi/anganwadi	106	436	515	525
4) Mahila Mandal	537	621	759	500
5) Yuvak mandal	100	218	331	426

Source :Economic and statistic organization. State planning Dept. Govt. of Uttar Pradesh 1989.

6b. SAMPLING DESIGN

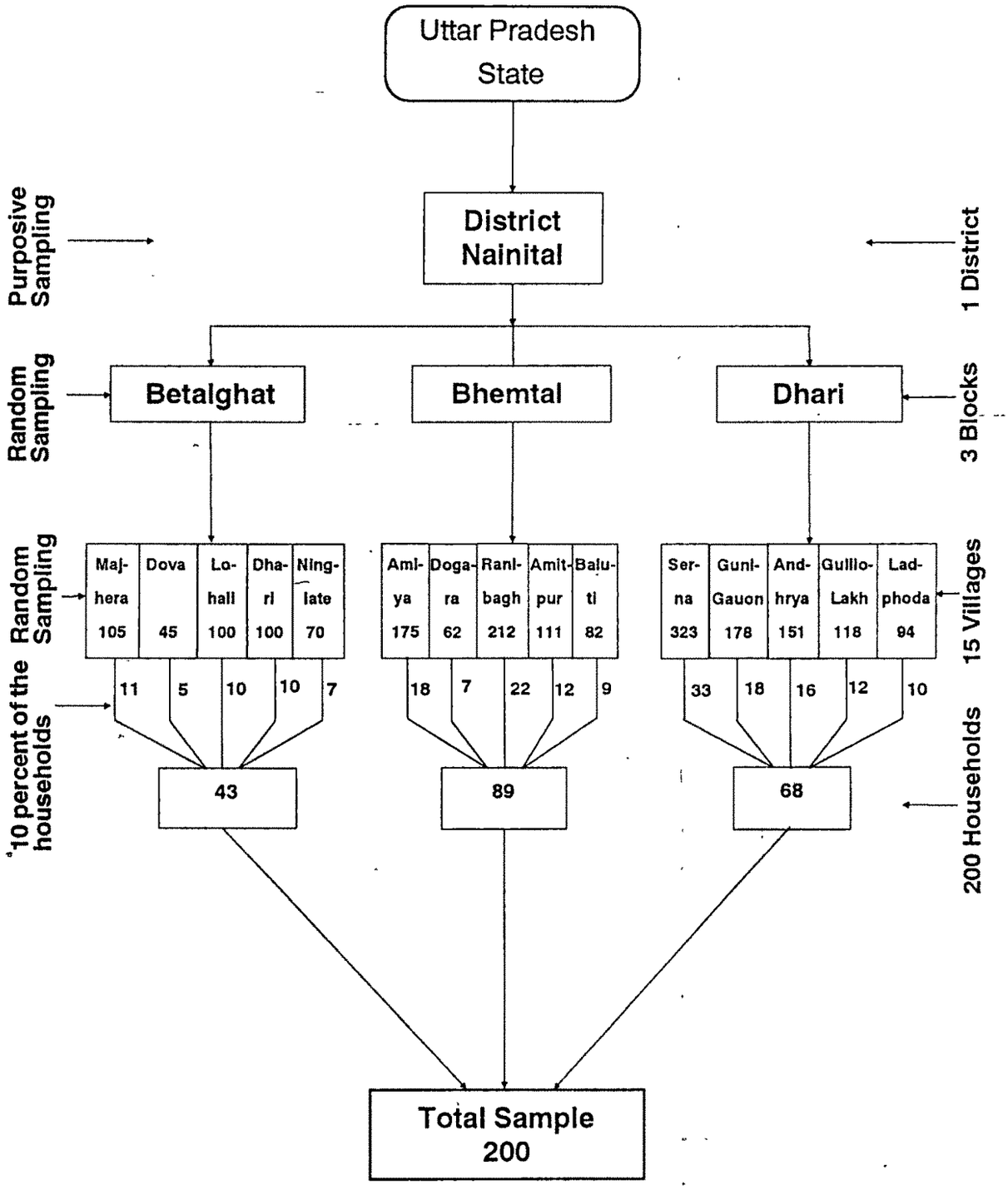
The multistage, purposive cum random sampling design was used to select the study area and respondents. The stages included the steps as, selection of blocks, selection of villages and selection of respondents (Figure 5).

Selection of blocks

For the selection of blocks a list of the blocks of the hill region of district Nainital was obtained from the District Development office, Nainital. The hill region consisted of 6 blocks, out of which three blocks of Bhemtal,

Figure 5

Schematic representation of sampling Design



Dhari and Betalghat were selected randomly for the study, after having thorough discussion with block development officer, regarding development projects/ programmes which were under operation in the selected blocks.

Selection of villages

For selection of villages, lists of villages under Bhemtal Block, Dhari Block and Betalghat Block were procured from the Block Development offices (Appendix VI). From these, 5 villages from each block were selected randomly.

Selection of families

Total number of families in each selected village as obtained from base line survey data 1989-90 as well as from the family registers maintained by Sabhapati of each of the villages. These provided the most upto date record of the families. Along with the number of families, other information received was number of family members, number of males and females in the family, type of occupation in which they were involved, size of the land holding and the income of the family (Table 4 to 10).

Information collected through census survey was supplemented with some more information regarding community facilities available in the villages from the Block development offices. The census survey made, helped in the selection of the sample for the study as base line data.

Table 3

Distribution of the families selected from three blocks

Name of the Block	Total families per village	Number of families selected
Dhari	Serna	323	33
	Guni Gaun	178	18
	Andhriya	151	16
	Gul io Lakh	118	12
	ladhioda	94	10
Bhemtal	Amiya	175	18
	Dogara	62	7
	Ranibagh	212	22
	Amritpur	111	12
	balauti	82	9
Betalghat	Dhari	70	7
	Ninglate	100	10
	Lohali	100	10
	Dova	45	5
	Majhera	105	11

6c. SAMPLE SIZE

A stratified random sampling on the basis of 10 per cent of families from total families of each village was made for the survey purpose (table 3). The sample consisted of 23 families from large land holding group, 64 from medium land holding group, 113 from small land holding group. The categories of the size of land holding according to the norms of State Department of Agriculture, Uttar Pradesh was,

(i) 0- .99 acres Marginal farmers.

(ii) 1-2 acres Small farmers

(iii) 2-4 acres medium farmers

(iv) 4 acres and above large farmers

The sample comprised of 200 families. Unit of inquiry was the family and the key informant was the respondents.

7. Method of data collection

Data were gathered personally by using the interview method. A visit was made to each of the selected villages prior to data collection in order to establish a rapport with villagers and to ensure full confidence and co-operation from the respondents. The data were collected with the help of the interview schedule. Respondents were the key informants for the investigation. Key informants were those who could respond to the questions pertaining to the present study. In several cases, family members were also asked some of the specific questions to cross check the answers. Respondents were interviewed in Hindi to maintain consistency while interviewing. The responses of subjects were very encouraging and provided authentic and frank responses. Many times cross checking and cross questioning techniques for a particular response was also adopted to get qualitative data.

Period of data collection was from Dec. 1991 to April 1992. Interviews took about hours to 2 hours 15 minutes for each of the family and only 3-4 families were interviewed in a day. On the whole all the respondents were very cooperative.

8. Analysis of data

8a. CATEGORIZATION OF THE VARIABLES FOR THE PURPOSE OF ANALYSIS AND TABULATION

Various techniques of scoring was applied to the relevant sections of data in the schedule. A detailed descriptions of scoring procedure adopted is given in appendix (VII).

For the purpose of analysis, variables of the study were categorised as given below.

1. **Age** : Age was measured in terms of number of full years the respondent completed at the time of interview. It was categorized as

   Young : below 35 years.
   Middle : 35-49 years.
   Old : 50 years and above

2. **Education** : Operationally, education referred to the formal education attained by the respondents. It was categorized as:

   1. Illiterate
   2. Low level : upto middle school.
   3. Medium level : High school
   4. High level : College level.

3. **Employment statys**

1. Self employed : Who were engaged in the formal/informal market sector for the returns in cash or kind.
2. Employed : Who were gainfully employed for wages.
3. Non-employed : Who were not employed outside home for cash, kind or wages.

4. **Socio-economic status** : Socio-economic status is a composite index which reveals social as well as economic standing of a family within a given society. Socio-economic status was measured by adopting the scale developed by Pareek and Trivedi, (1974). On the basis of scores obtained from the scale, the respondents were categorized. The categories were as follows.

Status Category	**Range of scores**
Upper class	above 43
Upper middle class	33-42
Middle class	24-32
Lower middle class	13-23
Lower class	Below 13

For the statistical analysis upper and upper middle class were clubbed and lower middle class and lower class were clubbed together.

5. **Family income** : Family income refers to the monthly money income accrued from various sources of respondent's family such as farm produce, service, business, dairy/poultry and income generating services. The family income ranges were made according to taxation inquiry committee (Taxation Enquiry Committee (1991) : Government of India - Publication).

Category		**Range of Income**
1.	Low income level	upto Rs. 1700
2.	Medium income level	Rs. 1701 to 4200
3.	Medium High income level	Rs. 4201 to 8400
4.	High income level	Rs. 8401 and above.

6. **Family size** : Operationally family size refers to the total number of member in the family consisting of husband, wife, children and other dependent, residing under same roof and sharing the same kitchen. The family size was categorized as :

1. Small : upto 4 members
2. Medium : 5 to 8 members.
3. Large : 9 and above.

7. **Occupation of the family** : It refers to family's means of livelihood. The respondents were categorized into the following occupational categories.

i. Farming - Persons engaged in cultivation, either as owners or tenants.

ii. Business - Persons engaged in independent business like having tea stall, owning grocery shop, selling of vegetables fruits and flowers.

iii. Service - Persons engaged in services like government, semi-government, private sectors etc.

iv. Labourers - Labourers included persons earning income on wage basis and may be employed temporarily. They were included persons engaged in private sector.

8. **Land holding** : Land holding refers to the standard areas, size of cultivated land possessed by an individual family. The size of land holding was categorized according to the norms of State Department of Agriculture, Uttar Pradesh. (Rural Area Development Research, Planning and Action making. Director, U.P. Hill Development Corporation Ltd. Lucknow U.P. 1986) as follows,

	Categories	**Range**
i.	Marginal farmers	0 to .99 acres
ii.	Small farmers	1 to 2 acres
iii.	Medium farmers	2 to 4 acres
iv.	Large farmers	4 acres and above.

For the analysis purpose marginal and small farmers were clubbed together.

9. **Caste** : Caste refers to the class or distinct hereditary order of society and was categorized as :

   i. High caste
   ii. Scheduled caste/Scheduled tribe.
   iii. Backward class.

10. **Relational position of the women** : The respondents relational position in the family was analysed in terms of their relation to the head of the family.

   1. Daughter
   2. Daughter-in-law
   3. Wife.

11. **Ordinal position of women** : The respondents were categorized as :

   1. eldest
   2. Middle position.
   3. Youngest.

12. **Exposure to rural development programmes** : Exposure to development programmes refers to frequency of contact between respondents and different developmental programmes. For the present study, the frequency of contact was measured as regularly, sometimes and never.

13. **Extent of involvement in decision making** : The respondents were categorized on the basis of their extent of involvement in terms of fully independent

decision takers, those who were partially involved and those who were not at all involved.

14. **Extent of participating in decision implementation :** The respondents were categorized on the basis of their extent of participation in decision implementation in terms of whole participation, partial participation and no participation.

8b. STATISTICAL ANALYSIS OF THE DATA

The data were coded according to code numbers assigned and were analysed employing descriptive as well as relational statistics. The total sample was categorized into three land holding groups (according to the norms of state Department of Agriculture, Uttar Pradesh). The entire analysis was represented by three land holding groups that the sample comprised of viz. small land holding group, medium land holding and large land holding group.

I. The data were presented in frequencies, percentages, mean and standard deviation for analysing the following information.

1. Demographic variables, family variables namely age, education, occupation of head of the family and other family members, family size, family type, composition of family, number of female members, number of girls employed at farm, size of land holding, family income, sources of income, earning members in the family.

personal variables, like age, education, employment status, marital status and caste of the respondents.

2. Assessment of personality traits.

3. Relational position and ordinal position of respondents.

4. Data related to extent of involvement in decision making related to household, farm, livestock and income generating activities.

5. Data related to extent of participation of respondents in various household, farm, livestock and income generating activities.

6. Types of income generating activities performed by respondent and role in financial matters.

TESTING OF HYPOTHESES

The statistical package for social science (SPSS/PC 1) was used for statistical analysis. All the variables that were assumed to have any bearing on the dependent variable i.e., Extent of involvement in Decision making, and implementing were studied.

(1) Multiple regression analysis was used to

(1) test the influence of personal, family and situational variables on the dependent variable.

(2) rōle of respondent in money matters and involvement in decision making processes.

From the 'T' values, in each case, the significant factors were picked, and again put through step wise Regression Analysis, wherein each significant variable was entered one at a time in steps, to test the independent influence of each variable, separately, one after another on the dependent variable.

(2) Chi-square test was used to determine the association between various personality traits and extent of respondent's involvement in decision making. For the significant chi-square values , coefficient of contingency was obtained to ascertain the degree of association between the two variables.

(3) Chi-square test was used to determine the association between the personal variables like age, education employment status, marital status, whether woman is head of the family, caste of the respondents, family variables such as land holding, family size, family type and family income and situational variables like relational position, ordinal position, their extent of exposure to developmental programmes and extent of participation in household, farm, livestock and income generating activities.

For the significant chi-square values, coefficient of contingency was obtained to ascertain the degree of association between the two variables.

(4) Pearson product moment correlation was computed to find out the correlations between extent of participation in household, farm livestock income generation activities and the dependent variable i.e. extent of involvement in decision making.