CHAPTER - 6

METHODOLOGY OF FIELD STUDY
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6.1 SELECTION OF THE SAMPLE BANK

For the purpose of getting the required information for the proposed study, the purposive and stratified random sampling technique has been adopted at different stages. One Regional Rural Bank of Assam, namely the Pragjyotish Gaonlia Bank (P.G.B.), the oldest Regional Rural Bank of the state, has been purposively selected for our study. By the end of March 1993, this bank has performed more than 56 per cent of the total business of RRBs in the state. Again, this bank has been increasingly financing the various categories of rural poor since 1976 and as such, it has become possible to collect sufficient data to evaluate the benefits enjoyed by the beneficiaries thereof.

The Pragjyotish Gaonlia Bank has also been occupying a significant position not only among the RRBs of North-Eastern Region but also in the country as a whole, mostly due to joint endeavour of the employees and management of the bank. It is also the biggest RRB in North Eastern Region with its total branch netwrok of 172 as at the the end of March 1993. This


bank has occupied twentieth position among the RRBs of the country in order of the date of establishment.

The relative position of all the RRBs working in Assam as at the end of March 1993, is shown in Table 6.1.

It is clear from Table 6.1 that for an individual researcher, it is not possible to contact all the beneficiaries of RRBs due to time and resource constraints. Hence, only a limited number of beneficiaries have been selected at random so as to collect the required information for our study. The various steps involved in connection with the selection of the sample for the present study is presented below -

6.2 SELECTION OF THE AREA

For the purpose of investigating the role, growth and performance of RRBs in rural development, the state of Assam has been chosen as an area for study. The reason behind the selection of Assam as the area of study is that about 88.90 per cent of the total population of the state lives in rural areas and nearly 20.23 per cent of this population belongs to scheduled caste and scheduled tribe.³ Besides, most of the people of Assam are directly or indirectly depend on agriculture as their source of livelihood. As RRBs are mainly for catering to the credit needs of the rural poor, the results

of such study based on rural oriented locality could be expected to have wide applicability to a number of other states of the country as a whole. The other reason for selecting Assam as area of study is that we ourselves are well acquainted with the economic condition and culture prevailing in the state.

6.3 SELECTION OF THE DISTRICTS

It is worthmentioning that Pragjyotish Gaonlia Bank has been creditably maintaining a steady growth in regard to mobilisation of deposits and disbursement of credit, and qualifying itself as one of the few profit earning RRBs in the country as a whole since 1981. The number of districts covered by the bank has increased to nine (9), after creating Bangaigaon district by the reorganisation of Kokrajhar and Goalpara districts. Out of these 9 districts, we have purposively selected only two districts, namely Nalbari and Barpeta, because of their representative character for the economy of the state. The other reasons for selecting the two districts can be stated as follows -

1. The district of Barpeta is remarkably backward one specially in industrial front. Out of the total 21,280 units of small scale registered industries of Assam by the end of December, 1992, the district of Barpeta had only 678 units of such industry, which represents only 3.19 per cent of the total industrial units of the state. Similarly, Nalbari is also a backward district.

in industrial field and by the end of December 1992, only 704 units of registered small scale industries are operating in the district, which again represents only 3.31 per cent of the state's total number of such small scale industries.5

(2) Physiographically, both the districts have particularly heterogeneous characteristics. The South-Eastern part of Barpeta district is mostly low-lying and the Northern part of the same extends upto the foot hills of "Bhutan". On the contrary, Northern side of the district of Nalbari is bounded by Bhutan and the mighty Brahmaputra separates its Southern side from Kamrup district and as such, this may provide us opportunity to study the performance of RRBs to the different categories of beneficiaries under different sets of ecological conditions.

(3) We have selected Nalbari and Barpeta districts, as the number of working population engaged in agriculture and other allied activities is very high in both the districts. Nearly 76.31 per cent of the total working population of Barpeta district depends upon agriculture and allied agricultural activities.6 In

5. Ibid. PP. 162 - 164.
case of Nalbari district too, about 71.63 per cent of the total working population depends upon agriculture and allied agricultural activities.  

(4) As RRBs were incorporated with a view to develop the rural economy by disbursing credit and extending banking facilities to the economically backward sector of rural community, their financing to rural poor can be judged only in those areas where majority of the people live in rural areas. From this point of view also both the districts have been treated as the best sample for our field study. About 92.98 per cent population of Barpeta district and 97.69 per cent population of Nalbari district belong to rural areas.  

(5) The number of RRBs branches operating in these two districts, as on March 1993, are middle-ranged, namely 23 in Barpeta district and 24 in Nalbari district as against the highest branches in Sonitpur district (31 branches) and lowest in Bongaigaon district (11 branches). As such, these two districts can be regarded as a representative sample for our field study.  

(6) As far as the role of RRBs in the development of rural

areas is concerned to which the present study relates, the district of Barpeta and Nalbari can also be treated as an unexplored region. No scientific and well planned study has been done till date for giving a systematic and clear idea of the impact of Pragjyotish Gaonlia Bank's finance in the development of the districts. The present study is an attempt actually to fulfil the existing gap of the districts.

6.4 SELECTION OF BLOCKS

Nalbari and Barpeta districts consist of eleven (11) and eight (8) blocks respectively. Two separate lists of all the blocks of both the districts have been prepared and from these lists Pub-Nalbari and Tihu Barama blocks of Nalbari district and Jalah and Bhawanipur blocks of Barpeta district have been selected purposively. The reasons for selection of these four blocks can be stated as follows -

(1) The Government's policies pay special attention to the marginal and small farmers as they constitute the bulk of the cultivating class in the country with heavy financial requirements. About 86.70 per cent population of Jalah block, 74.21 per cent population of Bhawanipur block, 50.00 per cent population of Pub-Nalbari block and 66.86 per cent population of Tihu-Barama block were engaged in agriculture and allied
agricultural activities.\textsuperscript{10} Again, majority of these working population belong to small and marginal farmers.\textsuperscript{11} Therefore, these four blocks have been selected for our study, as they would provide us ample scope for studying the benefits derived by the small and marginal farmers from the RRBs.

(2) Jalah block with 5 Gram Panchayats (or Gram Sabhas), Bhawanipur block with 6 Gram Sabhas, Pub-Nalbari block with 5 Gram Panchayats and 1 Town Committee, and Tihu-Barama block with 5 Gram Sabhas and 1 Town Committee are totally rural in character, devoid of any big industrial or commerical complexes.\textsuperscript{12} Majority of the population of all the sample blocks are the inhabitants of rural areas and even 100 per cent population of Jalah and Bhawanipur blocks live in rural areas.\textsuperscript{13} Hence, it has been expected that these four blocks may give us ample scope for studying the performance of RRBs in rural areas.

(3) All the four blocks have been selected on the basis of

\begin{itemize}
\item \textsuperscript{11} Ibid. PP. 228 - 230.
\item \textsuperscript{12} "District credit plan", 1993-94 (under Service Area Approach, Barpeta District, United Commercial Bank), P. 7. and "Annual Credit Plan", 1993-94 (under Service Area Approach, Nalbari District, United Commercial Bank), P. 19.
\end{itemize}
the concentration of poverty among the identified scheduled caste and scheduled tribe population. About 49.12 per cent population of Jalah block, 6.59 per cent population of Bhawanipur block, 8.48 per cent population of Pub-Nalbari block and 39.64 per cent population of Tihu-Barama block belong to the scheduled caste and scheduled tribe. 14

4. Further, it has been revealed through discussion with the concerned officials and farmers that all the major crops are grown in these four blocks and cultivators of all categories are more or less progressive and co-operative in their attitude. Hence, these four blocks have been treated as the best sample for our study.

6.5 SELECTION OF SAMPLE BRANCHES

After selection of the blocks, a set of four branches of Pragjyotish Gaonlia Bank, one from each block, has been selected for our field study. Jalah block in Barpeta district has four branches of Pragjyotish Gaonlia Bank, which are located at Ananda Bazar (Code No. 049), Baghmara (Code No. 050), rehabari (Code No. 051) and Salbari (Code No. 052). Of them, we have purposively selected the Ananda Bazar branch because of the predominance of the weaker sections and also of the SC/ST population within its area of operation.

Similarly, Bhawanipur block has four branches of Pragjyotish Gaonlia Bank which are situated at Barpeta (Code

No. 025), Bhawanipur (Code No. 026), Majgaon (Code No. 027), and Tapa (Code No. 028). Out of these four branches, we have selected purposively the Barpeta branch, because it is urban-oriented in nature and covers a large number of people belonging to different castes and tribes particularly of religious minority.

Again, Pub-Nalbari block in the district of Nalbari has also four branches of the sample RRB and these branches are Karia (Code No. 26), Jagra (Code No. 27), Morrowa (Code No. 32), and Nalbari (Code No. 33). Among these branches, we have selected purposively the Nalbari branch, (the oldest branch of P.G.B.) because of its urban orientation and this will enable us to have comparative study about the performance of RRBs specially in rural and semi-urban areas.

In the same way, Tihu-Barama block of Nalbari district has three (3) branches of Pragjyotish Gaonlia Bank of which one is located at Barimakha (Code No. 17), the other at Kaithalkuchi (Code No. 28) and the third branch at Barama (Code No. 47). Of these three branches, we have purposively selected the Barama branch because of its purely rural orientation and predominance of scheduled tribe population. Moreover, it is a recognised tribal belt of the district of Nalbari.

6.6 SELECTION OF SAMPLE BORROWERS

Four separate lists of beneficiaries have been collected from the four sample branches, specially for the year
1988-89. The borrowers of all the branches have been arranged into different strata, namely agriculturists (including agricultural labourers and those who engaged in allied agricultural activities), small businessmen and traders (including small scale industries too), and rural artisans, for selecting hundred (100) sample loanees from all categories of beneficiaries for each of the above referred branches on the basis of stratified random sampling technique. Hence, the final size of the sample for field investigation has been fixed at 400. The size (400) of the sample is considered as adequate for studying the correct impact of the loan on the borrowers. Of the total (400) sample beneficiaries, 160 persons have been drawn from agriculturists and from people engaged in allied agricultural activities, 180 persons from small businessmen and retail traders and the remaining 60 persons belong to rural artisans group.

6.7 METHOD OF DATA COLLECTION

The primary data have been collected through questionnaire with the help of survey method. A specially designed questionnaire was prepared in advance for recording the information on the spot in a face to face interview of the sample beneficiaries. At the time of drafting the questionnaire, the initial shortcomings were removed by consultation with the bank officials and beneficiaries. No vague questions were included in the questionnaire to avoid all sorts of mistakes on the part of the respondents. The questions included in questionnaire were simple and short in nature and
had the characteristics of bringing out the information in relevant parts of the main theme of the study.

The questionnaire framed on the basis of the requirements of the data was tested before using them in the field study so as to assess the reliability, validity, quality, clarity and objectivity of information sought to be collected. The wording of the various questions of the above referred schedule was later modified and changed, if found necessary, for ensuring correct responses from the beneficiaries.

The final survey was mainly conducted during the first quarter of 1993. All the respondents were personally interviewed. Data from all the sample borrowers were collected for two points of time, namely pre-investment period and post-investment period of loans. This has been done to study the impact of the loan on the economic conditions of the beneficiaries with reference to changes witnessed on the income and employment generation between two time periods, namely 1988-89 (pre-loan period) and 1992-93 (post-loan period). Of course, the bulk of information given by the respondents depend upon their capacity to memorise their past facts and figures. However, doubts, if any, were clarified by cross-questioning and using the personal judgement. All possible steps have been taken to reduce the errors in collection of data from the beneficiaries by attempting to gain their confidence and cooperation so that they respond naturally to the best of their capacity.
6.8 **SURVEY OF BRANCH MANAGER**

A field survey of all the branch managers of various branches of RRBs spread over two sample districts of our study, was also conducted to have further insight into the functioning of RRBs in the state. For this purpose, a separate questionnaire was also prepared and a pre-test of the same had also been made and accordingly, all desired changes had been made before giving a final shape to it. There are 23 branches of Pragjyotish Gaonlia Bank in Barpeta district and another 24 branches in the Nalbari district and as such, the final size of the sample of branch managers was fixed at 47. In most of the cases, the branch managers were communicated personally and in some cases, mailed questionnaire method was used to get the required informations.

6.9 **SECONDARY DATA**

In the present study, the secondary data have also been used for highlighting the various aspects of the problem under study. The secondary data were collected mainly from the various publications of RBI, NABARD, Government of India and other related publications, namely reports of the National Commission on Agriculture, various Reports of the Study Groups and Experts appointed by the RBI, NABARD and Government of India from time to time, Indian Journal of Agricultural Economics, Economic and Political Weekly, The Banker, The Agricultural Banker, The Journal of the Indian Institute of Bankers, Indian Banking to-day and to-morrow, All India Co-

6.10 FRAMEWORK OF ANALYSIS

In the proposed study, at the first stage, sampling technique as stated earlier, is used to collect data from various categories of beneficiaries. At the second stage, all the data collected through field survey have been tabulated in an appropriate manner. A wide range of statistical measures, namely percentage, ratio, and average etc. have been used for in-depth analysis of the problem of RRBs. Pictorial presentation of most of the data have also been done in the form of curves, graphs, bar-diagrams and pie-diagrams etc.

Again, the chi-square ($x^2$) test has also been used to find out the statistical significance of certain data. This technique has been used particularly to study the inter-category differences with regard to the various aspects of the functioning of RRBs highlighted by the respondents in the questionnaire. It has been worked out as follows -

$$x^2 = \sum (O-E)^2 / E$$

where, $x^2$ refers to chi-square
value, O, refers to the observed frequencies, and E refers to the expected frequencies.

The calculated value of $x^2$ is compared with the table value of $x^2$ for a given degree of freedom, specially at 5 percent level of significance. The degrees of freedom is calculated by applying the following formula -

$$v(\nu) = (r-1) (C-1)$$

where $v(\nu)$ refers to degrees of freedom, $C$ refers to number of columns and 'r' refers to number of rows.

6.10.(i) **CALCULATION OF REAL INCOME THROUGH A DEFLATOR FOR ASSESSING THE CORRECT IMPACT OF LOAN**

The gross amount of nominal income derived by the borrowers during the post-loan period is not actually relevant for assessing the impact of loan on the beneficiaries, what is most relevant is the real income where there is no effect of rising price level. In order to measure such a real income, it is necessary to deflate the nominal income by an appropriate deflator. For this purpose, "Consumer Price Index Numbers" for Agricultural Labourers of Assam have been used.\textsuperscript{15} To deflate the nominal income of the sample beneficiaries, a particular year, that is, the year 1988-89 (loan disbursement year) is taken as the base year and the price level for that year is assumed as 100. Now, the general level of prices of the year

\textsuperscript{15}. Labour Bureau, Govt. of India.
1992-93, for which the real income is to be calculated in terms of the prices of the base year, is determined. The formula used for this purpose is as follows -

\[
\text{Real Income} = \frac{\text{Money Income}}{\text{Price Index for the base year}} \times 100
\]

For calculating real income of the borrowers with the help of above noted formula, the Consumer Price Index numbers for Agricultural Labourers in Assam is presented in Table 6.2., for the period 1988-89 to 1992-93 (Agricultural year).

On the basis of the Consumer price index numbers of Agricultural Labourers in Assam as shown in column 2, of Table 6.2, we have calculated in column 3 the percentage changes in price level in 1992-93 over different years. In column 4, we have calculated the changes in price level in 1992-93 over different years and in column 5, we convert these changes into index numbers.

A hypothetical example is given hereby to show the procedure of calculation of real income of the borrower, specially in post-loan period. Let us suppose that a particular borrower "A", has taken a loan in September, 1988-89 and his annual income during that period was Rs. 3955.62. In the post-loan period, that is, in 1992-93, it has increased to Rs. 7561.78. This amount is actually a nominal income and the increase in nominal income has included the effect of rising prices during the period 1988-89 to 1992-93. To find out the
<table>
<thead>
<tr>
<th>YEARS</th>
<th>CONSUMER PRICE INDEX NUMBERS FOR AGRICULTURAL LABOURERS IN ASSAM (1988-89 TO 1992-93)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1988-89</td>
<td>694</td>
</tr>
<tr>
<td>1989-90</td>
<td>760</td>
</tr>
<tr>
<td>1990-91</td>
<td>805</td>
</tr>
<tr>
<td>1991-92</td>
<td>925</td>
</tr>
<tr>
<td>1992-93</td>
<td>1077</td>
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<tr>
<td>1992-93</td>
<td>1077</td>
</tr>
</tbody>
</table>

\[ (100+55.2) = 155.2 \]
\[ (100+41.7) = 141.7 \]
\[ (100+33.8) = 133.8 \]
\[ (100+16.4) = 116.4 \]

**SOURCE:**
extent that, what part of income raised is the result of rising production and rising prices, the real income of "A" has been calculated as shown below -

\[
\text{Real Income of "A" (in 1992-93) = } \frac{\text{Money Income}}{\text{Price Index for the base year}} \times 100
\]

\[
= \frac{7561.78}{155.2} \times 100
\]

\[
= 4872.28
\]

Thus, the real income for the year 1992-93 works out to Rs. 4872.28 instead of Rs. 7561.78 and the increase in real income is only 23 per cent instead of 91 per cent in terms of nominal income.

6.11 DEFINITION OF CONCEPTS

In every study, some economic concepts are to be used on the basis of which quantitative analysis of the data has to be made. Some such concepts used in the study are explained below for clear understanding of this work -

(a) To calculate the net income of firm or any other agriculturists, the gross value of the total output produced at prevailing market price has been calculated first and then all sorts of expenditure incurred in the process of producing output has been deducted.
(b) The value of main output has been calculated on the basis of the price prevailing during the harvesting period. Of course, the value of by-products has been evaluated on the basis of the price indicated by the respective farmers.

(c) To attain an idea about the impact of loan specially in the case of increase in employment opportunities, both hired and family labour was recorded in terms of number of work-days.

(d) On the expenditure side, expenditure incurred both in cash and kind on the heads, like fertilisers and organic manure, seeds, rent, hired casual labour, hired bullock labour, exchanged bullock labour, tractor charges and feed for bullocks were also taken into consideration. Further, the payment of land revenue for every plot of land, payment on account of repair and maintenance of land, cost incurred for the purchase of minor tools, and the depreciation charges of major tools were also included in the process of cost estimation.

(e) The facts and figures for the sample beneficiaries other than agriculturists or farmers were collected on the basis of their records which were reported to us at the time of our field investigation.
LIMITATIONS OF THE SURVEY

It is worth mentioning that our field study is actually limited and deals with only one RRB, namely Pragjyotish Gaonlia Bank out of five existing RRBs of the state. The sample size of this study cannot be said to be adequately large so as to cover maximum number of households. Only 400 beneficiaries were selected due to resource constraints and shortage of time. As a result, our findings based on such limited coverage, cannot be treated as purely representative and satisfactory for all RRBs working under different topographical and varied socio-economic conditions. The major limitations of this study can be stated as follows -

(a) The schedules prepared for field investigation were not always conveyed to the head of the family due to their absence at the time of our interview. Under such circumstances, other responsible adult members of the households were interviewed for getting necessary informations.

(b) Another important limitation of the study is the nature of accuracy in regard to the facts and figures which are based on a single point of time because of the obvious limitations of an individual researcher.

(c) Still another limitation of our survey is that most of the Indian agriculturists neither buy a considerable portion of their inputs nor produce goods specially
for selling in various markets, rather they consume a part of their output for fulfilling their daily needs. As no price is paid by the farmers for most of the inputs, there is actually no such expenditure to be incurred by the cultivators which can be termed as costs of inputs as a whole unless it is imputed on the basis of market prices. As opportunity cost of family labour is not actually equal to the ruling wage rates, the total costs estimated on the basis of such ruling wage rates would give an unrealistic and even misleading picture to the total income estimated for the farm.

(d) Difficulty also arises in regard to the estimation of the exact number of workdays for the farmers and their family members as they did not work regularly or continuously so as to facilitate counting of workdays. During some particular period they had overworked while at another time they remained under worked. Under such circumstances they had to depend upon their vague memory at the time of giving the responses about their working days.

(e) Again, for collecting data from other borrowers, namely rural artisans, small businessmen and retail traders in regard to their income and employment, we had to depend mainly on the responses given by them. It is therefore, possible that the data collected by
us are not quite free from the memory bias and other built-in-biases of the beneficiaries.

(f) Still another limitation of our study is the inadequacies and in-built deficiencies which occur due to the use of index numbers for agricultural labourers in Assam. Although we are aware of the inadequacies of such index numbers and the chance of leading us for taking biased result to a particular area through the use of such numbers, we are left with no alternative except using this device. As such, it is expected that income deflated by this device may be closer to real income as received by borrowers specifically during the post-loan period.

In spite of these limitations, the findings of the study would be of both practical and academic interest as it provides the trend of the impact of bank finance on the various categories of beneficiaries.