CHAPTER 4
METHODOLOGY OF THE STUDY

4.1 Introduction

In this chapter we present the methodology adopted for the study of collective action among the micro-finance group members of Wayanad district. This chapter provides an elaboration of the various ways in which data for the present study were collected and examines how the objectivity of the study was ascertained with the help of various methods and instruments of data collection.

While explaining each of the objectives and hypothesis adopted for the study, we have made an attempt to answer the following questions. Which were the different indicators and variables selected for studying the collective action among micro-finance groups and their members? Which were the different kinds of methods employed for data collection? Which instruments have been administered while collecting the data? What was the sampling framework adopted for the study? What procedure has been followed for data collection? The chapter also provides an explanation on how the objectivity of data collection was ensured.

The first section of this chapter looks at the various indicators and variables used while addressing each of the objectives and hypothesis of the study. This is followed by an explanation of various data collection methods such as survey method and secondary source review adopted. Five instruments of data collection were used for the study. Of them, the survey method was administered with the help of the following four instruments such as group interview schedule and member/household interview schedule, interview schedule for bank officials, a common interview schedule for NGO and government officials dealing with micro-finance groups. The fifth instrument used for data collection was secondary source review and it was carried out with the help of a structured format. The sampling framework adopted for the selection of panchayaths, government supported and NGO supported micro-finance groups and the member
households have also been provided. This chapter also explains how the data collected from various sources were cross-checked while ascertaining their veracity and objectivity.

4.2 Indicators and Variables of the Study

The present study has been carried out with a broader objective of analysing the existence and nature of collective action among micro-finance group members. The study examines the mechanisms and incentives incorporated by micro-finance group members and their impact on collective action while selecting the borrowers, monitoring the utilisation of loans borrowed and enforcing the repayment of loans.

In order to address the aforementioned objectives of the study, the following hypotheses have been framed.

4) appropriate mechanisms and incentives have not been incorporated in micro-finance groups for collective action in the selection of borrowers, monitoring and enforcing repayment of loans;

5) micro-finance groups do not select creditworthy borrowers, monitor the utilisation of the loan and enforce loan repayment; and,

6) there are no differences between government and NGO initiated micro-finance group members in terms of their socio-economic profile and their performance in terms of selection, monitoring and repayment.

To understand collective action among micro-finance group members, the study analysed the institutional aspects of selection, monitoring and repayment among micro-finance groups and members. Group characteristics such as year of formation of the group, number of members in a group or the size of the group and its socio-economic characteristics have been collected at the group level. Moreover, information relating to the number of members who left the group, the factors contributed towards members to leave the group, duration of meetings of the groups, number of meetings conducted by the groups in the last year has also been collected at the group level. The financial transactions of micro-finance
members such as savings contributions of the members, provisions of loans, amount of loans received from various sources have been captured from records maintained at the group level.

The variables pertaining to group level performance such as years of experience, group size, attendance in group meetings and the amount of savings have also been analysed with the help of means tests to examine whether there were significant differences between SHGs and NHGs. Similarly, means tests have been carried out with respect to member level characteristics such as education, age and annual income of the household to examine the differences across the members belonging to SHGs and NHGs.

Mechanisms adopted for collective action among members have been captured with respect to the norms prevalent in the groups such as attendance in group meetings, duration of membership in groups, presence of saving to loan ratio and repayment norm. The fulfilment of each of these norms across various groups has been considered as incentive for the members to get selected for loans. A member is said to have been selected for loan, if she received at least one loan from the group since her participation in the group and this information has been collected. The financial burden of the members has been captured by way of information related to external loans outstanding, besides the loans received from NHG or SHG.

As the members received loans from the groups were considered as those selected as borrowers, it is pertinent to examine which factors determined the loan amount received by the members. The analysis has been carried out with an econometric technique of ordinary least squares. The variables comprising of group characteristics such as participation of the members in either NHG or SHG, caste homogeneity of the group, and group size have been analysed. Group discussion prevalent in the group at the time of disbursal of loans has been captured as a mechanism for selection. Fulfilment of each of the selection norms have been considered as variables indicating incentives for selection. Household
characteristics pertaining to per capita income of the household, member
c characteristics pertaining to external debt, caste of the members, and their number
of years of membership in the group have been analysed in detail in the sixth
chapter.

With the objective of understanding the impact of collective action in the
selection of borrowers, the perceptions or the opinion of the members with
respect to the selection procedures followed in the groups were captured. The
factors that determined a ‘very good’ selection procedure expressed by the
members have been analysed with the help of a logit model. The independent
variables selected for this analysis were group characteristics such as membership
in either NHG or SHG, size of the group, and homogeneity of the group in terms
of caste. The group level information with respect to the number of meetings
collected in the last year, savings contributed by the members, presence of
group level discussions were also used for the analysis. The fulfilment of each of
the group norms with respect to selection were considered as important variables
indicating the incentives for selection. Besides these variables, member
characteristics such as per capita income of the household, educational attainment
of the members, amount of loans received by them and their years of experience
in the group were also considered as independent variables while analysing the
perception of the members regarding the selection procedure followed in the
group.

The responses of the members with respect to the issue of loans to those who did
not comply with the group norms were also captured to understand whether the
non fulfilment of group norms by any member adversely affected the collective
action of the group. A descriptive analysis has been carried out in the fifth
chapter to understand how collective action had been understood and perceived
by the members, as a major portion of the members were not ready to reject
issuance of loans to their co-partners who did not comply with their group
instructed norms to avail loans.
It was expected that the group as well as the members would monitor the purpose of loan utilisation in order to ensure that the members used their loans in such a way that they repaid without any delay. The most important variables captured with respect to monitoring were the purposes of utilisation of the loans, frequency and amount of loans received by the members. The trainings imparted to the members to improve their skills for undertaking IGA were also captured such as the number of training programmes attended by the members and the type of trainings received by them. At the group level, information pertaining to the efficiency of the group in monitoring has been assessed in terms of the ability of the group to ensure that the members had skills to undertake economic activities, monitor the availability of raw materials for undertaking productive IGAs and ensure that marketing opportunities were made available to the members to sell their manufactured products.

The institutional dimensions of monitoring have been understood with respect to both positive and negative incentives of monitoring. These incentives related to the sharing of profits among the members in a group, liability to repay in case of default by another member and ensuring that other members in the group too received loans. An important variable used to measure the efficiency of collective action in monitoring was the participation of the members in group discussions.

The factors that influenced the members to undertake IGAs have also been examined with the purpose that a better monitoring would result in better utilisation of the loans for IGAs. The factors have been analysed with the help of econometric technique of logit model by considering whether the members had undertaken IGAs or not and this analysis has been dealt in detail in chapter seven. Variables pertaining to group characteristics such as group size and their membership in either NHG or SHG have been considered as independent variables for the analysis. The member characteristics such as caste, per capita income, education, amount of loans received by the members and their participation in training programmes have been taken as independent variables having a bearing on the IGAs undertaken by the members.
The information pertaining to the total investment cost of IGA was collected and additional amount of money realised, if any, from sources other than micro-finance groups were also captured. The significance of the IGAs undertaken with the help of the loans borrowed from micro-finance groups was discussed with regard to the financial contribution of IGAs to the total income of the household.

The efficiency of the members in terms of monitoring has also been discussed. A descriptive analysis was carried out to capture the reasons behind monitoring undertaken by the members and their efficiency in monitoring. A logit model with econometric analysis was carried out to examine the various factors which determined the efficiency of the members in monitoring. The group characteristics such as size of the group, membership in either NHG or SHG and homogeneity of the group in terms of caste have been used for the analysis. Fulfilment of norms with respect to monitoring has been considered as positive incentive behind monitoring. The member characteristics such as per capita income of the household, education and years of experience of members in the group have been considered as important factors determining the efficiency of monitoring undertaken by the members.

A detailed explanation on collective action among the micro-finance members in case of repayment enforcement has been carried out in chapter eight. Stipulated duration of repayments for both NHGs and SHGs for various sources of loans has also been examined. Actual time taken by the members to make repayment of different sources of loans has been collected and it was compared against the amount of loans received by the members. As micro-finance groups insisted on members making repayment on an instalment basis, the members were asked whether they fulfilled the instalment pattern of repayment. The information relating to the delay in the repayment of the loans was also been collected and the same has been used to make comparison across NHGs and SHGs.
The repayment has been examined in terms of the average number of days of delay in the repayment of loans. An ordinary least squares method has been employed to carry out this analysis. Group characteristics of the members such as membership in either NHG or SHG, homogeneity of the group in terms of caste, and group size have been discussed as independent variables determining repayment. The repayment duration stipulated by the groups has been taken as a mechanism while analysing delay in repayment. Both positive and negative incentives of repayment such as social pressure from the group and incentive to receive further loans from the groups have been taken as other independent variables. Besides this, member and household characteristics such as education of the members, whether the members had undertaken IGAs or not, monitoring characteristics of the members, number of loans received by the members since inception, income of the household and debt of the household from sources other than micro-finance group have been analysed as independent variables.

The perceptions of the members with respect to their repayment behaviour and the reasons for making repayment have also been analysed. Besides this, the members were enquired about their sources of repayment. The differences between the day on which the members received loans and the day on which they repaid their previous loans have been examined for all the loans received by the members to find out whether any particular pattern could be observed.

4.3 Methods and Instruments Used for Data Collection

The present study on collective action among the micro-finance group members has been carried out primarily by using the survey method. The study also made use of the secondary source review of micro-finance group records. The survey method has been used to collect information from the micro-finance groups and members. It was also employed to collect information from the bank officials dealing with micro-finance transactions, officers of NGO and government supported micro-finance groups. The method of secondary source review of the group records has also been administered mainly to collect information pertaining to the financial transactions of the groups and their members.
The survey was carried out with the help of interview schedules. Structured interview schedules were prepared for interviews with micro-finance groups and members. These schedules captured issues with respect to collective action among micro-finance groups in terms of selection, monitoring and repayment. The interview schedules prepared for bank officials and for officials of micro-finance groups were not structured in nature and the information provided by them largely served as checklists.

The interview schedule administered at the member level was used mainly to capture individual information and opinion of the members regarding selection, monitoring and repayment. Group level interviews were carried out to gather information pertaining to mechanisms and incentives prevalent at SHGs/NHGs, and the financial transactions of the groups. Moreover, unstructured interview schedules prepared to the bank officials and to the NGO and government officials served as checklists. In addition to the two types of aforementioned interview schedules prepared, records maintained by the micro-finance groups such as minutes of the meeting, books maintained by the micro-finance groups having information on loan and saving transactions were also reviewed to cross check the information provided by the members and groups and also to collect information on group level financial transactions. This information was gathered during the time of the group level meetings in a specific format and it is annexed in the appendix (Annex No.2).

The structured group level interview schedule contained questions relating to all important parameters of group level activities such as mechanisms of selection, monitoring and repayment prevalent at the group level, details regarding group level meetings, year of formation of the group, changes of group size over a period of time, meetings conducted in the previous year, loans issued from sources such as banks, government and NGOs, saving contribution pattern etc. Group interview schedule was administered at the group level during the time of regular group meetings. It was the only forum which provided an opportunity to
interact with and gather information from all the members in a uniform manner, as the household level interviews with the members were restricted to only six members selected on a random basis from the group. The questions were asked to all the members of the group and most of the time the answers emerged after discussions among the members. Attending these meetings and collecting information from the groups provided inputs on how the discussions occurred at the group level and also how many of them were aware of group mechanisms and incentives. Often, the discussions took place at the group level provided some inputs on collective action prevalent at the group and hence, it supported the findings of the study.

Secondary source reviews of records were carried out with a format and it contained data relating to socio-economic composition of the group, group size, details regarding loan transactions such as purposes of utilisation, amount borrowed and amount repaid along with dates of such transactions. Information in this tabular format was recorded immediately after the execution of the group level interview schedule and these data were recorded against the names of each member in a group. The financial transactions of micro-finance members including the amount of external loans received from banks, NGOs and the grant from the revolving fund of the panchayath were collected at the group level in this format. The information related to meetings conducted by the groups in the previous year was collected at the group level and the same was cross-checked from the book records maintained by the members, wherein they had written the minutes of all the meetings conducted by the groups from their time of formation. Certain aspects like the borrowing of the group from the external agencies like banks, revolving fund of the panchayath and NGO fund were also recorded in these minutes and copied them in the above said format. Besides the minutes maintained by the groups, all NHGs/SHGs maintained a record on saving contributions of the members and another record on credit transactions and repayment pattern.
Besides collecting information at the group level, the study has extensively used data at the member level. The present study used a structured interview schedule for households for collecting member information such as household characteristics and the individual opinion of the members regarding selection, monitoring and repayment prevalent in the groups. The household interview schedule included questions relating to the efficiency with which members complied with mechanisms of selection, monitoring and repayment, and also regarding the level of satisfaction experienced by the members with respect to each of these aspects of collective action. The members were also asked about their sources of loans other than micro-finance groups. This was collected mainly to know the actual financial burden of each member in addition to the amount they borrowed from micro-finance groups.

The questions relating to the utilisation of the loan were included in the household interview schedule. Detailed information on IGAs undertaken by the members with respect to their amount of investment, various sources from where the investment cost was met, income generated from the investment undertaken over the years, the profitability of the investment and the amount repaid were collected. This schedule also included questions relating to the compliance of the members with mechanisms of monitoring, and incentives behind monitoring their co-partners in a group. The household level schedule included questions relating to the repayment pattern of loans by the members. The repayment behaviour of the members was captured in terms of their incentives behind repayment, the sources of repayment, and the individual responses on the level of satisfaction in terms of repayment of loans.

Two interview schedules that served as checklists were also used for cross-checking the information provided by micro-finance groups and members. First among them was the interview schedule prepared for the staff of government and NGO supported micro-finance groups. Since these officers were more involved in terms of the internal day-to-day functioning of the group by providing guidelines to the members, questions asked to them were mostly related to the internal
functioning of the groups with respect to selection, monitoring and repayment. They were also enquired about the conflicts of interests among the members during the time of selection of borrowers, monitoring the utilisation of the loan and enforcing their repayment of loans. Moreover, these officials were asked about the issue of grants from panchayath and other sources of funds channelled to the groups.

Another interview schedule that served as a checklist was the one addressed towards bank officers to capture banking transactions of the micro-finance group members. Since all groups maintained their accounts with the banks, the officials were approached and enquired about the regularity of keeping accounts with the banks, amount of loans issued and repayment pattern of the groups. These two checklists also helped in ensuring the veracity and objectivity of the information provided by the group members.

In addition to the aforementioned survey instruments and tabular format used for data collection, interviews were also conducted with the local panchayath leaders, the heads of NGO and government supported micro-finance groups. Often, these interviews did not follow any particular structure and hence, interview schedules were not prepared well in advance. Generally, they were approached to collect information based on the experience of these interviewees with respect to their engagement in the field of micro-finance. They also helped in providing certain insights into the basic functions of micro-finance groups in the study region and their growth over the last five years, how they helped the women both socially and economically, their loan utilisation pattern and repayment pattern. Moreover, all these discussions threw light upon the significance of micro-finance groups in the context of the financial situation of the region, especially the pattern of multiple membership of women in various groups to meet their financial crisis, and their problems at the time of making repayment. The deliberations and discussions arrived at by these unstructured interviews were quite helpful in supporting the arguments and the findings of the analysis that emerged from the study.
4.4 Sampling Framework

Wayanad district of Kerala has been selected for understanding the institutional dimensions of collective action among the micro-finance group members. As mentioned in the first chapter, this study was undertaken in the specific context of Kerala because the micro-finance developments in the state offered scope for comparing the functioning of institutional mechanisms and incentives across government and NGO micro-finance programmes. In Kerala, micro-finance programmes have been promoted both by the government and NGOs.

Kerala is one of the first states which adopted micro-finance programmes as a part of the state poverty alleviation strategy. Wayanad is one of the most backward districts of Kerala with the highest proportion of tribal population. Moreover, this district has the highest proportion of micro-finance groups prevalent in the state. Even before the emergence and popularity of the micro-finance programmes in Kerala through the implementation of the government supported micro-finance programme under the state poverty alleviation programme, the district has had the highest presence of micro-finance groups compared to other districts of the state. A number of poverty alleviation programmes supported and promoted by NGOs were working in this district since the early eighties and it was mainly through these NGOs that the micro-finance programmes were got introduced to this district. Though the genesis of the micro-finance groups could be traced from the credit groups (generally the membership was as high as 200 to 400) which were initiated by the NGOs, functioning and the effectiveness of these groups were relatively lower when compared to micro-finance groups. In course of time, these credit groups got transformed to micro-finance groups (mainly NGO supported SHGs) with lesser number of members having a better organised structure with more focus on the socio-economic issues of the members.

After the introduction of the government supported micro-finance programme or Kudumbashree programme and its implementation in this district, the presence of
government supported NHGs and NGO supported SHGs increased manifolds. The present study makes a comparative analysis of the groups that were promoted by the government and those which were promoted by the NGOs.

Out of the three Blocks\(^{28}\) of Wayanad district, Sulthan Bathery block has the highest number of micro-finance groups and the study selected micro-finance groups from this Block. Two panchayaths - Sulthan Bathery and Noolpuzha - were randomly selected from Sulthan Bathery Block. Since the data on the total number of NHGs and SHGs or the universe were not available due to problems of dual\(^{29}\) membership, an equal number of groups from these two panchayaths was selected. An equal number of groups was selected based on the assumption that both the categories of groups performed more or less equally. Accordingly, 8 NHGs and 8 SHGs were selected from each of these panchayaths and a total of 32 NHG/SHGs were selected randomly. From each of these groups, 6 members were randomly selected and thus, a total of 192 members were selected for the study.

Besides the member households being the basic sources of data, the study collected information from the staff of NGOs and government micro-finance groups, the leading officials of the micro-finance promoting institutions, bank officials and the local leaders such as panchayath members who had a major role in deciding the allocation of revolving fund from the government. In order to analyse information pertaining to the financial transactions of the members, the study extensively made use of the records maintained by the micro-finance groups. The information collected from the other agencies acted as a checklist to crosscheck the responses given by the micro-finance members.

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\(^{28}\) For administrative purposes, each district of the state has been divided into block panchayaths or blocks and the blocks are further divided into gram panchayath or panchayath.

\(^{29}\) Dual membership and multiple memberships arise as some members maintain membership in more than one organisation at a time.
4.5 Procedures Adopted for Data Collection

As both the NGO and government supported groups worked independently, the members promoted by them were approached separately. In order to get introduced to SHGs and to the members of SHGs, the NGOs actively involved in the promotion of SHGs of Sulthan Bathery blocks such as Shreyas, WSSM, Hilda were approached. Through these organisations, SHGs were got introduced at the time of regular monthly meetings convened to discuss their overall performance. In this manner, 8 SHGs from each of these panchayaths were selected randomly for the study.

The data pertaining to the government supported NHGs were collected from Kudumbashree office functioning at the district level during regular monthly meetings. Through them, the concerned officers of the two panchayaths- Noolpuzha and Sulthan Bathery were approached. Moreover, the group representatives of the Community Development Society (CDS\textsuperscript{30}) working in both the panchayaths were interviewed during regular monthly meetings. Through these NGO representatives, the representatives of Area Development Society (ADS\textsuperscript{31}) functioning at the ward level were approached to get in touch with the NHGs working at the grass root level. Thus, eight NHGs were selected randomly from each of these two panchayaths.

A group level interview was conducted after holding regular meetings with the groups. Generally, group level meetings comprised of taking attendance of participants, and reading minutes of the previous meeting followed by a presidential address by the President or Vice president of the group and a discussion on socio-economic issues of the members. Often, regular financial transactions of the groups were undertaken after this, where the group representatives were entrusted with the task of collecting the savings contributed by the members. They also discussed about the issue of loans, if any members were in need of loans. The amount of loan along with the purpose of utilisation

\textsuperscript{30} Governing body of NHGs or government supported micro-finance groups working at the panchayath level.

\textsuperscript{31} Governing body of NHGs working at the ward level is called ADS.
was also discussed in these group meetings. The representatives of the groups maintained regular records of the groups, which included an attendance book, a book containing the minutes of the proceedings, an account book where the details of the financial transactions were recorded. In addition to these records, certain groups maintained another book which contained current events and general knowledge and in the meeting these news items were read out for the benefit of the group members. These records maintained by the secretary of the group were made available to all the members for references and inspection. The tabular formats prepared for collecting information on financial transactions were filled with the help of these secondary sources of records. Whenever differences existed in the information provided by the members to that of what was recorded in the books, the information recorded in the books were considered as final, as this information was made open to all the members.

The group level questions were asked mainly to understand various kinds of mechanisms and incentives provided for the members at each group. The group level information also gathered adequate information on whether the groups received external aid from the government or whether they received loans from either NGOs or banks. Later, the officials of these banks were approached and enquired about their savings and credit transactions. Wherever the groups received external help in maintaining their records, as in the case of tribal groups where the tribal volunteer assisted groups in preparing records, the officers from NGOs or government were contacted to verify the responses given by the groups.

After collecting the required information at the group level through the interview schedules and from records, six members of each of the selected groups were approached. The members were interviewed at their houses where questions were posed to them about individual opinion about groups, especially about their responses to work in a group. The individual members were asked more about their responses regarding mechanisms and incentives of selection, monitoring and repayment of loans. Moreover, the members were asked about the banks where
they maintained their accounts and the bank officers were contacted to cross-check the information.

In order to ensure the objectivity on data collection with respect to important information such as saving contributions, amount and frequency of loan, date of issue of loans and repayment, instalments of repayment, number of meetings conducted by the group in the previous years, group formation, purpose of utilisation of the loan, types of training programs conducted and member participation in them, different sources (micro-finance, grant from panchayath, NGO loan, bank loan) from where the members received loans, days of delay in repayment, repayment behaviour of the members, group records have been considered as the basic source to cross-check information provided by the members. Whenever differences were observed in the information provided by the members in a group, the information recorded in the books was considered as final.

4.6 How Objectivity in the Data was Cross-Checked?

As discussed earlier, information pertaining to the collective action among micro-finance groups and their members was collected for the present study. It is significant to note that a major portion of the analysis has been carried out with data collected from the micro-finance members (Appendix: Annex No. 3) and groups (Appendix: Annex No. 1). This has raised the following questions regarding the reliability of the information provided by the members.

How was the objectivity of the data ensured when the study analysed different kinds of information including the opinion of micro-finance members? Were there enough sources to supplement the opinions provided by the members? Were there properly maintained records to cross-check the information and if so, how was such information captured? Whether the information provided by the micro-finance groups had been cross-checked with reliable sources outside the groups? This section elicits answers to the aforementioned questions and emphasizes that
the information collected from the micro-finance members and groups had been cross-checked in an objective manner.

In order to ensure objectivity in the analysis, information provided by the members with regard to variables such as number of loans, loan category, date of borrowing, purpose of loans, amount of loans, when loan was to be repaid, date of actual repayment, amount repaid so far, and balance amount to be repaid were captured from the group records (the format used for capturing the group level information has been given in the Appendix: Annex No. 2). Thus, the information provided by the members with respect to each of them was cross-checked with the group level records. Whenever differences were observed in the information provided by the members in a group and similarly, differences were observed in the responses of the members with that of the group records, the information recorded in the micro-finance group book was considered as final. These records were made open to all the members in a group. Generally, the books were maintained by the Secretary of the group, who was elected by the members on a democratic basis. Doubts may raise regarding the reliability of the books maintained by the tribal groups, as most of the members of these groups were illiterates. The records of such groups had been entered by tribal volunteers and often, they were cross-checked by the NGO and government supported micro-finance group representatives. In the interview schedules prepared for the officials of NGO and government and bank officials, there were questions related to the reliability of the data entered in the records of micro-finance groups (Appendix: Annex Nos. 4 and 5). It was informed that these records were properly accounted by these officials on a regular basis.

It is significant to note that the fulfillment of norms pertaining to selection such as attendance norm, saving to loan ratio norm, duration of membership in the group, and maintaining saving to loan ratio were individual responses of the members. Under such circumstances, how do we ensure that the responses given by the members were correct and hence, final? There was no issue with regard to them, as they had been cross-checked from the records maintained by the groups.
The information pertaining to the financial transactions of the members, their attendance in the meetings, and the date of joining the groups were recorded in the books on a day to day basis. There was question regarding the perception of the members on selection procedures followed in the group. This, being an important variable, indicated the collective action on the selection of borrowers, the information provided by the members was carefully cross-checked with the data given by the outside sources (see interview schedules for bank officials and NGO and GO officials: Annex Nos. 4 and 5).

There were two descriptive questions posed to the members relating to the selection of borrowers. They were: how did they obtain loans in the absence of norm fulfillment? And what would be the response of the members to others who did not follow the selection norms? The responses provided by the members gave some insights on the selection procedures followed in the group, and such responses had not been subjected for detailed analysis and they had been used mainly to supplement the quantitative data. Moreover, member-specific responses on the selection of borrowers in this particular region had also been cross-checked with the help of informal discussions with local leaders like panchayath members and NGO representatives.

There were two opinion-based questions posed to the members with respect to monitoring. How did members characterize their monitoring behaviour and what was the influence of incentives for monitoring? (Appendix: Annex No.3). As in the case of the selection, here too, the opinions of the members on incentives for monitoring were supplemented with information given by the NGO and government supported micro-finance group representatives (Appendix: Annex Nos. 4 and 5). The information related to the participation of the members in the training programmes were collected from the book records. Similarly, the information relating to the utilization of the loan and the income generated from the activity had been cross-checked with other members and outsider sources on an informal basis.
Most of the important information related to the repayment such as amount repaid, date on which the amount to be repaid, balance amount to be repaid, etc., were captured with the help of a format prepared for recording group data (Annex No. 2). Such quantitative information also supported the analysis carried out with respect to delay and delinquency in repayment. Besides this, the information related to the date on which the members repaid their loan and the amount to be repaid, etc., were used to capture the repayment pattern of the members. The information pertaining to the financial transactions of the members had always been properly accounted in the group records. Their documents had been cross-checked by the government officials during the time of application for panchayath grants, and similar accounting had been carried out for loan application to the NGOs and to the banks.

The information relating to the repayment behaviour of the members happened to be opinions of the members and they were supported with quantitative data and information collected from bank officials and officials of the group. There were questions related to the incentives for repayment by the members. The response, being the opinion of the members, had been cross-checked with respect to information provided by the officials and group records. Moreover, information provided by the local panchayath leaders and NGO leaders too supported the data given by the members, especially with regard to repayment and its pattern in this region.

Thus, from all the above discussed facts, we can say without any hesitation that the present study has used the data collected on an objective basis. Often, the data were cross-checked with supported evidences from different sources, which improved the reliability of the analysis.

4.7 Summary
This chapter examined the methodology adopted for analysing the collective action among micro-finance group members. It discussed in detail the indicators and variables used while addressing the objectives of the study, and how each of
the objectives of the study was addressed by various data collection methods and the instruments used. Sampling framework followed for data collection has also been provided and it is followed by an understanding on the procedures followed for data collection. In this chapter, we also explain how the objectivity of the study was ensured by way of cross-checking the data.