

CHAPTER 6

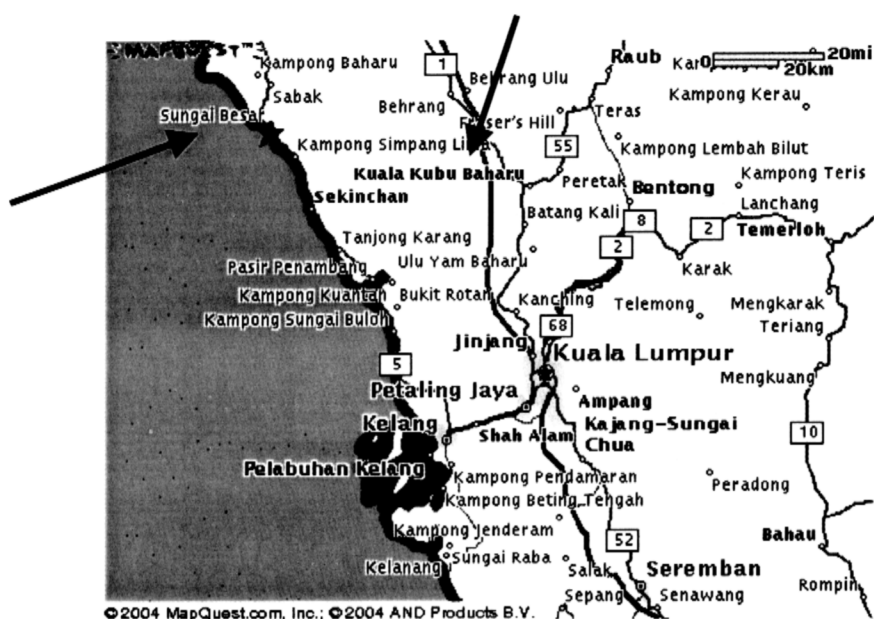
METHODOLOGY AND DATA COLLECTION

6.1 Introduction

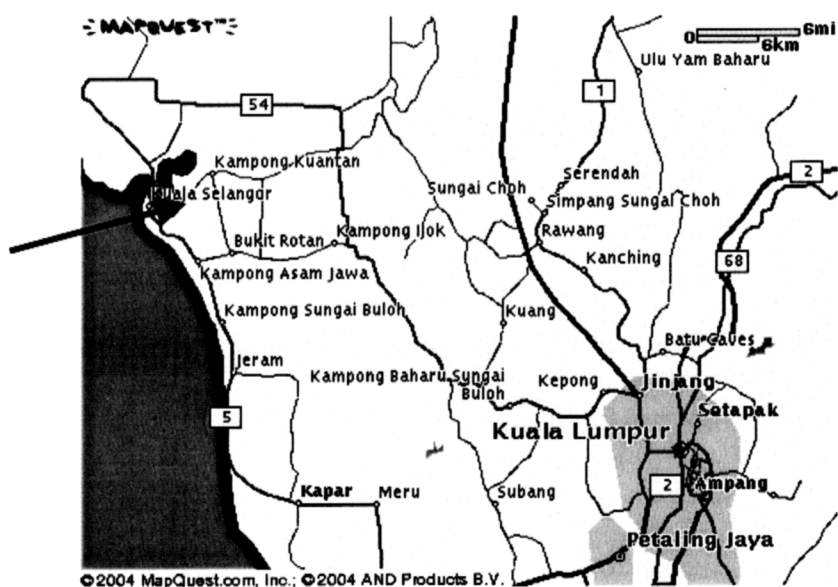
In light of the objectives of the present study, this chapter describes in a nutshell manner the study area, the sources and methods of data collection and the statistical procedures used in analyzing the data. For convenience, this chapter is divided into the following sections: in addition to the introduction, section two gives a general description of the study area. Section three explains the selection of the study area. Section four deals with population and sampling methodology. Section five describes the methods of data collection. Section six is mainly devoted to the limitations and problems faced in the field survey. Section seven focuses on the statistical procedure used in analyzing the data.

6.2 The Study Area

The study covered three main districts in Northwest Selangor: First, the district of Sabak Bernam where the main branch (headquarters) was located in Sungai Besar. Second, the district of Kuala Selangor in which Kuala Selangor Mini Branch (KSMB) was established as an affiliate to the main branch that is Barat Laut Selangor (BLS) in Sungai Besar. The third district is Kuala Kubu Bharu where Kuala Kubu Mini Branch was initiated under the auspices of Sungai Besar headquarters (See Figure 6.1).



A/ Location of Sungai Besar and Kuala Kubu Bharu



B/ Location of Kuala Selangor

Figure 6.1 Locations of the Study Areas

The BLS branch at Sungai Besar was the first to be established to cater for the implementation of Projek Ikhtiar as a pilot project to test whether it was possible to replicate the Grameen Bank Approach (GBA) to poverty eradication or not. It was launched under the patronage, as mentioned in chapter five, of the Selangor State Economic Planning Unit SSEPU, CPR, USM, and the MIEDF.

The field survey covered 41 meeting centers scattered in the surrounding villages adjacent to the three branches in Sungai Besar, Kuala Selangor and Kuala Kubu Bharu.

6.3 The Choice of the Study Area

As cited in the preceding chapter AIM now has 59 active branches covering ten out of the fourteen states of Malaysia. As mentioned above, the present study focuses mainly on three branches located in northwest Selangor for several reasons:

First, in terms of macroeconomic indicators Selangor State holds the fourth position with an average GDP per capita amounted to RM 18158 in 2000 (Malaysia, 2001). The average annual growth rate of the mean monthly household income was 4.0% over the period 1995-1999 which was regarded as the second lowest rate among both developed and underdeveloped states (Malaysia, 2001). The incidence of poverty in Selangor State has experienced a sharp reduction from 7.8% in 1990 to 2.5% in 1995 and decreased further to 1.3% in 1997 and then increased to 2.0% in 1999 (Malaysia, 1991,1996,2001). However, in 2002 the rate has been reduced to 1.1% of its total population of 4.175 million in 2000 (Malaysia, 2003). Thus, the average poverty rate in Selangor State is relatively low

compared with other states but it was the most populous state registered an average growth rate of 5.4% per annum. The high rate of increase in Selangor was largely due to net immigration from neighboring states. However, poverty still persists despite the general improvement of the standard of living of the population. For instance, AIM in Northwest Selangor alone has 2,148 poor clients under different poverty reduction programs in 2002. This means that despite positive results being achieved by AIM microcredit and other government programs, a number of poor households in Northwest Selangor are still under the poverty line and uncovered by these programs.

Second, the research site involves one of the oldest AIM branch in the country, that is, BLS in Sungai Besar in the district of Sabak Bernam. This branch, however, was established in 1986 mainly to run and execute the operations of Projek Ikhtiar, which was extended over a period of two and a half years as an action research project that tested in Sabak Bernam and Kuala Selangor Districts the Grameen Bank Approach to the reduction of extreme rural poverty. The long span of time within which AIM carried out its on-lending operations in the three districts of northwest Selangor, compared to its operations in other states of Malaysia, provides ample opportunity to study the impact of the program on the clients' livelihoods.

Third, the seventeen years of operation of AIM in the study areas should be more appropriate in evaluating the program performance in terms of poverty alleviation in rural areas. Moreover, the longer time span will make it possible to trace the socio-economic changes that have been brought about by the program compared with similar studies carried out in other states with shorter periods.

Fourth, since the establishment of BLS branches in 1986 no impact and private studies were conducted to run a comparative study between the BLS main branch and the other two branches in Kuala Selangor and Kuala Kubu Bharu mini branches with regard to the changes that took place in the clients' socioeconomic conditions as a result of Ikhtiar microcredit. Therefore, it is of research importance to compare the main differences between the clients in terms of their access to education, health services, potable water, electricity, land, agricultural equipment, housing conditions, differences in income and expenditure, savings and household welfare generating assets.

Fifth, the selection of the study area has been highly recommended by AIM staff at AIM Training and Research Center in Sungai Buloh. In their view, this can be justified on the ground that all AIM branches are conducting similar activities, and dealing with almost homogenous clients, most of whom are women who are running similar income generating projects and adhering to the same organizational set up. Thus, concentrating on a few branches would be more time efficient and cost effective.

Sixth, the operations of AIM's branches in Kuala Selangor are confined mainly to the northwest part of Kuala Selangor and this again should spare much time and effort in conducting the field survey.

Seventh, the researcher has selected the three research sites because they have different types of clients with different sociocultural backgrounds and this in turn makes it easier to compare and contrast between them. More importantly, while in both Sabak Bernam and Kuala Selangor districts the respondents are predominantly Malay, in Kuala Kubu, some of

them are Indian and this facilitates the task of detecting the impact of the program on different ethnic groups.

6.4 Population and Sampling Methodology

The investigation of the role of the AIM microcredit program in poverty eradication in northwest Selangor districts requires an adequate sample size containing a sufficient share of households participating in the program. The primary data used in this study come from a nine month long two-round survey of 529 respondents in 41 centers where the three branches studied were operating actively. In the first round, which took place in June-July 2002, a pilot survey of 26 respondents in the main branch (BLS) in Sungai Besar was conducted. The pre-tests and pilot surveys were used to check the adequacy of the questionnaire and the sampling frame as well as the variability with respect to the subjects under study (Moser and Kalton, 1979). The second round, during which the main field survey was carried out, commenced on August 27/2002 and was ended in February 2003.

The stratified random sampling method has been applied for the selection of the representative sample of the respondents whereby the surveyed population was divided into 12 strata (field workers). Each field worker was assigned from five up to 9 centers. Each center contains between 6 members (Sinar Jaya) up to 41 members (Desa Usaha). Thus, the center membership is not fixed, as mentioned in Chapter five, that the center in which AIM members gather weekly must comprise about 30 members. Then a sample of 529 subjects derived from a population list of 2148 consisting of 2037 active and 111 inactive borrowers, which represents our sampling frame, was allocated between the different strata.

Table 6.1 The Distribution of the Sample among the Branches

Branch	Center	%	Members	%	Sample size	%
Main Branch	65	68.4	1453 ⁽¹⁾	67.6	354	66.9
Mini-branch Kuala Selangor	20	21.1	499	23.2	119	22.5
Mini-branch Kuala Kubu Bharu	10	10.5	196	9.2	56	10.6
Total	95	100	2148	100	529	100

Source: Field Survey, 2003

Table 6.2 The Distribution of the Sample Size

Field workers	All members	Inactive ⁽²⁾ members	Sample size	Active members	Sample size	%	Total sample size	%
Zulkifli ¹	206	22	5	184	42	8.3	47	8.9
Suhaila ¹	239	19	4	220	61	12.1	65	12.3
Rafeah ¹	185	28	6	157	39	7.7	45	8.5
Fuazia ¹	194	10	2	184	43	8.5	45	8.5
Din ¹	194	6	1	188	44	8.7	45	8.5
Muti ¹	224	12	3	212	49	9.7	52	9.8
Nora ¹	211	14	3	197	52	10.3	55	10.4
Arman ²	190	—	—	190	67	13.3	67	12.7
Azhr ²	167	—	—	167	38	7.5	38	7.2
Zurhuluda ²	142	—	—	142	14	2.8	14	2.6
Baihan ³	101	—	—	101	36	7.1	36	6.8
Radzhi ³	95	—	—	95	20	4.0	20	3.8
Total	2148	111	24	2037	505	100	529	100

⁽¹⁾ Sungai Besar (BLS) branch, ⁽²⁾ Kuala Selangor Mini-branch, ⁽³⁾ Kuala Kubu Mini-Branch

Source: Field Survey, 2003

¹ 13 inactive members were deducted from the total of 1466 members belonging to 4 centers in BLS branch² AIM members no longer borrowing.

The total number of the 2148 target borrowers *Sahabat* (the term used by AIM to refer to its participants, it literally means friends but technically beneficiaries) from which the representative sample was derived was distributed disproportionately between the 95 centers in the three branches (Table 6.1). The Main Branch in Sungai Besar has 65 centers (68.4%), comprising 1453 members (i.e 67.6% of the total number of the participants) and therefore has the highest share of the sample size of 354 respondents. Kuala Selangor Mini-branch has 20 centers with 499 members and its share in the overall sample size was 119. Kuala Kubu Bharu Mini-branch with the lowest number of participants has only 10 centers comprising 196 members and has 56 members represented in the overall sample size. A sample of 529 respondents was drawn randomly from the 41 centers, which were selected randomly out of the total list of 95 centers, and were divided proportionately among the 12 field staff in the three branches (see Table 6.2).

However, the 529 respondents that had been drawn randomly from the population sampling frame represents 24.6% of the total number of the branches' members. This indicates that a relatively larger sampling size will lead eventually to a significant increase in the reliability of the study findings, as the larger the sample size, the higher the overall precision will be (Moser and Kalton, 1979).

6.5 Methods of Data Collection

The present study is both explanatory and descriptive in nature and to realize the objectives of the research the primary data were collected primarily through questionnaires. Two sets of questionnaires, written in Bahasa Malayu and translated in English, were employed to gather information from the respondents and the main branch manger. The first set

comprises 101 questions and the second set consists of 25 questions. The empirical information collected in the first form includes the following modules (for a copy of the questionnaire see Appendix D-1):

6.5.1 Primary Data Questionnaire

The primary data questionnaire consists of the following information:

1. General information on interviewer name, date of interview, name of the respondent, name of the branch, name of the village, name of the center, name of the group, state and questionnaire number;
2. Information on the household members including: First, sex, age and marital status of the respondent. Second, socioeconomic and demographic characteristics of the household members, household members previous history of primary occupation;
3. Household living conditions including type of living, number of rooms, number of utilities, building materials, household assets, house size, type of fuel for illumination and source of water;
4. Information on household's productive assets including land ownership, type of crops produced, ownership of animals and type of agricultural equipment;
5. Information on household current income and expenditure;
6. Information on social facilities such as educational and health facilities;
7. Dealing with AIM includes information on: First, type of economic activities pursued prior to AIM, sources of financing these activities, when the respondent joined AIM, when the respondent received his first loan, type of activity he or she pursued after joining AIM, repayment of loan, social loans. Second, the impact of

the loan received on the borrower's income and consumption expenditure and type of savings; and

8. Training facilities, terms and conditions of credit facilities.

6.5.2 Primary Data- Interview

The second set of questionnaires covered certain organizational aspects of AIM branch and included data on (see copy of the questionnaire in Appendix D-2):

1. Personal information on the interviewee's age, sex, social status, present job and education;
2. Information on the branch performance such as the main objectives, criteria used for selecting borrowers, type of economic activities financed, testing the eligibility of the loanees, loan monitoring, problems faced in loan repayment, method of finance and types of social programs financed;
3. Field staff job satisfaction, ways for improving job satisfaction;
4. The participation of the branch's members in planning their income generating projects and its effect on the branch performance;
5. Improving the efficiency and effectiveness of AIM programs; and
6. The branch successes in lifting up those in poverty and the difficulties encountered in improving the livelihoods of the branch beneficiaries.

6.5.3 Secondary Data

Secondary data were compiled from records, official documents, monthly and annual reports of the BLS branch at Sungai Besar as well as from the Training and Research

Center at Sungai Buloh. In addition, the data collected from AIM Department of Finance and Administration include:

- i. Loan disbursement schedule 1988-2004;
- ii. Loan repayment schedule 1988-2004;
- iii. Sources of loan fund 1988-2001; and
- iv. Loan fund repayment schedule 1992-2005

Almost all the monthly reports being collected were written in Bahasa Malayu and they were translated into English for crosscheck and comparison with the primary data that had been collected via questionnaire. Moreover, secondary data concerning Sudan were gleaned from the records of the Sudan Central Bureau of Statistics, including the Statistical Year Book 1998, the Sudan National Population Census, 1993, the Ministry of Finance economic review for the years 1996, 1997, the UNDP Sudan Office, the Sudan Human Development Report 1997, the Sudan Center of Strategic Studies annual report 1999, the Zakat Chamber, and the Sudan Academy for Administrative Sciences.

Meanwhile, direct and indirect interviews were conducted with the director of the Training and Research Center, clients, officials and staff of the branches under study. In addition, for the theoretical part of the study, the researcher also reviewed a bulk of relevant literature in University of Malaya (UM) library as well as on the Internet, which helped in developing the theoretical framework and in writing the literature review. As for writing the background information on Sudanese poverty eradication programs, the researcher relied upon the research papers and textbooks, as well some official publications written by Sudanese writers on poverty in Sudan.

6.6 Limitations and Problems Encountered in the Field Survey

Similar to other primary survey-based research, this study was also hindered by some limitations. First, while the field research has been confined merely to the AIM branch and sub-branches in the districts of Sabak Bernam, Kuala Selangor and Kuala Kubu, it overlooked other important microcredit programs carried out in Malaysia due to various logistical factors and time and financial constraints. Second, the study has been restricted mainly to assessing the experience of AIM performance in terms of its outreach and the impact on the poor borrowers who are currently active members, leaving behind those who drop out and those who are inactive members. However, regardless of these shortcomings, the study's results may be generalized and applied in other socioeconomic settings providing that the factors that lead to the success of AIM's experience in poverty eradication somehow existed in the environment to which it is to be transplanted.

The problems and difficulties encountered during the course of conducting the field survey which are responsible for the long period spent in data collection, may be classified into two categories: firstly, one related to the respondents and secondly, to the fieldworkers.

i. Problems with the Respondents

Although the researcher tended to stay with the branch field staff in the nearby Kampong (Village), he was to travel a long distance to attend some meeting centers located far away from the place of residence and from the branch. These meeting centers were usually held three times during the week on Monday, Tuesday and Wednesday which makes somewhat difficult to attain all the meeting centers held simultaneously on the same day. To overcome such problems some arrangements were made with the help of the field workers, and a

meeting schedule was worked out. In order not to miss any meeting center selected for the study, the researcher had to attend two meeting centers per day with the help of the field worker who had the means of transportation.

The researcher's choice of the meeting center for conducting the interviews with his respondents could only be justified on the grounds that most of them were not available at home during the time of the enquiry. The majority of the respondents were women and sometime used to do their business outside their homestead in food processing and sundry shops in the nearby town.

The preoccupation of the respondents with their daily home works such as bringing back their children from the school and preparing food added much to the delay of the data collection. The problem was complicated further by the short time spent in filling in the questionnaire at the meeting center. Most of the respondents could not manage to respond promptly in answering the questions and they preferred to do it at their home. In such a case, the questionnaire form could only be returned at the next center meeting. Those who agreed to fill up the form at the meeting center were always in a hurry to finish it as quickly as possible so that they could fetch their children from schools and fulfill other social obligations. This problem, however, has resulted in response error on the part of the respondent. This problem could only be tackled by making repeating visits to the research sites for crosschecking.

The inadequate information on incomes and expenditure constituted a serious problem that affected the interpretation and analysis of the data. Most of the respondents tended to understate and overstate their incomes and consumption expenditure respectively in

apprehension of losing benefits and incurring taxes imposed by the government. The reluctance of the respondents to maintain full records of their incomes and expenditure is partly attributed to their low level of education associated with low level of income (Ataul Huq, 1998). Consequently, the lack of quantitative information on some variables leads us to exclude some questions from the analysis.

Moreover, most of the respondents did not keep detailed information on the amount of loan received and repaid as well as the amount saved in the group fund. In most cases, they tended to avoid answering such types of questions. This again significantly affects the research findings. Low literacy rates among the clients coupled with the presence of the field staff at the center meetings could be identified as the main factors that obscured the perceptions of the respondents in expressing their dissatisfaction with AIM. Personal interviews could not be conducted meticulously and, more often than not, most respondents were hesitant to express their views on the impact of the scheme on their well-being. Data on the clients past socioeconomic situations, such as their previous occupations, income, expenditure, and living conditions, could not possibly be obtained from the respondents due to memory problems. Since such types of information could only be generated from M3⁽³⁾ forms at the branch office, however, these forms could not be made available at the time of the inquiry due to the lack of an adequate filing system. Finally, direct interview with the clients was not an easy task due to the lack of communication. In Kuala Selangor and Kuala Kubu mini-branches, some of the clients speak local dialects such as Javanese, Banjarese, Malays and Minang. This problem could only be overcome with the help of the field workers who speak these local dialects.

³ M3 form refers to client's prerequisite test, which consists of information on the client background, household information, housing index, and source of income and value of property before joining AIM.

(ii) Problems with the Field Workers

In the main branch at Sungai Besar four out of the seven field staff were females who used to attend the meeting center by motorcycle. This posed a serious problem particularly when the researcher attempted to accompany a female fieldworker to the center meeting, which in this case could only be reached by motorcycle. However, the solution lay in accompanying a male field worker to the meeting center that assigned to a female one. In the other two branches, such problems no longer existed, as the field workers were predominantly male. Compared to their female counterparts, male field staffs were more willing to collaborate and advise on matters related to the distribution and collection of the questionnaire forms from the respondents.

6.7 Methods of Data Analysis

The current study is both explanatory and descriptive in nature. It is neither comprehensive nor exhaustive in dealing with the problem of poverty in all its ramifications and complexity. Its scope is confined mainly to the analysis of Amanah Ikhtiar Malaysia as a model of a successful poverty eradication program and to upgrade such experience to be replicated in Sudan. However, without such confinement the study would become too general and would therefore make it difficult to evaluate and assess the impact of the programs being implemented to combat poverty in Malaysia, and the objective of formulating a policy framework to redress poverty in Sudan and Malaysia would not then be possible to realize.

6.8 Framework of Analysis

Three types of framework of analysis will be considered in our present study. First, the evaluation of the effectiveness of AIM poverty eradication programs from the perception of the target population. Second, the assessment of the program performance from the program administrator's point of view. Third, evaluation of AIM performance by adopting the so-called "critical triangle of microfinance," that is outreach (reaching the poor both in terms of number of clients, centers and field staff), financial sustainability (sustaining high repayment rates and meeting operating and financial costs over the long term), and impact (having a discernable effect upon clients' quality of life). With regard to the clients' perception and subjective judgment, the effectiveness of the program performance can be measured in terms of the conditions and terms of finance stipulated by the program, the type of security offered, the clients opinion on the procedures and methods of lending and repayment whether they are Islamic or not, the clients' subjective evaluation of the outreach of microcredit to the poor, and the clients suggestion on the improvement of the program performance. The impact of the poverty eradication program on the target population will be analyzed by utilizing adequate effectiveness measures such as a household's expenditure and income, living conditions, employment, educational level, health, sewerage facilities and water supply. These variables measure the social and economic impact of the program on the household.

The effectiveness of the program performance can be gauged by interviewing the program manager. The interview questions will cover certain organizational aspects including: the objectives of AIM microcredit program, the criteria used for selecting the borrowers, the type of economic activities financed, testing the eligibility of the client, loan monitoring,

problems faced in loan repayment, methods of finance, type of social programs financed, job satisfaction, the participation of clients in planning their activities, improving the efficiency and effectiveness of the program performance and the difficulties faced in carrying out the program operations .

From the above discussion, a possible analytical framework can be constructed inspired largely by the relevant theories, theoretical models, concepts and insights derived from the preceding chapters. As presented in Figure 6.2, the hypothesized framework of analysis incorporates three main interrelated components that directly affect the performance of the AIM poverty eradication program. Figure 6.2 illustrates that the effectiveness of the AIM program's performance is influenced largely by three main groups of variables; namely outreach, financial sustainability and impact on the clients. The first two variables were discussed thoroughly in the preceding chapter. In this framework, it is assumed that there exists a causal relationship between these three variables. The capacity of outreach is usually measured by the value and number of loans being disbursed, the number of the clients covered, the number of branches established and the proportion of women participating in the program. The financial sustainability of the program can be attained by charging high rates of interest on loans, high repayment rates, making some profit to cover the cost of operations and depending to some extent on some sort of subsidies to sustain the program operations. The impact on poor clients can be gauged by a significant increase in the clients' income, consumption and assets, and investment in different income-generating activities and social improvement in terms of education, health, water supply and electricity.

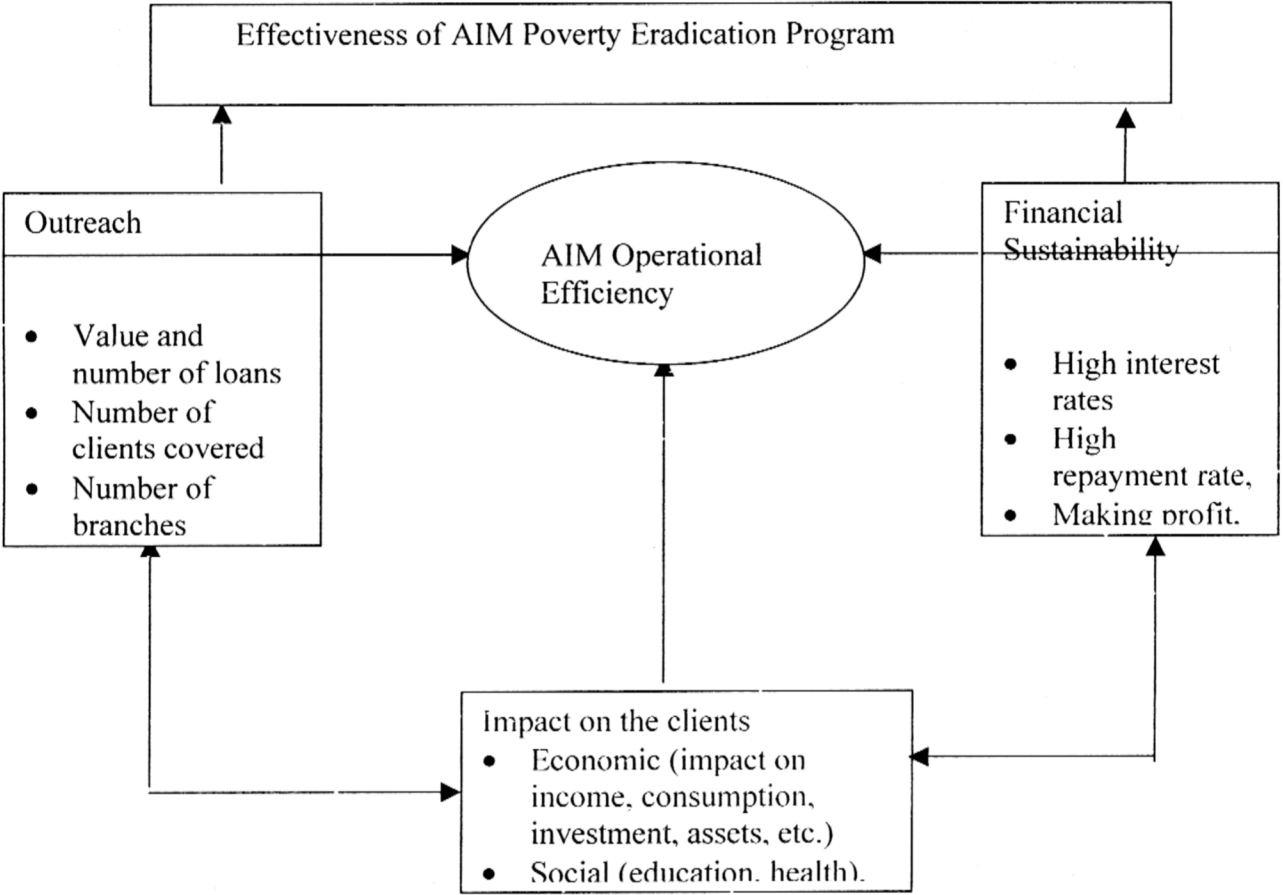


Figure 6.2 Framework of Analysis

The above analytical framework will be utilized to analyze the impact of the AIM poverty eradication program on the clients in the three branches as follows:

First, by comparing the clients present economic status in terms of certain socioeconomic indicators such as housing conditions building materials, incomes and power supply, with some of the results of the External Impact Study 1994/1995 as well as by using within group comparison. Such comparison will provide good insight on the changes that took place as a result of the introduction of microcredit program in the study areas.

Second, the impact of the program on the recipients will be analyzed by measuring the extent of relative poverty among the clients by obtaining data on living conditions, ownership of productive assets such as land, agricultural equipment, animal husbandry, health, education, water supply, electricity, type of fuel used for illumination, etc.

Third, we assess the performance of the AIM delivery system by collecting data on the amount of loan received and how it has been utilized by the clients, loan repayment performance, education and housing loans, training of the clients, terms and conditions of finance and perception of the clients on AIM performance.

Fourth, In terms of the measurement of the degree of outreach a comparative analysis will be carried out between BLS which include the main branch in Sungai Besar and the mini-branches in Kuala Selangor and Kuala Kubu and five other AIM branches in Tengah and Selatan State. Here the analysis centers on measuring the operating efficiency ratio of these

branches in terms of the staff outreach efficiency ratio to centers and borrowers as well as center outreach ratio to borrowers.

Fifth, financial self -sustainability of AIM will be measured by analyzing the data collected from AIM on the amount of loans received from the government and other financial institutions as well as the amount repaid to these institutions. In addition to the data on the amount of loan disbursed to the clients and the amount repaid back to AIM.

Sixth, within group comparison will be used to examine the extent of poverty and the impact of the program on the clients' livelihood. In addition with and without method will be utilized to test the effect of program on the client's income

Seven, some relevant statistical methods will be utilized to detect the interrelationship among the various classes of variables using SPSS release 11.0. Here the multivariate statistical techniques of factor analysis will be employed to ease the analysis, and stepwise multiple regression analysis is also used to examine the interrelationship between the program performance variables and the socioeconomic and demographic variables and to test the research hypotheses. Based upon the accuracy of the field data, the most influential demographic and socioeconomic variables that have a direct impact on the program performance are chosen. Principal Component Analysis is used to convert the selected variables into factors. Oblimin with Kaiser Normalization rotation is used as a factor selection criterion. The factor that has significant loading is included in the analysis. The selected variables can be represented by the factors in the stepwise multiple regression analysis and in testing the different hypotheses.

Finally, both descriptive and inferential statistics will be employed to examine the correlation between the socioeconomic and demographic variables and the program performance. Descriptive statistics, including frequency distribution, means, independent t-student test, cross-tabulation, Chi Square test and rank correlation are utilized to simplify the discussion and to examine the interrelationships between the program performance variables and the demographic and socioeconomic variables. The primary data that has been collected will be checked for accuracy against the secondary data from the AIM branch offices.