

CHAPTER III

METHODOLOGY

In order to reach the aims of the present study a detailed plan of work and sequential procedures are required. The research design, conceptual framework showing the relationship of variables, description of the variables and operational definitions of the terms used in the study are explained briefly. The sampling technique, selection and construction of the tool for the data collection, the method of data collection and analysis of data are also described for the study. This chapter is therefore organised under the following sub-headings to depict the plan of work and sequential procedures:

- 3.1 Research design
- 3.2 Conceptual framework of the study
- 3.3 Variables under study
- 3.4 Operational definitions
- 3.5 Development of the tool
- 3.6 Selection of the sample
- 3.7 Method of data collection
- 3.8 Analysis of data

3.1 Research Design

The research design is the specification of methods and procedures used for acquiring the information needed for the study. The present study aims at analysing in-depth, the status of women in female-headed households in a particular part of

India. For this purpose the descriptive research design was thought to be the most appropriate because apart from describing the character of particular individual or a group, it enables collecting data for testing hypotheses or answering questions which are concerned with the current status of women in female-headed households.

3.2 Conceptual Framework of the Study

In order to give direction to the investigation a conceptual framework was developed (figure .1). The components of the framework are as follows :

- i. Personal factors
- ii. Familial factors
- iii. Situational factors
- iv. Problems faced by the female heads of the household.
- v. Survival strategies adopted by the female heads to meet the crisis situation.
- vi. Opinion on discrimination against women.
- vii. Status of women.

Females assume the role as the head of households under various circumstances viz., death of husband, migration of male member for long period of time, divorce/separation/dessertion and also when male members have lost their function as economic provider due to unemployment or ill health. Thus women have to accept the responsibility of chief economic provider for the family and assume the role of head of the family. It was conceptualised that certain personal, familial and situational

FIGURE - 1

CONCEPTUAL FRAMEWORK OF STATUS OF WOMEN IN FEMALE-HEADED HOUSEHOLDS

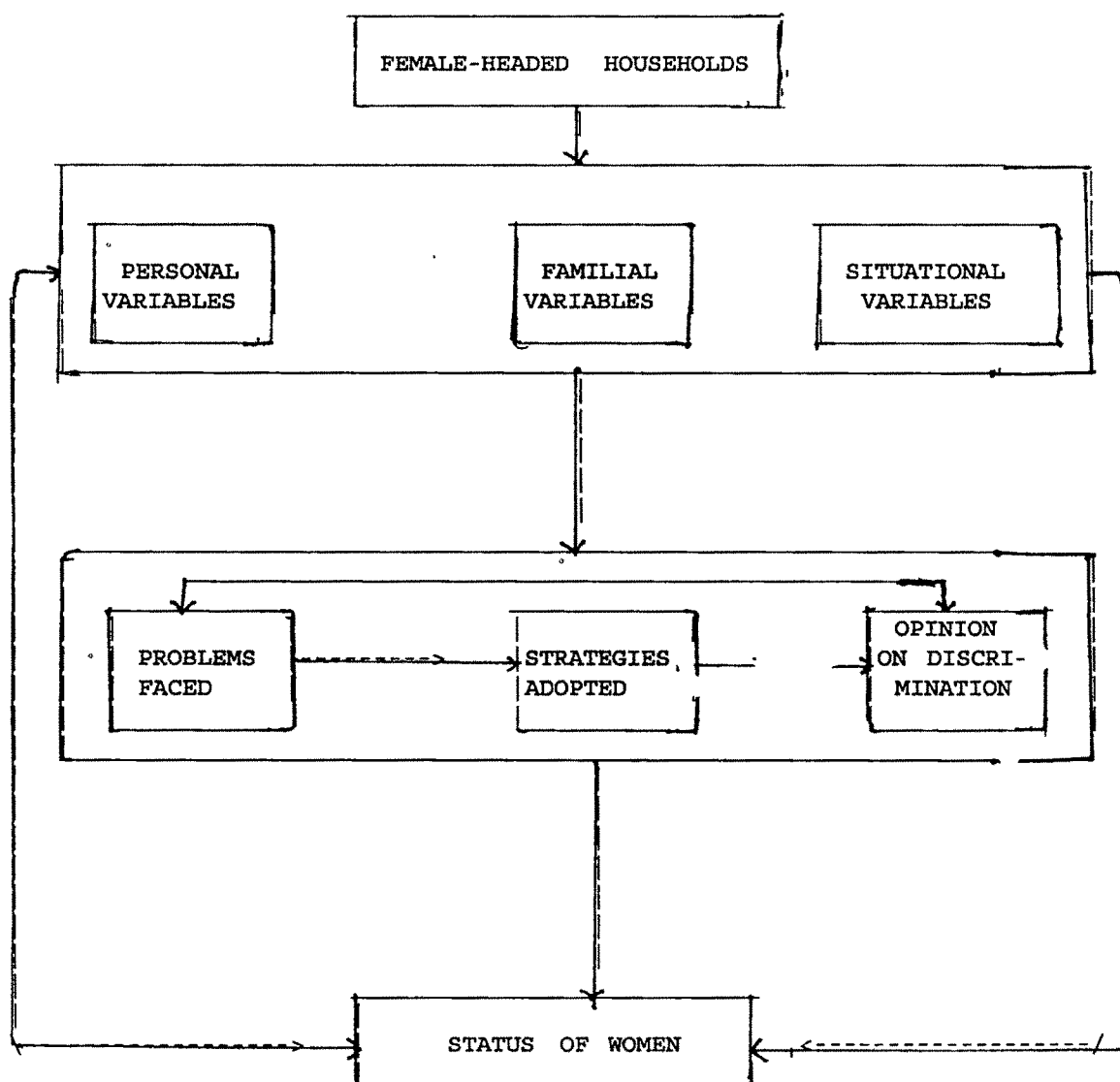
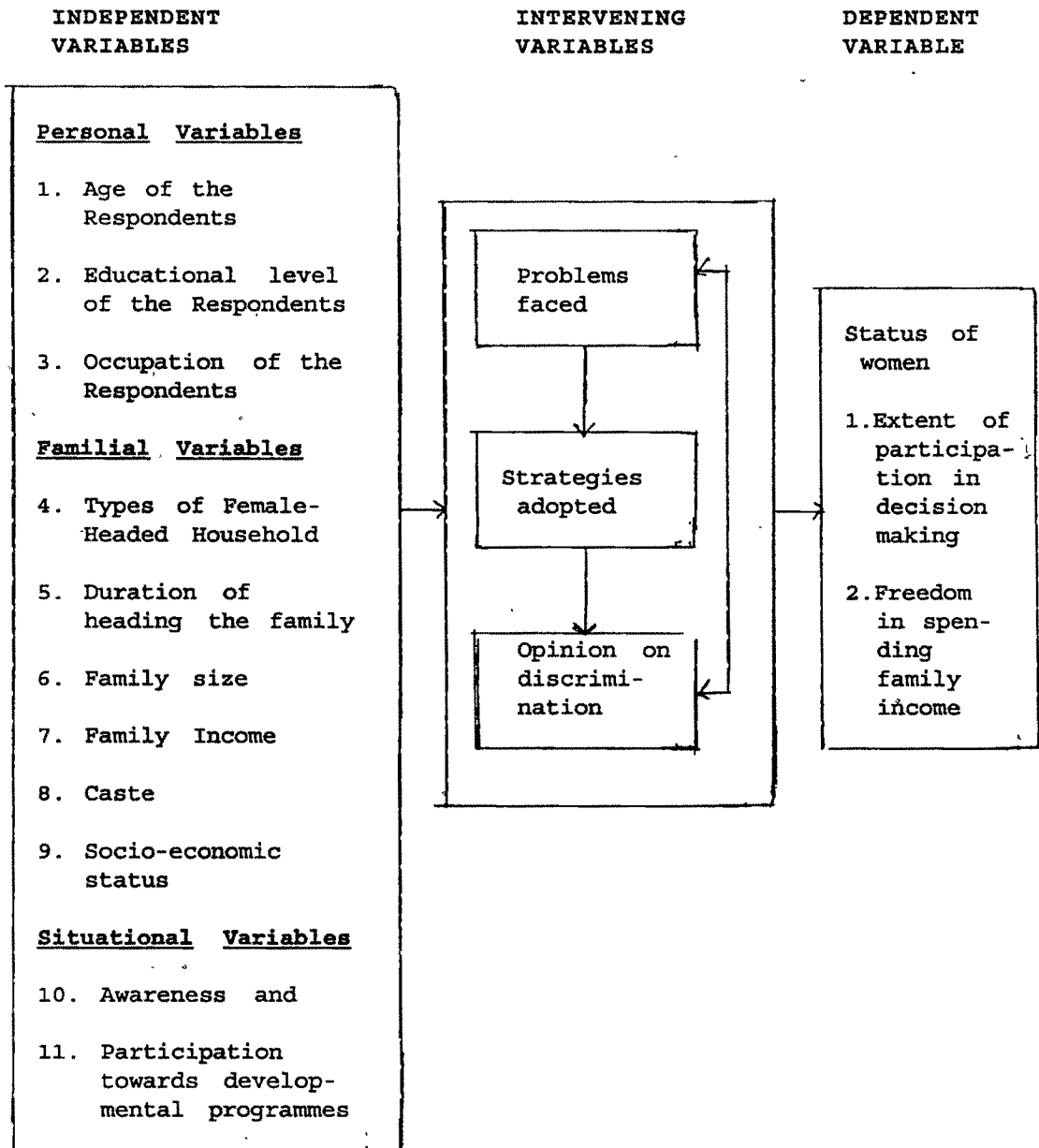


FIGURE - 2

VARIABLES UNDER STUDY



factors related to female heads of the household, may affect the problems faced by them, strategies adopted by them to meet the crisis situation and opinion on discrimination against women which in turn influenced their status. It was also conceptualized that problems faced by them, strategies adopted by them and opinion on discrimination against women may be interrelated and may have impact on each other. However, the status of women of female heads of the household may also be affected by selected personal, familial and situational variables (Figure-1).

3.3 Variables Under the Study

Status of women in female-headed households depends upon a number of factors based on which the three sets of variables have been selected. The independent set of variables act through the intervening variables, as well as upon the dependent variable directly. The intervening set of variables act as independent variables so far as the dependent set of variables are concerned but act as dependent variable in relation to independent variables. The rationale for selecting these variables have been presented in the following discussion (Figure - 2).

3.3.1 Dependent Variable

In this study the status of women was dependent variable. The attempt has been made to study the status of women in female headed households with respect to the extent of their participation in decision making and freedom in spending family income. The indices are as follows :

- (1) Extent of participation in decision making : Decision making in the family is an important element in the status of family members because it plays supreme role in the allocation of resources and the distribution of duties within the family. According to Rao and Husain (1991), and Sood (1991) participation of women in decision making process in the family is a strong indicator of their position in terms of equality with men.
- (2) Freedom in spending family income : Mere earning of money and its contribution to the family income, however, may not increase a woman's status. Devi Lalitha (1982) reported that women's share of authority in spending the family income leads to the possession of economic power.

Therefore, for the present study it was thought that the extent of participation in decision making and freedom in spending family income would serve as valuable indicators to measure the status of women. Status of women was also considered separately as dependent on certain intervening as well as independent variables.

3.3.2 Intervening Variables

Intervening variables in the study were problems faced by the female heads, strategies adopted by them at the time of crisis and opinion on discrimination against women, which in turn might influence the status of women. Here they would act as independent variables. The same would act as the dependent

variables in relation to other variables, that is, personal, familial and situational variables of the present study.

3.3.2.1 Problems faced by female heads : It was found in earlier research studies that the absence of male not only leads to sharp fall in the income level of the family but the wives and children are deprived of the emotional security that husband and father normally provide and increases responsibilities for women. In most of the cases the hostility of in-laws results in split-home where wife and children are set apart from the warmth of the family (Gulati, 1983; Bharat, 1986; Parasuraman, 1986). On the basis of the above observations, this variable was considered to be an important one for the study. It was thought this variable might be affected by certain personal, familial and situational variables.

3.3.2.2 Strategies adopted by the female heads : The survival strategy at the time of assuming responsibilities as female heads of the household is crucial to the status of women in these households. The woman has to assume the role of economic provider and chief decision maker. If she gears herself and takes the challenge, her status would be better but if she scumbs to the stress and strain she would lose her identity. The new social status to which the family will move after the exit of the husband, is dependent largely on the woman's personality and also the social environment in which the family operates. The woman, as the head of the family unit, plays a pivotal role. Her education, skills, as well as her ability to withstand the psychological and physical stresses of her new role, will all

define the orientation that her family will get (Leela, 1988). It was thought that some of the females' personal, familial and situational variables might influence the strategies adopted by the females. Therefore, it was considered as an important variable to be included in the present study.

3.3.2.3 Opinion on discrimination against women (DAW) : Opinion regarding discrimination against women shall mean any distinction or restriction made on the basis of sex which has the effect of impairing or nullifying the recognition, enjoyment or exercise by women, irrespective of their marital status, on the basis of equality of men and women, of human rights and fundamental freedoms in the economic, social, cultural or any other field, (Convention Report, united Nations, 1979). Discrimination against women in the Indian society is very common resulting in a strong barrier in the way of women's upliftment. For instance there is a tendency in the society to preferably hire male workers, which limits the wage earning opportunities of the women making their problems more complicated. The opinion of the respondents in this regard was therefore thought appropriate to create a sound yardstick to measure the status of women.

3.3.3 Independent Variables

For the present investigation, the independent variables were classified into three categories namely 1) personal variables 2) Familial variables and 3) situational variables.

3.3.3.1 Personal variables : These included age, educational level and occupation of the respondents.

Age of the respondents : Age was considered to be an important factor influencing status (Vlassoff, 1978; and Patel, 1982), Age as a variable affecting decision making pattern of women as reported by researchers (Schomaker and Tnorpe, 1963). Data on the relationship of age of women and extent of participation in decision making of particularly female-headed households residing in rural area in northern regions is limited. Visaria (1985) reported that the older the female heads of households, the greater was the possibility of her not being able to provide for well being of households. Such findings inspired the investigator to study the relationship between these variables. Hence, it was thought appropriate to include age as an independent variable in the present study.

Educational level of the respondents : Education is an important variable which may influence the status of the women. It was found in a few studies (Agarwal, 1986; Sethi, 1982 and Talwar, 1984;) that education and occupational status of women were some of the factors associated with the women's participation in decision making process in the family. Thus, it was considered essential to select this variable for the present study.

Occupation of the respondent : It was postulated that occupation of female-heads of the household may affect the status of women as well as problems and strategies of female-headed households because it affects the financial position of the family. It is

also directly associated with the chance given to women in the family to participate in decision making. Therefore, this variable was considered to be an important one for the present investigation.

3.3.3.2 Familial variables : These included family income, family size, caste, types of female heads, duration of heading the family and socio-economic status (SES) of the family.

Family income : It was envisaged that the family income might affect the problems and strategies of the female-heads of the households. Hence, this variable was found to be of crucial value to the study.

Family size : Family size as a variable was found to be associated with different activities, problems faced and survival strategies adopted by the female headed-households. Therefore, this variable was included.

Caste : Caste is believed to play an important role in females' because it is usually assumed that females' participation in various activities varies according to the 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 the caste influences women's participation in different activities, it was included.

Types of female headed households : Women who headed the families were found to be more involved in decision making (Ahsan et al.,

1986, Halim and Ali, 1986;). The types of female headed households might affect the decision making pattern and the effectiveness in decision making which in turn might affect the status of women. This variable was therefore thought important.

Duration of heading the family : This indicated the length of heading the family on the basis of which the female heads might express their opinion of their pains or joys or risks or rewards experienced during the heading of family including their opinion on discrimination against women and the strategies adopted by them. This variable was therefore considered as important.

Socio-economic status : The socio-economic status (SES) of the family tends to affect the respondents' participation in various activities and decisions (Arya, 1964; Bajwa, 1984; Ghosh, 1985; Sirohi, 1985). It was also postulated that socio-economic status of the family might affect the problems faced, strategies adopted and their opinion on discrimination against women. Therefore, this variable was considered to be an important one for the present study.

3.3.3.3 Situational variables : For the present study, situational variables consisted of respondents' awareness and participation regarding developmental programmes.

Awareness towards developmental programmes : The various developmental programmes organised by the various organisations equip the women with plenty of knowledge and provide them with adequate opportunities so that the women might overcome the problems as suitably as possible. To be benefited from these

programmes awareness of the respondents was most important. It was assumed in this study that more the awareness better the strategy and better the status.

Participation towards developmental programmes : Women's participation in developmental programmes was equally important for acquiring income generating skills and availing the benefit under the various programmes. It was assumed that participating women might have less problems and adopted better strategies. Thus, the variable was included.

3.4 Operational Definitions

Certain terms and concepts were operationally defined for the measurement of variables in this study.

Female-headed households are defined as those households where "females are the chief economic provider, irrespective of the presence or absence of male member in the family" such as widows, wives of outmigrant, wives of non functional male and deserted women.

Chief economic provider is the person who is the main contributor to family income or is the sole earner in the family.

Problems faced by the female heads it referred to the views and feelings of the respondents about the extent to which difficulties were arising out of the existing situations.

Survival strategies it is operationally defined as the methods adopted by the female heads to meet the financial

problems/demands in order to survive/sustain and/or to maintain standard of living.

Opinion on discrimination against women it is the expression of reaction to statements reflecting the belief or feelings on discrimination against women.

Duration of heading the family for the present study it is defined as the number of years since when the respondents have been heading the family.

Status of women for the present study, is reflected by the women's participation in decision making and their freedom to spend family income.

Chief decision maker is the person who takes independent and final decisions in various situations.

Freedom to spend family income operationally defined as extent of freedom to spend income according to the desires of the female head.

Awareness towards developmental programmes is defined as the consciousness of individual towards various developmental programmes.

Participation in developmental programmes is defined as the frequency of attending the developmental programmes operative in that area by the respondents.

3.5 Development of the Tool

As the data for present study was to be collected for a cross section of population who were generally illiterate, interview schedule was considered as the appropriate tool which would adequately gather informations pertaining to the research work. The objectives formulated for the study guided the development of an interview schedule.

3.5.1 Description of the Tool

The pre-coded interview schedule was constructed comprising of six sections.

Section - I of the interview schedule included questions which helped in collecting information pertaining to socio-economic and demographic profile of the respondents. Pareek and Trivedi's (1974) socio-economic scale (Rural) was adopted to establish the socio-economic status of the female-headed households, reliability of the scale ^{was} 0.87. Types of female heads and duration of heading the family were also included in this section.

Section - II of interview schedule comprised questions on respondents' awareness regarding developmental programmes conducted by government and voluntary agencies and the nature and extent of their participation in these programmes. The impediments, if any, preventing them from participation were also included in this section.

Section - III contained the set of statements describing the problems faced by female heads of the household in relation to economic, family, personal & social, and agricultural aspects.

Section - IV of the schedule was designed to elicit information in detail regarding support structures available and survival strategies adopted at the time of assuming responsibilities as a head.

Section - V of the schedule was planned to explore the opinion of the respondents' regarding discrimination against women in family and society. The opinionnaire was designed to elicit information through statements pertaining to various aspects of discrimination against women in general female heads, widows, wives of outmigrants and divorced/deserted women.

Section - VI of the instrument dealt with the information regarding status of women in relation to the (i) extent of participation in decision making viz. household, farm, livestock and income generating activities and (ii) extent to which they had freedom to spend family income (Appendix -II ~~Part-B~~ ^{Part-B}).

3.5.2 Development of the Problems Scale to Measure the Extent of Problems Faced by Respondents

An attempt had been made in the present investigation to develop a descriptive rating scale about the problems ^{of} respondents faced in different situations. The objective of determining the extent of problems faced by respondents required a standardized scale to measure it. For quantitative measurements the concept of scaling method is mostly used.

3.5.2.1 Item collection : The scale comprised of several statements (the items) relevant to study. A thorough review of literature helped to frame the statements on various problems i.e. economic, family (related to rearing and caring of children) personal and social, agricultural in nature. The most important factor considered in collecting and framing the items was that it should be within the level of rural respondent's understanding. Following criteria were kept in mind while selecting the items.

(i) The statements should be as simple as possible.

(ii) That should be clear, brief and related to the practical problems encountered by women.

3.5.2.2 Content validity of the problems scale : The aim was to develop such scale that would satisfy content validity. The content validity assesses the relevance of the scale to the stated purpose. It is basically judgemental and intuitive. It can be determined by using a panel of persons who shall judge how well the measuring instrument meets the standards.

Therefore on the basis of available literature and discussion with subject specialist 40 statements were carefully constructed for the problem scale. Then the statements were submitted to a panel of seven judges who were experts from the Faculty of Home Science, M.S. University of Baroda.

The judges sorted out the statements in terms of its correctness or incorrectness. This was felt necessary so that the investigator could make sure of herself in distinguishing correct

or incorrect statements. They were also requested to indicate their judgement on clarity and applicability of each item. All the responses of the judges were coded and tabulated and analysed for each statement. The screening of the items was done on the basis of the following criteria :

- (i) The statement classified as 'clear' by eighty percent or more of judges was retained in the scale.
- (ii) The statement which was reported as 'aplicable' by eighty percent or more of Judges was included in the test.

Very few statements which were indicated as 'ambiguous' but were very much applicable to the study were modified as per the suggestions given by the experts and were made more clear and approved by the judges after modifications. After the analysis of the judgement given by the panel of experts, ten statements which were not meeting the above criteria were eliminated from the scale. Thus, out of the original set of forty items, thirty items which fulfilled the above criteria were included in the the problems scale.

3.5.2.3 Pilot study : A pilot study, was done to see the feasibility and clarity of the interview schedule and the possibility of discovering new aspects of the problems not anticipated at the planning stage. Therefore the constructed interview schedule was pretested on 30 randomly selected female-head's of households of non-sampled village, Hanumannager (Bhour) Pandaul block of Madhubani district.

3.5.2.4 Reliability of the problems scale : Reliability refers to the accuracy in terms of consistency and stability of measurement by a test (Anastasi, 1982). The reliability varies from zero to one (0-1), having the former value when the measurement involves nothing but error and reading the latter value only when there is no variable error at all in the measurement.

So to ascertain the reliability of the tool, the following procedure was adopted.

- (i) Scoring of responses on the problems scale : The responses received from 30 female-headed households for each statement of the scale were quantified by ascribing scores. The respondents were asked to indicate for each item whether they faced the problem to a great extent, some extent, or not at all. The responses were ascribed a score of three, two and one respectively. There was thus, a possibility of a respondent scoring the minimum of 30 if all answers were "not at all" and maximum of 90 if all the respondents faced the problems to a great extent.
- (ii) Reliability coefficient of problems scale : Split half technique was applied to determine the reliability coefficient of the scale. The whole scale was divided into two halves employing odd-even method. Each of the two sets of items were treated as separate scale. The respondents who scored high on odd items scored high on

even items as well, if empirical errors have been kept to a minimum and the same applied in the case of low scores as well. The total scores of each respondent on the odd and even categories were found out. The coefficient of correlation between odd and even scores of thirty respondents was computed by Pearson Product Moment Coefficient. The value for the scale was found to be $r = 0.79$. From the correlation of the half tests, the reliability coefficient of the whole test was estimated using Spearman - Brown prophecy formula which is, as follows.

$$r_{xx'} = \frac{2 \text{ roe}}{1 + \text{ roe}}$$

where $r_{xx'}$ = reliability coefficient of the whole test
 roe = correlation coefficient of the half test obtained by the Pearson Product Moment formula.

The reliability coefficient thus computed was 0.88, which was considered highly reliable.

3.3.5.3 Development of opinion scale to measure opinion towards discrimination against women (DAW) : For the present investigation, Likert's method of summated rating was used to develop the opinion scale. The survey of literature revealed that Likert technique of summated rating gives results comparable to those obtained by other more time consuming and laborious methods such as Thurstone Equal Appearing Interval Scale. Moreover, the subjective influence of judges as in Thurstone

Technique is also eliminated (Seltiz et al, 1959; Compton and Hall, 1984; and Best and Kahn, 1989).

3.5.3.1 Item collection : Based on the available literature and original ideas of the investigator, the statements which expressed the opinion on discrimination against women were framed. The following criteria were borne in mind while editing the statements.

- (i) The statement should be simple, brief, clear and direct as far as possible.
- (ii) The statements should be such that it can not be interpreted in more than one way.
- (iii) Each statement should contain only one complete thought.
- (iv) No statement should have double negative or other confusing expressions.
- (v) The statement should be in simple rather than in the complex form of sentence.
- (vi) The statements should be worded such that they are expressive of a range of opinion from positive to negative.

It is recommended that about 20 per cent more items than needed be written so that an adequate number of good items will be available for the final version of the test, (Aiken 1982).

Hence, the test is usually somewhat longer than the final product since many items are discarded after try out/item analysis (Borg and Gall, 1983). For the present study initially 52 statements were thus constructed for the opinion scale.

3.5.3.2 Content validity of the opinion scale : The carefully edited statements were submitted to a panel of 10 judges consisting of experts from the Faculty of Education and Psychology; Faculty of Home Science, Faculty of Social Work and Centre for Advanced Studies in Education (CASE), M.S. University of Baroda. Relevant operational definitions and objectives of study were furnished to them. The judges were requested to indicate the following points.

- (i) The direction of the opinion as expressed by each statement. A statement that favoured the discrimination against women was to be considered positive and vice-versa.
- (ii) Clarity of the statement.
- (iii) Relevance of the statements to the opinion in question.

The judges' responses were assessed by the following criteria for the selection of statement :

- a. Those statements where atleast 80% of the judges agreed on the direction of the opinion, clarity and relevance were to be included in the scale.

- b. Any statement reported as ambiguous by three or more number of judges was to be modified and re-submitted to a panel of 5 judges for scrutiny, if approved, then it was to be included in the opinion scale.
- c. The statement on which there was 80% agreement among judges for the category under which it fell was considered to be belonging to that category.

All the criteria were considered simultaneously. Forty five statements were chosen for inclusion in the opinion scale to be used in pilot study.

3.5.3.3 Pilot study : Pilot study was done in the same way as it was done for problems scale.

3.5.3.4 Reliability of the opinion scale to measure opinion towards discrimination against women.

- (i) Scoring of responses on the opinion scale : A three point scale was developed to know the opinion of female-heads of households regarding discrimination against women in general. The responses sought were in terms of agree, uncertain and disagree. The responses on each of the item of scale were quantified by ascribing scores. On a three point scale, weightage was given as below :

	positive statement	Negative statement
Agree	3	1
Uncertain	2	2
Disagree	1	3

A three point scale was purposely chosen taking into consideration the illetrate or low literacy level of female heads of households so as to enable them to express their opinion in more definite manner as they might not be able to differentiate the intensity of their feelings in usual five point scale.

(ii) Item analysis of opinion scale : The total score obtained by all 30 respondents were arranged in descending order. Thirty three per cent (10 respondents, each from top and bottom scores were selected for item analysis as the high and low groups. These were taken as criterion group to evaluate individual statements. Then each item was analysed to determine how effectively it differentiated between the high and low groups. The 't' value for each item was computed to find the discriminating power of each item of opinion regarding discrimination against women. Only those items which showed significant t-values were retained for final scale. Out of 45 items 40 items were retained in the opinion scale after item analysis (Appendix - I).

(iii) Reliability coefficient of opinion scale : Using split-half method, reliability coefficient of the opinion

scale was worked out in the same way as it was done for problems rating scale. The correlation coefficient of the half test was $r = 0.91$ and that estimated for the whole test was $r = 0.95$ after using Spearman Brown Prophecy formula. Hence the scale was found to be highly reliable.

3.6 Selection of the Sample

To select the sample for data collection, it is important to decide the universe of the study from which small areas are designated and sampling units are selected called as household. The basic sampling units chosen may depend on such factors as; the type of area being studied, population distribution, the availability of suitable maps and other information (Raj, 1984).

3.6.1 Locale of the Study

The present study was carried out in Rahika block of Madhubani district of North Bihar. The main reason for the selection of this block was that perceived probability of incidence of female-headed households was high in this block. Low literacy level, backwardness and underdevelopment of the area compelled the male members of the family to go out for livelihood and, leaving their women folk incharge of the family. Secondly, not much research work has been carried out in this district. Thirdly, the investigator herself belongs to Bihar and hence well versed with social and cultural norms which could facilitate her in establishing good rapport with the respondents thus ensuring collection of reliable data.

Population

Madhubani district is subdivided into five sub-division i.e. Sadar Madhubani, Benipati, Jainagar, Jhanjharpur, Phulparas. Each of these sub-division consists of 5,4,3,4,4, blocks respectively. Since this district is densely populated and flood affected, majority of farm-labourers go to Delhi, Punjab, Bombay and some other cities in search of employment. They leave behind their families in the villages. In their absence the wives or mothers or any adult female assume the responsibility as the head of the household. Mostly these females are engaged in agricultural and livestock activities. Some of them are also engaged in a very special handicraft and painting works known as 'Madhubani Painting'/'Mithila Painting'. The total population of the district is 28.32 lakhs and the population of selected block namely Madhubani (Rahika) was found 2.0 lakhs according to Census (1991) (Appendix -IV & V).

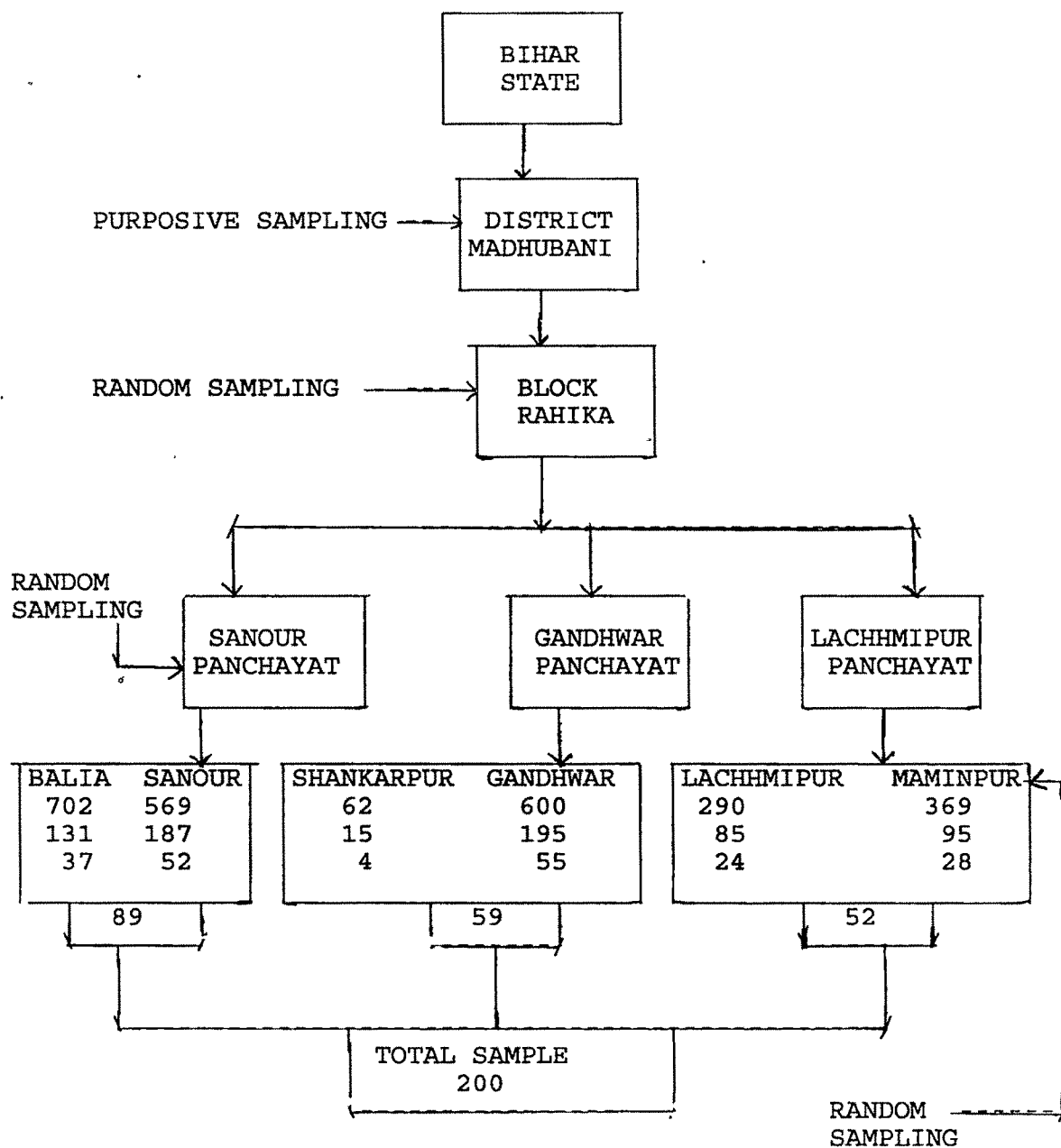
3.6.2 Sampling Design

A multistaged sampling design was used to select the study area and female-headed households in the selected area for the present study. The stages included the selection of block, selection of Panchayat, selection of villages and selection of households (Figure 3). The state and the district were selected purposively for the present investigation.

3.6.2.1 Selection of block : For the selection of block a list of the blocks of Madhubani district was obtained from the Statistics Department of district collectorate. The district

FIGURE - 3

HAMLETS REPRESENTATION OF SAMPLING DESIGN



Note :

- (I) Total No of Households in the village.
- (II) Total No of Female Headed Household available.
- (III) No of Female Headed Household selected for the study.

consisted of 20 blocks, out of which one block of Rahika was randomly selected for the study.

3.6.2.2 Selection of panchayats : For the selection of Panchayats a list of Panchayats which fell in the Rahika block were collected from Block Development Officer(B.D.O.) The block consisted of 22 Panchayats, out of which 3 panchayats were randomly selected for the present study namely Sanour, Gandhwar and Laxmipur Panchayats.

3.6.2.3 Selection of villages : Selection of villages was made from villages listed under Sanour Panchayat, Gandhwar Panchayat and Laxmipur Panchayat. The list was procured from the Mukhia and Sarpanch of the different Panchayats. Total of 6 villages were randomly chosen i.e. 2 villages from Sanour Panchayat, Gandhwar Panchayat and Laxmipur Panchayat.

3.6.2.4 Selection of households : Total number of households in each selected village were obtained from census handbook. A census survey was carried out to collect the informations about the person heading the family/chief provider of the family. As a result of the survey the number of female headed households available in the selected villages were obtained (Appendix - II).
(Part-A)

3.6.2.5 Selection of female-headed households : In this study it was found that 27 percent of the households were headed by females. Out of the number of female headed- households available in the selected villages 28 percent of households were selected through Systematic Random sampling Proportionately from each village. (Table -3.1).

Table-3.1 Distribution of the Female-Headed Households from Three Panchayat

Name of the Panchayats		Total households per village	No. of FHH per village	No. of FHH selected
Sanour (7, 231)	1. Balia - (4, 142)	702	131	37
	2. Sanour - (3, 089)	569	187	53
Gandhwar (6, 829)	3. Shankarpur - (400)	62	15	4
	4. Gandhwar -	600	195	55
Lachhmipur (7, 089)	5. Lachhmipur - (1, 575)	290	85	24
	6. Mominpur - (2, 048)	369	95	27
Total		3015	708	200

Figures given in brackets indicate total population of Panchayats and village.

3.6.2.6 Sample size : The total sample consisted of 200 households of which 90 female -headed households were from Sanour panchayat, 59 Gandhwar panchayat and 53 from Lachhmipur panchayat. The unit of enquiry was the female heads of the households.

3.7 Method of Data Collection

Data were gathered personally by the investigator using structured interview schedule. In spite of being time consuming the interview technique was chosen for the present study for the following specific reasons :

- (i) To get authentic data by establishing rapport with the respondents'.
- (ii) To gain confidence and full co-operation from the respondents as well as to ensure completely filled-in data sheets.

After establishing rapport, respondents were interviewed in local language. The interview schedule was translated in local language i.e Maithili by an expert who was proficient in English as well as in Maithili. This was done to ensure the convenience in asking the questions and getting proper reply at the time of interview. At times cross checking and cross questioning technique for a particular response was also adopted to get qualitative data. The investigator⁹₁ felt that the responses of subjects were very encouraging, authentic and frank and the respondents were very cooperative. Period of data collection was from May'96 to October'96.

3.8 Analysis of Data

The data collected were coded and analysed applying descriptive as well as relational statistics. The data were categorised, tabulated and presented in frequencies, percentages, mean and standard deviation for analysing various informations. The statistical analysis was carried out to test the hypotheses of the study.

3.8.1 Categorisation of the Variables for the Purpose of Analysis

For the purpose of analysis variables of the study were categorised as given below. Various techniques of scoring of responses were applied to the relevant sections of the schedule.

- (i) Age of the respondent : Age was measured in terms of number of full years the respondents completed at the time of data collection. It was then categorized as :

Category	Range of Age
Younger group	20-35 Years
Older group	36-50 Years

- (ii) Educational level of the respondent : Education referred to the formal education attained by the respondent, was categorised as :

Illiterate	:	no formal education
Literate	:	had some formal education

- (iii) Occupation of the respondent : Occupation referred to the means of livelihood adopted by the female headed households. The respondents were categorised into the following occupational categories :

Caste occupation	:	Respondents engaged in occupation designated by caste viz, cobbler, potter, blacksmith, barber, carpenter etc.
------------------	---	----------------------------------------------------------------------------------------------------------------

Self employment : Those who were engaged in productive activities to produce and sell in the formal/informal market sector for returns in cash or in kind viz, handicrafts, painting, stitching etc.

Farming : Those engaged in cultivation either as owners / tenants or labourers.

Labourers : Those respondents who were temporarily employed for wages during the season.

(iv) Family size : Operationally family size referred to the total number of members in the family consisting of husband, wife, children and other dependents, residing under same roof and sharing the same kitchen. The family size was categorised as :

Category size	Range of Family (no. of family members)
Small	≤ 4
Medium	5-8
Large	≥ 9

(v) Family income : Family income referred to the monthly income accrued from various sources by respondent's family such as income from farming, animal rearing, handicrafts, remittances and other income generating sources. Respondents

were categorised into 3 groups according to information obtained from Taxation Inquirey Committee for rural areas (Taxation Enquiry Committee, Bihar (1991) : Government of India :

Category	Range of Income (in Rupees)
Low Income group	< 500
Medium Income group	500-1100
Medium High Income group	1101-2000
High Income group	2001 and above

(vi) Caste : Caste referred to the class or distinct hereditary order of society and was categorised as : Scheduled Castes, Backward caste and General (Caste Amendment Act, 1976 notified for the state of Bihar)

(vii) Socio-economic status (SES) : 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 : Rural) (Appendix - III). On the basis of scores obtained from the scale, the respondents were categorized as;

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

(viii) Types of female headed household : Referred to categories of female headed households. For the present study households were categorised as :

1. Wives of outmigrants
2. Widows
3. Wives of physically handicapped husband

(ix) Duration of heading the family : Referred to the number of years the females were heading their family and were categorised as :

Category	Range of Duration (In years)
Less experienced group (LEG)	< 5
More experienced group (MEG)	>=5

(x) Awareness towards developmental programmes : Referred to the consciousness of the individual towards developmental programmes viz Mahila manadal, Handicrafts, DWCRA, TRYSEM and Adult Education. It was measured by giving scores to their awareness regarding each of the programmes, either aware or not aware. In order to know the level of awareness for varioius progrmmes, scores obtained for each programme were summed up and categorised on the basis of equal intervals.

Category	Range of scores
Less Aware	1-3
More aware	4-5

(xi) Participation in developmental programmes : Referred to the respondent's participation in programmes. It was measured as participated and not-participated in the programmes with participation attributed a score of one and not participated to zero.

(xii) Problems faced by respondents : Level of problems were measured in terms of low, medium and high on the basis of scores given to the respondents on the extent to which they felt various problems in different situations. The scoring pattern was as follows :

Extent of problems	Scores
To great extent	3
To some extent	2
not at all	1

The total scores were summed and categorised on the basis of equal intervals. The total possible scores ranged from 30 to 90.

Category	Range of Scores
Low	30-50
Medium	51-70
High	71-90

(xiii) Survival strategies : It was measured in terms of poor, moderate and high on the basis of scores given to the respondents to which methods adopted by the female -heads to meet financial problems in order to survive and/or maintain standard of living. The scoring pattern was as follows :

Type of Strategies	Scores
Always	3
Sometimes	2
Never	1

The scores were categorised on the basis of equal intervals.
The total possible scores ranged from 12 to 36.

Category	Ranges of Scores
Poor	12-20
Moderate	21-28
High	29-36

(xiv) Opinion on discrimination against women : It was measured in terms of low, medium and high on the basis of scores given to the respondents on the extent to which they responded towards a statement expressing different opinion on discrimination against women. The scoring pattern was as follows :

Opinion on discrimination	Positive statement's scores	Negative scores
Agree	3	1
Uncertain	2	2
Disagree	1	3

The total scores were summed up and categorised into three groups on the basis of equal intervals. The total possible scores ranged from 40 to 120.

Category	Range of scores
Low	40-67
Medium	68-94
High	95-120

- (xv) Status of women : It was measured by using two indicators viz; extent of participation in decision making and extent of freedom in spending family income. The status of women was measured as low, medium and high. Scores obtained for each indicator were summed up and categorised into three groups on the basis of equal intervals. The total possible scores ranged from 85 to 184.

Category	Range of scores
Low	85-117
Medium	118-150
High	151-184

- (a) Extent of participation in decision making : Referred to the measurement of respondents participation in decision making in terms of 'independently' and 'jointly' decisions. The scoring pattern was as follows :

Decisions	Scores
Independently	2
Joint	1

The scores were categorised on the basis of equal intervals and level of decision making was measured.

Category	Range of Scores
Low	71-95
Medium	96-119
High	120-142

The total possible scores ranged from 71 to 142.

(b) Extent of freedom in spending income : The level of freedom was measured in terms of low, medium, and high on the basis of scores given to the respondents on the extent to which they spent family income on various puposes. The scoring pattern was as follows :

Extent of freedom	Scores
To great exetent	3
To some extent	2
not at all	1

The total scores were categorised on the basis of equal intervals. The total possible scores ranged from 14 to 42.

Category	Ranges of Scores
Low	14-23
Medium	24-32
High	33-42

3.8.2 Statistical Treatment of Data

The data were statistically analyzed employing descriptive as well as relational statistics for drawing of inferences. The total sample was categorised into less experienced (LE) and more experienced (ME) groups according to the duration of heading the family.

3.8.2.1 Descriptive statistics : The data were presented in frequencies, percentages, mean and standard deviation for analysing the information.

3.8.2.2 Relational statistics : Statistical analysis was carried out to test the relationship between selected variables and the hypotheses postulated for study. Analysis of variance were computed to study the differences among the respondents in the problems faced, strategies adopted, opinion on discrimination against women and status of women due to variation in personal familial and situational factors. When significant 'F' values were found, 't-test' were computed to find out the groups of respondents varying from each other.

Pearson Product Moment : Correlation were computed to find out the (a) relationship among the scores of various problems, strategy adopted, and opinion on discrimination (b) relationship between status of women and problems, strategy and opinion on discrimination against women.

Multiple Regression Analysis : To find out the overall influence of selected independent variables on the dependent variable i.e status of women. Stepwise Multiple Regression analysis was carried out. Variables are presented based on the influence exerted by them on the status of women.