RESEARCH METHODOLOGY

This chapter deals with the methods and procedures followed in the selection of respondents, variables and their measurements. The statistical tools used in analysing the data to arrive at valid and reliable interpretation have been discussed. It consists of three main parts:

PART - I RESEARCH DESIGN

This part consists the following:

1. Locale of the study.
2. Selection of the Districts.
3. Blocks under study.
4. Villages under study.
5. Sample of respondents and their selection.
6. Pilot study.
7. Pre-testing of instruments.

(1) Locale of the study -

For the purpose of the present investigation, Uttar Pradesh was chosen as locale on the grounds that there is hardly any study of this kind in Uttar Pradesh which could work as guideline for workers, planners and administrators for planning and implementation of the IRDP schemes and activities. Thus the present study will fill the long felt need and assessing the qualitative aspects of the programme under reference. The researcher was well acquainted with the culture prevailing in the selected districts of the state, as he himself hailed from one of the clusters of two districts of the western region of Uttar Pradesh.
(2) Selection of Districts --

Aligarh and Bulandshahr districts were selected purposively. The pair of these two districts resource constraints and unique in its agroclimatic conditions were realized to be the best locale for the present investigation. Moreover, administrative and executive staff of IRDP were also interested in carrying out a research over the qualitative aspects of the programme being operated in these districts with these points in view, it was decided to confine the research work to only those districts of western region of Uttar Pradesh. Owing to a limited time and resources available at the disposal of the researcher, it was found practically impossible to carry out the research in all the districts were chosen for the purpose of the present investigation.

(3) Blocks under Study --

A random sampling procedure was adopted for the selection of blocks. Two blocks from district Aligarh viz. Igns and Gundry and the same number from Bulandshahr district viz. Bulandshahr and Sikanderabad were finally selected for the present investigation.

(4) Villages under Study --

In order to facilitate the selection of the respondents, it was thought essential to spot out some of the villagers from the referred two sets of blocks. Had there been no spotting of the villages the respondents to be interviewed would have been from scattered places of the blocks and data collection would have been very difficult. Hence with a view to have a handy sample of respondents, a set of seven villages and eight villages was considered sufficient to be taken from each of the four blocks. For this purpose, a list of villages was prepared separately for each of the blocks that were used for
drawing required number of villages through random sampling procedure. Thus, the study included a set of 30 villages. The details of the villages selected are given as under:

Table 1: Selected districts, blocks, villages and respondents under study.

<table>
<thead>
<tr>
<th>Districts</th>
<th>Blocks</th>
<th>Villages</th>
<th>Number of respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Gonda</td>
<td>1. Dhantoli</td>
<td>10</td>
<td></td>
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<tr>
<td></td>
<td>2. Basoli</td>
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<td></td>
<td>3. Chinta Ki Nagri</td>
<td>10</td>
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</tr>
<tr>
<td></td>
<td>4. Gonda</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>1. Aligarh</td>
<td>5. Razaval</td>
<td>10</td>
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<td></td>
<td>6. Mangarhi</td>
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<td></td>
<td>7. Dhanda</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>2. Iglas</td>
<td>1. Jotholi</td>
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<td></td>
<td>2. Hastpur</td>
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<td></td>
<td>3. Nagla Chura</td>
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<tr>
<td></td>
<td>4. Basei</td>
<td>10</td>
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<tr>
<td></td>
<td>5. Kamavali</td>
<td>10</td>
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<tr>
<td></td>
<td>6. Visnanpur</td>
<td>10</td>
<td></td>
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<tr>
<td></td>
<td>7. Thera</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td></td>
<td>8. Kajroth</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>2. Bulandshahr</td>
<td>1. Bileri</td>
<td>10</td>
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<tr>
<td></td>
<td>2. Vikhota</td>
<td>10</td>
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<td></td>
<td>3. Aminagar</td>
<td>10</td>
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<td></td>
<td>4. Kankpur</td>
<td>10</td>
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<tr>
<td></td>
<td>5. Lohkha</td>
<td>10</td>
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<td></td>
<td>7. Haridypur</td>
<td>10</td>
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</tbody>
</table>
(5) **Sample of Respondents**

It comprised of beneficiaries like small and marginal farmers.

Agricultural and non-agricultural labourers, scheduled cast, rural artisans, etc. A list of beneficiaries from each of four blocks was prepared separately with the help of block officials for all the 30 villages. From the list 300 beneficiary respondents were selected on random basis.

(6) **Pilot study**

Before construction of the research instruments and determining the type of sample of respondent, a pilot study of the setting was carried out. The investigator himself visited the district headquarter, blocks and some of the villages covered under the IRDP Project and held detailed discussions with officials and villagers of the area. The aim of conducting the pilot study was as under:

1. To obtain the general idea of the locality, the type of benefits to the people, attitudes acquired by the officials towards the implementation of IRDP schemes and the procedure of people's participation.
2. To know the staffing pattern of the programme, types of officials involved
in it and the types of activities being taken up.

3. To have general idea about the problems of the officials in the area.

(7) Pretesting of the Instruments

The important schedules related to the study were first examined with the help of concerned officials, the beneficiaries of the study area and later revised in the light of suggestions made by them. The first draft of structured personal interviewing instruments was prepared to be used for pretesting over a sample of respondents included in the study. The observations so obtained were tabulated and analysed.

Based on these observations the instruments were finalized for their final use for data collection.

Further in the process, all the scales and instruments that were developed by the researcher and used in this study were carefully listed before their final use. This was followed by editing and modification as and when necessary. These modified and edited schedules once again were discussed with the key information so as to ascertain the reliability of the responses.

PART - II VARIABLES AND THEIR MEASUREMENTS

The variables to be studied and the measurements used for the present investigation were as under:
(1) **Programme undertaken by IRDP**:

Various programmes have been undertaken by the IRDP to eradicate the rural poverty of the different sectors of people. These programmes differ from area to area and state to state. Keeping this in view, an attempt has been made to examine the various programmes comes under IRDP in the selected blocks. A schedule is constructed to collect the information needed in this regard which given in Appendix II.

(2) **Coverage of families and Financial Assistance**:

One of the objectives of the present investigation was to study the coverage of families and the financial assistance given to the beneficiaries for various purposes. The coverage refers have to the total families covered under IRDP in selected blocks on the other hand financial assistance refers to the total financial assistance (Loan + Subsidy) given to the covered families in the selected blocks.

Information on these aspects were obtained from all the selected block officials (secondary data). Schedule developed for collection of information on these aspects is given in Appendix II.

(3) **Extent of Loans given to the Sample Households**:

How much amount loan has been given under IRDP for different programmes according to the demand of beneficiaries was measured under this aspect.

(4) **Animal Husbandry Practices**:

Various animal husbandry practices have been undertaken by the IRDP to alleviate the rural poverty of the different sections of people. These
practices are nearly similar from area to area. Perceiving this in view, an attempt has been made to examine these practices. A schedule was constructed to collect the information needed in this regard.

(5) **Extent of Benefits Utilized:**

The term extent of benefits was conceptualized as the total net income of the beneficiaries of three years received by them after the implementation of IRDP programme. In order to know the term extent of loan utilized was conceptualized as how much portion of the loan given to the sample beneficiaries was utilized in the real purpose.

(6) **Improvement in the Socio-economic Status:**

Chapin (1928) defined socio-economic status as “the position of an individual or a family occupied with reference to the prevailing average standards of cultural possession, effective income, material possession and participation in the group activity of the community.”

Socio-economic status of the respondents before and after the implementation of programme was measured with the help of socio-economic status scale developed by Trivedi and Panneek (1963). Some modifications in the original scale were made due to change in the situation of the country. This was examined in terms of eight sub-concepts which are given as under:

(i) Children's education
(ii) Material possession
(iii) Farm power
(iv) Food habit
(v) Clothing position
(vi) Social participation
(vii) income level

(viii) No. of family member employed.

(7) **Relationship between socio-economic status and financial help given to the beneficiaries**:

In the context of the study, relationship has been operationalized in between post-implement scores of socio-economic status and scores of financial (loan + subsidy) given to the beneficiaries in the study area. It was measured with the help of coefficient of correlation.

(8) **Problems of Beneficiaries**:

The IRDP Project is working in co-ordination and collaboration with various financing institutions and government departments for bringing about improvement in the social and economic conditions of small and marginal farmers. Agriculture and non-agricultural labourers, scheduled castes and tribes, and rural artisans. The beneficiaries of IRDP have experienced many problems and difficulties in obtaining benefits. Proper implementation of the schemes and achieving the targets because of this, the beneficiaries have not come up to the level of expected progress inspite the assistance available from IRDP. There must be some problems and difficulties being faced by the beneficiaries in reaping benefits of the IRDP. Therefore, an enquiry was made in this regard to identify such anticipated problems and difficulties. For this purpose, a schedule was constructed for beneficiaries respond which is given in Appendix VI.

(9) **Opinion of Officials**:

Open ended questions were asked to the official respondents to seek their opinion about the working of IRDP and also suggestions to improve the working of the programme for extension functionaries and beneficiaries.
There opinion and suggestions so obtained were then analysed to take measuring out of them.

To know the problems faced by beneficiaries in obtaining benefits and opinion of officials about ICMP, a three point rating scale was exercised with the following corresponding numerical values:

(a) Agree ... 3 score
(b) Indifferent... 2 score
(c) Disagree ... 1 score

PART - III DATA GATHERING AND STATISTICAL PROCEDURE

This part is further divided into two parts:

Data Collection

The study consisted of two sets of instruments for collection of data. They are:

(i) The instrument for beneficiaries.
(ii) The instrument for officials.

All the beneficiaries, official respondents were interviewed personally by the researcher himself and the responses were collected with the help of structured and unstructured scales and instruments. Face to face interview afforded the researcher an opportunity to answer questions, assume an anonymity and clarify the meaning of many items if required. An office call approach was adopted for information from officials and the rest of the respondents were approached through individual contact method in the respective villages. Every beneficiary was contacted individually at his house or farm or whenever he could be available at ease. The respondents who were not available for
interview at the time of investigator's visit were replaced by the other respondents of the same family. The purpose of the data collection was explained to every respondent before he was asked to supply the answer. The whole data gathering took about three months i.e., from early June of 1992 to first week of October 1992.

Statistical measures used

For analysis and interpretation of data, the following statistical tools were used:

1. **Tabular analysis**:
   For the comparison and interpretation of various aspects in the assessment of credit need, its availability and utilization pattern, the tabular form of analysis was used.

2. **Average**:
   The average given, refer to the averages of aggregate values.

3. **Percentage**:
   In the extent of loans and benefits utilized, programmes undertaken by IRDP, "Percentage" method was used to interpret the data.

4. **Mean score**:
   It was calculated to know the average of a particular score, the formula used is as under:

   \[
   \text{Mean Score} = \frac{\text{Total weighted score on particular item}}{\text{No. of respondents}}
   \]

5. **Chi Square test \((X^2)\)**:
   In order to test the difference between before and after the implementation of IRDP, \(X^2\) test was used. Formula used for calculation
of \( X^2 \) test is as under:

<table>
<thead>
<tr>
<th>Total weighted score on particular item</th>
<th>No. of respondents</th>
</tr>
</thead>
</table>

(4) **Chi Square test \((X^2)\):**

In order to test the difference between before and after the implementation of IRDP, \( X^2 \) test was used. Formula used for calculation of \( X^2 \) test is as under:

\[
X^2 = \frac{N}{R_1 R_2} \left[ \sum \left( \frac{a^2}{c} \right) - \frac{R_1^2}{N} \right]
\]

where \( a = \) observed frequencies of post-implementation of socio-economic status,

\( c = \) sum of columns of pre and post implementation of socio-economic status,

\( R_1 \) and \( R_2 = \) Stands for sum of the rows of post and pre-implementation of socio-economic status while \( N \) stands for the total of rows.

(5) **'t' test:**

It was used to test the significance of difference between pre and post-implementation of socio-economic status of beneficiaries in farm power and material possession components. Formula used for calculation of 't' test is as under:

\[
t = \frac{D}{S \sqrt{N}}
\]

\[
S = \sqrt{N} \sqrt{\sum D^2 - \left( \frac{\sum D}{N} \right)^2}
\]

\[
D = \frac{\sum D}{N}
\]
where,

\[ D = \text{difference in between post and pre-implement of socio-economic status}, \]

\[ N = \text{number of items}. \]

This was used for each statement and for each region.