Chapter III

METHOD AND MATERIAL

3.1 Evaluation Approaches:

Rural Development Programmes are generally evaluated by two methods viz. goal attainment model and system model. The goal attainment model tries to match the achievement with targets. Majority of studies undertaken during recent past are primarily based on this model. All these studies mechanically adopted this model of target achievement and cropping the poverty line and showed how poorly the Integrated Rural Development Programme performed its objectives.

IAD Programme philosophy in nutshell envisages to improve the quality of life in rural areas and promote balanced growth through induction of higher growth in backward areas and less privileged section of rural society by way of government intervention so as to reduce the gap between haves and have-nots. It is in this context that the impact of the programme has to be evaluated. But evaluation by goal attainment model does not throw any light on such issues. Secondly, evaluation of impact of the programme on family income of beneficiaries does not reveal the real situation. Whether a particular benefited family crosses the poverty line depends upon four factors:

(i) the initial income level of the family;
(ii) investment/assistance given under the programme;
(iii) incremental income realised from the assistance/investment; which in turn will depend upon the cost efficiency of the assisted economic activity; and

(iv) sustained flow of income over a number of years which further depends on the quantum of assistance, nature of assets, sustained support from the programme, capabilities of the benefited families and demand positions for the final output generated.

Looking into the economic conditions of the programme target group, there is every possibility of households crossing the poverty line who are relatively better off (just below the poverty line) by IDDP intervention. But in case of the poorest among the poor, it is too much to expect them to cross the poverty line with uniform scale of financing in a couple of years. They can be expected to improve their total family income, but crossing the poverty line will definitely be a difficult task. To be realistic, they can be expected to climb the successive income ladder only gradually. As such they can cross the poverty line after sustained support from programme delivery system.

The goal attainment model, does not take account of the beneficiaries who improved their family income by IDDP intervention and fall short of the poverty line. This appraisal as such underestimates the impact of the assistance. Further, amongst those who crossed the poverty line, there is every likelihood of slipping back to initial income level due to lack of constant support from the programme delivery system, the
goal attainment model does not have any mechanism to examine all these crucial issues. Thus, this model does not appear to be appropriate for evaluation of programmes like IADP.

3.2 System Approach:

System model takes care of all the deficiencies in goal attainment model. Further, the scope of the programme itself strengthens the choice of this model for more comprehensive evaluation. This model examines/analyses all possible aspects of the programme like programme planning process, working environment, organisational capability of the programme delivery system, its implementation and impact at various situations. Thus, it presents wholistic view of the performance in consonance with programme philosophy. The approach as used in this study covers the following aspects.

3.2.1 Coverage of Differential Development Level:

The performance of programme strategies depends upon the planning of programme in consonance with the physical resource potential, infrastructure and local needs/skill. Further, the physical resource potential and infrastructural facilities vary from location to location; so will the performance. Thus, an appraisal at aggregate level does not appear appropriate. It has been observed that the areas/regions with low level of development or higher concentration of poverty are also infrastructurally poor; the performance of IADP in these regions thus, is also poor. To present wholistic view of performance, the appraisal on the basis of regions with homogeneous level of development/magnitude of poverty therefore becomes more relevant.
This will be able to present the appraisal in a much wider perspective and give clear view of strong and weak points of the programme. To inbuild this criteria in the total appraisal system, the area under study has been demarcated into possible homogeneous regions according to the existing level of development/extent of poverty.

To ascertain the levels of development, composite index was developed in view of some important indicators like per capita arable land, rural population growth, extent of literacy, concentration of scheduled caste and scheduled tribes, proportionate active work force in total rural population, proportionate marginal workers in total work force, proportion of landless in the total work force, extent of small and marginal holdings, average size of land holding, proportionate sown area irrigated, proportionate geographical area sown, cropping intensity, productivity of principle crops, extent of employment in non-agricultural sector, institutional infrastructure like banking institutions per 100 Sq. Km, road length per 100 Sq. Km., educational institutions per 100 Sq. Km., percentage of villages electrified, animal health centres per 100 Sq. Km., marketing institutions, agriculture and horticultural extension centres. This list could be made further exhaustive, but due to non-availability of data on other indicators it has to be restricted to the above ones only. However, for demarcation purposes this list is sufficient to reveal relative position of different regions. Data on these indicators was gathered at block and district levels. Thereafter
they were standardised as follow:

\[ Z_{ij} = \frac{x_{ij} - \bar{x}_i}{s_i} \]

Where \( i \) refers to the indicators \((i = 1, 2, 3 \ldots \ldots \ldots \ldots 21)\), \( j \) refers to the blocks/districts and \( \bar{x}_i \) is the mean of the \( i \)th indicator with \( s_i \) standard deviation. After standardisation, composite index was built by simply assigning equal weights to all the indicators and summing them up after adjusting them to their logical direction as follow:

\[ Z(\text{sum}) = \sum_{i=1}^{21} Z_{ij} \]

On the basis of the so computed composite index, Block/districts were grouped into homogeneous regions by making quartiles. Accordingly three homogeneous regions of the study area viz. relatively developed, having intermediate level of development and backward, could be visualised. At State level, districts Shimla, Solan and Sirmur were found to be relatively developed, Kinnur, Lahaul-Spiti, Kulu and Chamba districts were adjudged as backward and remaining districts viz. Kangra, Mandi, Hamirpur, Una and Bilaspur had intermediate level of development. Appraisal of the programme thus, was attempted at these three situations.

### 3.2.2 Coverage of Growth Process

Impact of the programme on income of the beneficiaries is generally measured by two approaches viz. 'pre and post assistance' approach and 'with and without assistance' approach.
Former is static in nature while the latter is dynamic. In other words, the latter approach, besides incremental income accrued due to assistance, also takes account of increase in income as a result of the ongoing growth process. Thus, 'with and without assistance' approach appears to be more appropriate than 'pre and post assistance' approach. However, it requires careful analysis to identify incremental income accrued on account of natural growth process and IRDP intervention separately. This identification becomes more complex particularly when IRDP assistance is extended to partially supplement the existing economic activities e.g. assistance in the form of crop loan, ongoing agricultural activities, etc. However, when assistance is provided for taking up new activities e.g. new unit of milch animals, horse and mules, sheep/goats etc. the task becomes relatively easier; net income earned through the assisted activity thus directly gives the incremental income accrued with the assistance. In such a situation, the income accrued due to the ongoing economic activities directly gives the income of beneficiaries without assistance. On the other hand when this income is added to the income accrued due to assistance, it will give income of beneficiaries with assistance. In these circumstances there does not appear any need to have control sample of non-beneficiaries. If at all control sample is considered, then it may not reveal the real picture of growth in income of beneficiaries without assistance. However, when IRDP assistance is extended to partially supplement the ongoing economic activities the necessity of controlled sample cannot be ruled out. Since IRDP assistance in study area by and large
is for new economic activities, therefore in view of reasons explained above only beneficiary households have been considered to evaluate the impact of the programme 'with and without assistance' approach.

3.2.3 Wholistic View of Impact on Income and Poverty

To evaluate the impact of IHP intervention on income and poverty, the earlier mentioned deficiencies in goal attainment model have been taken care of appropriately. To take account of all the possible improvements in income of beneficiaries due to IHP assistance, income mobility criteria appears to be more appropriate than poverty index as used by several researchers. It is based on:

(i) whether the assisted families realised higher income than without IHP assistance situation;

(ii) whether the assisted families progressively climbed to the next higher income level from the income level they had without IHP assistance; and

(iii) cost-efficiency at which the improvement in income was realised.

The first two criteria have been analysed by forming income mobility matrix of beneficiaries with and without IHP intervention; and third one has been examined through investment and output ratio of the assistance. To take long term perspective of the benefits, sufficient time lag has been allowed between the provision of IHP assistance and evaluation of the impact of the programme.
3.2.4 Impact on Regional and Intra-regional Disparities:

Other dimensions of the evaluation in view of programme philosophy considered were, the ability to reduce regional and intra-regional variation in income. In other words, how far the programme succeeded in reducing the gap between haves and have-nots. This aspect was examined through 'Gini Concentration Ratio' of following specification:

\[
\text{Concentration Ratio} = 1 - \sum_{j=1}^{n} P_j (Q_j + Q_{j-1})
\]

Where \( P_j \) = Proportion of households in jth income group

\( Q_j \) = Cumulative proportion of income in jth income group,

\( Q_{j-1} \) = Cumulative proportion of income in (j-1) income group, and

\( n \) = Total number of income groups

3.2.5 Capabilities to plan and implement the programme:

The appraisal has also been made more comprehensive by examining the programme planning and implementation process.

3.3 Selection of Study Area:

Himachal Pradesh depicts a diversified resource endowments and agro-climatic conditions. Therefore, solution to economic/social problems will also be of varied nature. For a fair appraisal of IRDP in hill States like Himachal Pradesh, analysis at different situations is perhaps methodologically necessary. Therefore, area representing all geo-physical features prevailing in the State appears to be more appropriate
for this study. Area fulfilling all these conditions could be a combination of few districts or a district itself. However, in view of the time and resource constraints, attempt was made to select a district representing all possible situations and easily approachable in the stipulated time period. Looking into the relevant statistics of individual districts of the State, Mandi is the only district satisfying all such conditions.

Its altitude varies from 565 metres to 4035 metres above MSL. Thus, the resource endowments and infrastructural facilities are also not distributed uniformly. Therefore, choice/selection of this district is obvious. Further, to evaluate the programme in all the situations it was thought fit and proper to cover all the ten development blocks of the district in this study. Thus the study intensively covers the whole district. To facilitate the appraisal at various locations, the blocks were grouped into regions with homogeneous level of development as discussed earlier. Accordingly the distribution of blocks among different level of development was as follows:

(i) relatively developed region: Gopalpur, Dharampur, Rewalsar and Chauntra;

(ii) region with intermediate level of development: Mandi Sadar, Sunder Nagar and Chachyot; and

(iii) backward region: Karsog, Drang and Seraj
3.4 Data Sources

The study is based on both secondary as well as primary data. Secondary data were collected from various levels of administrative machinery at block, district, and State level. Some information was also collected from District Lead Bank. Basic statistics used on economic and social aspects were gathered from various publications of the Directorate of Land Records and Directorate of Economics and Statistics of H.P. Government. Primary data used in this study was collected from the ultimate beneficiaries of IRDP. Further, information was also collected by way of discussions and personal interview of programme implementing officials.

3.5 Selection of Study Periods

Primary information was gathered from beneficiaries to whom programme was extended during 1980-81 and 1981-82. Choice of this period has been due to following reasons.

(i) Integrated rural development programme in the State picked up tempo during this period only and hence coverage of poor under the programme was also maximum during this period;

(ii) Because of higher coverage under the programme, nature and number of economic activities extended under the programme were also higher;

(iii) Since there is some gestation period necessary for accrual of benefits after initial investment, therefore, reasonable time gap equivalent to at least the gestation period is essential to follow evaluation. Above selected time period allows quite reasonable time lag for accrual of IRDP benefits; this time gap perhaps is also reasonable to examine the continuity (long term impact) of
3.6 Sample Design:

To collect primary informations from programme beneficiaries a sample of nearly five per cent was drawn out of total families benefited during the study period. Individual respondents in each block were chosen through multi-stage random sampling technique.

First stage of sampling involved preparation of the list of the villages and beneficiaries in each block. Therefore, a cluster of six to ten contiguous villages widely covered under IdDP was selected from all the ten blocks of the district. Further, in the formation of village clusters, care has also been taken to select villages where large number of economic activities were offered under the programme. The village clusters thus selected were also confirmed with the programme implementation officials for their suitability to the present study.

Second stage of sampling involved the selection of ultimate beneficiaries for personal interview from the cluster villages. These respondents were chosen purpose-cum-randomly from the beneficiaries in each cluster village. Total sample in each cluster was decided according to the total families assisted in a particular block. Sample size drawn as such was nearly five per cent of the latter.

In total sample, due representation has also been given to various categories of poor viz. small and marginal farmers, landless agricultural labourers, scheduled caste, scheduled tribes etc. The composition of each group in the
sample was determined by their respective proportion in total families assisted in each block. The sample included 406 families in all. The selected beneficiaries, thereafter were interviewed personally for their resource endowments, utilization, sources of income and employment, utilization of IRDP assistance, income derived thereof etc., etc., on a specially designed and pre-tested schedule. Break-up distribution of sampled beneficiaries among different regions may be seen in Table 3.1.

### Table 3.1: Distribution of Sampled Beneficiaries among different Regions in Mandi District.

<table>
<thead>
<tr>
<th>Regions</th>
<th>Total IRDP Beneficiaries</th>
<th>Sampled IRDP Beneficiaries</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Developed Region</td>
<td>1533</td>
<td>2413</td>
</tr>
<tr>
<td></td>
<td>(4.3%)</td>
<td>(4.1%)</td>
</tr>
<tr>
<td>2. Developing Region</td>
<td>1192</td>
<td>2030</td>
</tr>
<tr>
<td></td>
<td>(3.4%)</td>
<td>(3.3%)</td>
</tr>
<tr>
<td>3. Backward Region</td>
<td>782</td>
<td>1314</td>
</tr>
<tr>
<td></td>
<td>(2.2%)</td>
<td>(2.2%)</td>
</tr>
<tr>
<td>4. Overall Districts</td>
<td>3487</td>
<td>5757</td>
</tr>
<tr>
<td></td>
<td>(100.0%)</td>
<td>(100.0%)</td>
</tr>
</tbody>
</table>

**Note:** Figures in brackets are percentages to respective totals.

* These proportions are based on the total beneficiaries benefited in respective years.

**Source:** District Rural Development Agency, Mandi, Himachal Pradesh.
Further, to look into the non-participation of a part of the programme target group, a sample of another 100 families out of the target, and who could not be benefited, was also drawn. This sample was also drawn from the village clusters chosen for selection of beneficiaries. These families were interviewed for reasons of their non-participation and prospects of future participation.

3.7 Limitations in the Study:

The study suffers from certain limitations, which cropped-up mainly due to reporting of the data; some have been listed as follow:

(i) the secondary data used in this study was not available in a particular form at different levels, hence, rigorous performance appraisal on such data could not be attempted. Further, there was no consistency in data maintained at different administrative levels;

(ii) besides, the latest information on some of the crucial aspects was not available particularly at block level; and

(iii) in the sample survey, although five per cent beneficiaries were contacted for personal interview, yet some of the sampled beneficiaries could not recollect the exact details of the assistance. In such cases the provided information was over(under)estimated. On thorough scrutiny of all the schedules, such cases had to be dropped from final analysis to avoid their spill-over effect on overall results. It is hoped that it will not divert the conclusions from realities.