CHAPTER 5

SURVEY DESIGN
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The study is based on the data obtained from field survey (Primary source). Final field survey is conducted on 370 households. Out of 370 households, 250 households are selected from pilot survey (population), and the rest (120 households) are selected using 'propensity score matching' method. More importantly, out of total households (370 households) selected for final survey, there are one core group and three types of control groups. The core group and two types of control groups, which include 250 households, are selected for final survey and the rest control group, selected for final survey, is chosen on the procedure of propensity score matching technique. The procedure of selecting 250 households (one control group and two control groups) is in the following lines. As per the secondary data (SIPRD, 2000 & 2001; Sarker, 2001), the micro credit programmes are observed to be operative under two broad categories – SHG-NGO and SHG-non-NGO models- in West Bengal. Each category is further classified in three models. Our field survey is conducted in two stages-primary stage and final stage. Pilot survey (population) is conducted to select SHGs in all models which exist eight years or more. The pilot survey is conducted in Howrah, Hooghly, North 24 Paraganas and Nadia districts based on the data of secondary source. On the basis of data from pilot survey (population), we prepare our final survey design. At the first stage, under sequential sampling method, 15 SHGs have been randomly selected for each model under SHG-NGO category and 10 SHGs for each model of SHG-non-NGO category.
have been randomly selected out of total women SHGs participating under microcredit programme for eight years or more under the respective micro credit agency/organization on the basis of pilot survey.

It is important to mention the variation of the number of selection of SHGs for each category (SHG-NGO/SHG-non-NGO) is due to non-availability of equal number of SHGs, which exist eight years or more, in the pilot survey. Notably, NGO as Microfinance Institution and NGO as financial intermediaries do not exist separately—they are clubbed into a single category, NGO as financial intermediaries (according to NABARD, 2001-02). Hence the number of models under SHG-NGO category is reduced to two. The criterion of sampling for SHGs during the final stage is based on the principle that the total number of population for each model should be at least double of the sample.

At the second stage, 30 user members for each of two models under SHG-NGO category out of 15 sample SHGs and 20 user members for each of three models under SHG-non-NGO category out of 10 sample SHGs have been randomly selected under probability sampling (SRSWOR). The number of user groups for each category (SHG-NGO/SHG-non-NGO) differ from each other because the number of user members is based on the proportion of sample SHGs selected at the first stage of sampling. Total size of women sample borrowers (core group) selected for final survey is $(30*2+20*3) = 120$.

To have a comparative outlook of the research work, two types of control groups have also been selected along with our women sample borrowers, the core group of this study. Out of two control groups, one group is selected from male SHGs, participating in the micro credit programme for eight years or more. The second control group is selected
from those SHGs, which are operating in the micro credit programme for at best one year. The argument behind the taking of sample from the newly established (at best one year) SHGs is that the members of those SHGs have been included in the micro credit programmes very recently but lack experiencing of borrowing under micro credit programmes.

As regards the first control group is concerned, sequential sampling has also been used for selecting 40 men users of micro credit who are participating in the micro credit programme for eight years or more. At the first stage, 10 SHGs have been randomly selected for men users of micro credit who are participating in the micro credit programme for eight years or more under Tajmahal Gram Bikash Kendra of model-2 from SHG-NGO model, where NGO acts as financial intermediaries\(^{1}\). 5 SHGs have been randomly selected separately from each of model-3 and model-5 from SHG-non-NGO model. Totaling in all, 20 men SHGs have been selected from model-2 (10 SHGs), model-3 (5SHGs) and model-5 (5 SHGs). The argument behind the exclusion of other models from the sample is that all micro credit agencies under model-1 and model -4 are exclusively of women. At the second stage, for selecting members of first control group, 20 user (male) members are randomly selected from Tajmahal Gram Bikash Kendra under model -2 of SHG-NGO micro credit programme. But for model-3 and model-5 under SHG-non-NGO led micro credit programme 10 user members for each model have been randomly selected from the respective male SHGs selected at the first stage. Total size of male sample borrowers who have been participating in the micro credit programme by using micro credit for eight years or more has been fixed at 40 (20+10+10).
Concerning to the selection of second control group, two types of SHGs, operating under micro credit programme for at best one year, have been taken into consideration- women SHGs and male SHGs. For selection of women individuals under control group, 15 women borrowers from each model under SHG-NGO category, are randomly selected from SHGs (operating at best one year) under respective model, and 10 women borrowers from each model under SHG-non- NGO category, are randomly selected from SHGs (operating at best one year) under respective model. It is worthwhile to mention that the selection of SHGs of each model under the second control group is based on the criterion of close proximity (nearest in distance) of the SHGs of each model under core group. However, total female borrowers under second control group is $(15 \times 2 + 10 \times 3) = 60$. Similarly, the selection of male borrowers under second control group is made following the same criteria used in selecting women borrowers under second control group. Owing to the lack of existence of male SHGs, operating at best one year and within close proximity (nearest in distance) of the SHGs under core group, the sample of male borrowers under second control group is less in relation to the female borrower under the same control group. Thus, as per the availability of data, 10 men borrowers have been randomly selected from each of Model 2, Model 3 and Model 5. Total male sample under second control group is $10 \times 3 = 30$.

In order to select the households (120 households) for the third control group through propensity score matching, 250 households have been selected randomly from the households who are eager to join the micro credit programme but have not yet joined the programme. However, combining core group and three types of control groups (first, second and third control group) together, total sample size taken for final
survey is 370 \[120(\text{core group}) + 40(1^{st} \text{ control group}) + 90(2^{nd} \text{ control group}) + 120(3^{rd} \text{ control group})\] and all samples for this study have been taken from 4 districts – Howrah, Hooghly, 24 Paraganas(North) and Nadia. The Preliminary survey and final surveys have been conducted between March, 2006 and August, 2007.
5.1. Broadly, there are mainly two different models which have emerged under the
SHG-linkage approach operating microfinance activities in West Bengal. Each of the two
different models is further classified into three linkage approaches in the following.(As
Per The Secondary Data)

**SHGs linkage approach operating in West Bengal**

<table>
<thead>
<tr>
<th>SHG – NGO</th>
<th>SHG – NON – NGO</th>
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<tbody>
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<td>SHG-Bank linkage (Model 1)</td>
<td>SHG-Bank linkage (Model 2)</td>
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<tr>
<td>NGO as Promoter</td>
<td>NGO as financial intermediaries</td>
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<td>SHG as Cooperative (Model 4)</td>
<td>SHG as member of PACS</td>
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<td>SHG-Bank (Model 5)</td>
<td>SHG-Bank (Model 6)</td>
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Model 1  NGOs are working as promoters and linking SHGs directly with the banks. [Example: Sree Ma Mahila Samity]

Model 2  NGOs are working as intermediaries for channelising credit from bank to SHGs [Example: Sish, 24 Parganas district]

Model 3  NGOs are developing as Micro finance Institutions for providing credit to SHGs with bulk supply from RMK/ SIDBI / RASS/ Different Foreign Institutions etc.[Example: Village
Model 4  SHGs are being enrolled as members of PACS for saving and credit linkage [Example: Hooghly district, Howrah district.]

Model 5  SHGs are organised under state sponsored programmes (SGSY/DWCRA) and linked with banks for credit linkage [Example: Bagnan Nari Unnayan Samity]

Model 6  Banks themselves promote SHGs and provide them credit [Example: Bank of India / Allahabad Bank in 24 Paraganas (North) district]