

Comparative Study of Family Development Approach and Group Based Approach of Dipshikha on Poverty Reduction

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Comparative Study of Family Development Approach and Group Based Approach of Dipshikha on Poverty Reduction

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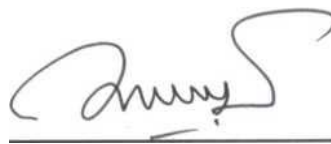
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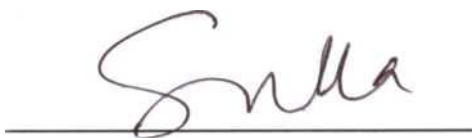
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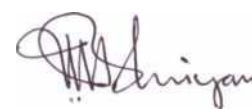
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CERTIFICATE

This is to certify that thesis entitled, **Comparative Study of Family Development Approach and Group Based Approach of Dipshikha on Poverty Reduction** submitted to the Faculty of Agriculture, Sher-e-Bangla Agricultural University, Dhaka, in partial fulfillment of the requirements for the degree of MASTER OF SCIENCE in AGRICULTURAL EXTENSION & INFORMATION SYSTEM, embodies the result of a piece of bona fide research work carried out by MD.MAHBUBUL ISLAM, Roll No. 01839, Registration No. 01839 under my supervision and guidance. No part of the thesis has been submitted for any other degree or diploma.

I further certify that such help or source of information, as has been availed of during the course of this investigation has been duly acknowledged by him.

Dated :
Dhaka, Bangladesh



(Prof. Mohammad Hossain Bhuiyan)

Supervisor

**Dedicated to my
Beloved Parents**

and Poverty-stricken People **of**

Bangladesh

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ABBREVIATIONS AND ACRONYMS

ANOVA	Analysis of Variance
BBS	Bangladesh Bureau of Statistics
et al.	and other
FAO	Food and Agricultural Organization
FDA	Family Development Approach
FGT	Foster-Greer-Thorbecke Index
FMMR	Full Method of Multiple Regressions
GBA	Group Based Approach
GNP	Gross National Product
HC	Head Count
NGO	Non-Government Organization
PG	Poverty Gap
SD	Standard Deviation
SMR	Step wise Multiple Regression
SPG	Square Poverty Gap
ha	Hector
ac	Acre
US	United States

Comparative Study of Family Development Approach and Group Based Approach of Dipshikha towards Poverty Reduction

ABSTRACT

By
MD. MAHBUBUL ISLAM

Non-Governmental Organizations (NGOs) are well-known in Bangladesh for their innovative approaches. Dipshikha, an NGO, working for the resource poor people in order to reduce poverty specially in the northern part of Bangladesh. It has been working through two approaches namely (i) Family Development Approach and (ii) Group Based Approach. In the study attempts were made to determine the extent of effectiveness of family development approach (FDA) and group based approach (GBA) of Dipshikha towards poverty reduction. The effectiveness were measured by computing the changes in annual income, expenditure for food and nutrition, expenditure for health, education and others, land assets, productive assets other than land, non-productive assets, housing condition, drinking water sources, sanitation conditions, between before and after involvement with Dipshikha under both the approaches. Some of selected characteristics of the respondents and their contribution to the effectiveness of family development approach and group based approach were determined and described as well. Data were collected from early October to early November, 2006.

The findings of the study indicated that the economical condition of Dipshikha beneficiaries under both the approaches had improved significantly after involvement with Dipshikha in relation with annual income, food and non-food expenditures, productive and non-productive assets. The Head Count (HC) method pointed out that the poverty level reduced significantly after involvement with Dipshikha under both the approaches. Poverty was reduced by 39% from 93% in FDA and 31% from 77% in GBA. Although, the Foster-Greer-Thorbecke (FGT) index showed that 51% of the respondents from FDA and 43% from GBA were still remain under upper poverty line in terms of income.

Social well beings conditions of the respondents namely housing condition, sanitation condition, access of safe drinking water, knowledge on health and social issues and women empowerment situation were improved significantly as well under both the approaches after involvement with Dipshikha.

The findings revealed that 27%, 63% and 10% of the respondents had low, medium and high socio economic changes respectively after involvement with Dipshikha under FDA while, 27%, 68% and 5% had low, medium and high changes respectively in GBA. The independent sample t- test showed that there was no difference between the effectiveness of FDA and GBA towards poverty reduction. But the findings showed that FDA has more potentials than GBA towards poverty reduction in terms of time, credit utilization, credit repayment, savings accumulation, training exposure, use of safe drinking water and sanitary latrine, awareness on health etc.

Implementation of family development plan, involvement with Dipshikha, savings of the family, credit availability and acceptance of loan received condition had positive contribution and family size had negative contribution to the effectiveness of FDA of Dipshikha. Utilization of credit, annual income and attitude towards Dipshikha had positive contribution to the extent of effectiveness of GBA of Dipshikha.

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CHAPTER I

Introduction

1.1 General Background

Bangladesh has made considerable development in reducing poverty and improving the lives of its people within only a little over three decades as an independent country. However, about 40% of its population of 141.8 million still lives below poverty level (World Bank, 2007) as measured by income, consumption and ability to meet basic human needs. The average per capita income of its population is only US\$ 470 while the average per capita income of South Asia is US\$ 590 (World Bank, 2007). Poverty means hunger, lack of assets - such as - land or savings and extreme vulnerability to shocks due to economic downturns, family illness or natural disasters. It means poor access to basic services and being unable to send children to school and often needing them to work instead. Poor people of Bangladesh tend to have low levels of education (44.9%, World Bank, 2002) and limited access to land and hold low paying, physically demanding, and socially unattractive occupations like casual wage labour. In both urban and rural areas, the poor lack of access to modern facilities and services and they also tend to live in inferior quality houses. In this situation poverty has become as a vital issue for the government, Non Governmental Organizations (NGOs) and the donor agencies as well. The NGOs hand in hand with government have been implementing a wide range of development activities in order to develop socio economic condition of the poor.

A large number of NGOs including Dipshikha are working in Bangladesh in order to develop the socio-economic condition of the poor. The NGOs and international organizations have implemented different sorts of poverty reducing programmes since mid-seventies. The NGOs are known worldwide for their innovative approaches. Many successful models in poverty reduction, micro finance, non-formal education and primary health care are developed by different NGOs.

Dipshikha - “Non formal Education, Training and Research Society for Village Development” was initiated in 1978 by a group of social workers, teachers and youths in the village of Rudrapur, Upazila Birol, District Dinajpur. It was registered with the Social Welfare Department in 1984 and Foreign Donation Ordinance in 1985. Dipshikha was started in a simple and modest village Rudrapur, Dinajpur and gradually its activities were expanded into 13 Upazilas of 4 districts in northern Bangladesh during last 20 years. It is working now with about 22,000 beneficiary families with envisions “A poverty free, just and peaceful society”. It believes in Integrated Development Approach, which is essentially needed to reduce the rural poverty of Bangladesh that includes formational education both for children and adults, appropriate agriculture, hygiene, sanitation, skills promotion and supports for income generation activities.

Like other NGO, Dipshikha initiated their work through *Group Based Approach (GBA)* which targets mostly the women and one person from each poor family. In Bangladesh women are targeted because they are more available, more likely to repay on time the credit, more flexible and patient than men and cheaper to service. In GBA, Dipshikha developed a group consisting of 20 - 25 poor women in every village to promote unity and solidarity for economic emancipation as well as to get rid of social injustice. All the interventions from Dipshikha including credit activities were provided through group for its member only. Other family members are not allowed to get any intervention from Dipshikha. Another aspect to form group is to ensure effective credit repayment. The group mechanism transfers risks of non repayment from the programme to the group itself. Peer monitoring from the group members for credit repayment reduced the cost of transaction and allows for successful implementation of credit intervention through group liabilities.

Dipshikha has long experience in rural development activities through Group Based Approach. It believes in and emphasizes on self-respect and

absolute human dignity. It further believes in the total development of the person i.e. human, social, cultural, economical, spiritual and political. To achieve self-reliance of individual through group activities Dipshikha found that group approach could not respond to develop the entire family of the group members. Ullah and Routray (2003) stated in their book “NGOs and Development- Alleviating Rural Poverty in Bangladesh” that today the group based approach seems to limit the magnitude of contribution of the NGO programmes has to improve poverty situation. Dipshikha experienced that the whole system is now operating on the basis of individual liabilities. On the basis of their field experiences, Dipshikha has developed *Family Development Approach (FDA)* in 2002 in order to improve the livelihood of poor families more intensively and scientifically. Family as a social unit is considered to be the center of all development efforts. All members of the family are brought as stakeholders of the development initiatives in this approach. Dipshikha thinks that all grown up potential family members should take part in economic and social development of the family. In FDA, the member families prepare their five years development plan on the basis of their problems, resources and opportunities. Dipshikha facilitate the member families to achieve their development plan. Moreover, this plan helps the member families to use the support from Dipshikha effectively by appropriate person from the family. Further the loans are issued under this system only when the individual family can contribute 20% of the total cost of the proposed activities and repay their loans after getting income from the specific activities. Member families can use their savings to invest in their development activities.

In this research, the researcher tried to find out the performance of Dipshikha activities through GBA and FDA which may provide a valuable guideline for the researchers, planners, policy makers of Government and Non-government organizations for programme development in order to reduce poverty.

1.2 Statement of the Problem

A large number of Non-Governmental Organizations are working now in Bangladesh to fight against poverty through different approaches. In early seventies, the NGOs came forward to assist the war devastated people with the task of relief and rehabilitation. Lately in mid seventies, they switched over their activities to sustainable development through a new approach known as “target group” approach by organized groups of poor people specially women in the rural areas. NGOs organized the poor people into small groups at the village level, arranged adult literacy programmes, provide necessary training and arranged regular discussion on different social issues. Credit was disbursed among the members to develop their income generation activities (Mustafa, et al, 1996). The poor people specially women and children brought under NGOS’ health activities. Still now, more than 22,000 NGOs are working through this approach for elimination of rural poverty. But the incidence of rural poverty in Bangladesh is much higher compared to the East Asian countries and South Asian neighbors. Ullah and Routray (2003) stated that the impact of NGOs on poverty reduction has been minimal. Therefore, the question came how far the group based approach creates impact on poverty reduction. On the other hand, although Dipshikha started its activities with group based approach like other NGOs but considering the limitations of this approach Dipshikha switched over in to family development approach. But Family development approach is very new and no study has been conducted to find out the effectiveness of FDA. Dipshikha is working now with both approaches in different areas of Bangladesh in order to identify the appropriate approach for rural development.

Now, the questions arise (i) how far these two approaches (GBA & FDA) effectively contributed to alleviate the rural poverty? (ii) What services do Dipshikha provides through these two approaches and how does they help in alleviation of poverty? (iii) Which approach is most effective for improving the situation of economic, social and institutional development of rural poor? Therefore, the comparative study of these two approaches finds

to be essential in order to search the appropriate approaches for poverty reduction. Innumerable projects and programmes launched and executed by Dipshikha to improve the well being of the poor since its inception but there are little systemic evidences of these two approaches which can direct Dipshikha as well as other NGOs and Donor agencies to adopt an effective approach to reduce poverty. No study has been done on the role of GBA and FDA in addressing rural poverty issues. Apart from the above discussion the study aimed to find out the answers from the following questions:

- ^ What are the personal characteristics of the rural poor and who are involved with Dipshikha activities through GBA and FDA?
- What are the selected personal characteristics of rural poor which contribute to extend of effectiveness of Dipshikha activities through GBA and FDA?
- What changes to the poor families are made by the intervention of Dipshikha through GBA and
- FDA in relation to annual income, food expenditures, non-food expenditures, land assets, productive and non-productive assets, housing conditions, water and sanitation conditions, awareness on social and health issues and women empowerment?

In consideration of above stated facts and findings, the researcher undertook a piece of study entitled “Comparative Study of Family Development Approach and Group Based Approach of Dipshikha on Poverty Reduction.” The study offers a new paradigm for the NGOs to restructure their programme strategies for an effective poverty alleviation programme.

1.3 Objective of the Study

The specific objectives are:

1. To determine the extent of effectiveness of (i) Group Based Approach

and (ii) Family Development Approach of Dipshikha towards poverty reduction in relation with annual income, expenditure for food and nutrition, expenditure for health, education and others, land assets, productive assets other than land, nonproductive assets, housing condition, drinking water sources, sanitation conditions, awareness on health, awareness on social issues and women empowerment.

2. To determine and describe some selected characteristics of Dipshikha beneficiaries. The characteristics are Involvement with Dipshikha, age, education, family size, farm size, family annual income, savings, implementation of family development plan (only for FDA), group cohesion (only for GBA), credit availability, credit utilization, credit repayment, acceptance of loan received condition, training exposure and attitude towards Dipshikha.
3. To explore the contributing factors to
 - i) extent of effectiveness of Group Based Approach of Dipshikha towards poverty reduction
 - ii) extent of effectiveness of Family Development Approach of Dipshikha towards poverty reduction

1.4 Assumptions and Limitations of the Study

1.4.1 Assumptions of the Study

An assumption is the supposition that an apparent fact or principle is true in the light of the available evidence (Carter, 1945). The researcher cherished the following assumptions keeping in mind while undertaking this study:

- i. The respondents included in the sample for both GBA and FDA were capable of furnishing proper responses to the questions contained in the interview schedule.
- ii. The information furnished by the respondents was valid and reliable.
- iii. The respondents included in the sample were representative of the population of Dipshikha beneficiaries under group based and family development approach in the selected study areas.

- iv. The researcher who acted as interviewer was well-adjusted to the social environment of the study area. The data collection from the respondents was free from bias.
- v. The selected characteristics of the respondents and ‘extend of effectiveness of Dipshikha activities through GBA and FDA on poverty reduction’ of this study were normally and independently distributed with their respective means and standard deviation.

1.4.2 Limitations of the Study

Considering time, money and other necessary resources available to the researcher and to make the study meaningful and manageable from the practical point of view, it has certain limitations that are cited below:

- i. The study was confined in two project areas of Dipshikha namely Bochanganj Upazila of Dinajpur District and Tarash Upazila under Sirajganj District.
- ii. There were many landless poor families in the study areas, but only the rural families involved with Dipshikha through group based approach and family development approach were considered for this study.
- iii. Characteristics of the rural women were many and diverse. But only 14 characteristics for each approach were selected for investigation in this study.
- iv. For information about the study, the researcher depended on data as furnished by the selected rural women during data collection and the data furnished by Dipshikha from their base line survey and family development cards.
- v. Most of the respondents were illiterate or have a lower level of literacy which made difficult to get accurate information as they do not keep written documents in respect to production, income or expenditures.
- vi. The social and economical characteristics of two study areas are to some extent diverse.
- vii. There were many dimensions to assess extend of effectiveness of Dipshikha activities for the approaches but only 12 dimensions were

selected for investigating in this study.

Findings of the study would be applicable to the beneficiaries of Dipshikha of two project areas namely Bochaganj and Tarash Upazila in particular but in general it would be applicable to other areas of Bangladesh where the physical, socio-economic and cultural conditions do not differ much from those of the study areas. Thus the findings are expected to be useful to the researchers, planners and policy makers, extension workers and beneficiaries of Dipshikha and similar NGOs and other organizations and personnel for promoting rural development.

1.5 Hypotheses of the Study

As defined by Goode and Hatt (1952), a hypothesis is a proposition which can be put to a test to determine its validity. It may seem contrary to or in accordance with common sense. It may prove to be correct or incorrect. In any event, however, it leads to an empirical test.

The following research hypotheses were put forward to test the contributing selected factors considered. Each of 14 selected characteristics (involvement with Dipshikha, age, education, family size, farm size, annual income, family savings, group cohesion (only for GBA), Implementation of Family Development Plan (only for FDA), credit availability, utilization of credit, repayment of credit, condition of loan received, training exposure, and attitude towards Dipshikha) of the beneficiaries is related to extend of effectiveness of group based approach and family development approach of Dipshikha towards poverty reduction.

However, for statistical advantages, each of the research hypotheses was converted into null form which states that

- i) “There is no contribution of the selected fourteen characteristics (involvement with Dipshikha, age, education, family size, farm size, annual income, family savings, group cohesion, credit availability, utilization of credit, repayment of credit, acceptance of loan

received condition, training exposure, and attitude towards Dipshikha) of the beneficiaries to extent of effectiveness of group based approach of Dipshikha”

- ii) There is no contribution of the selected fourteen characteristics (involvement with Dipshikha, age, education, family size, farm size, annual income, family savings, Implementation of Family Development Plan, credit availability, utilization of credit, repayment of credit, acceptance of loan received condition, training exposure, and attitude towards Dipshikha) of the beneficiaries to extent of effectiveness of family development approach of Dipshikha.
- iii) There is no difference between the situation before joining Dipshikha and after joining Dipshikha in both approaches in relation with (1) annual income (2) Expenditure for food and nutrition (3) Expenditure for health, education and others (4) Land Assets (5) Productive assets other than land (6) Nonproductive assets (7) Housing condition (8) Drinking water sources (9) Sanitation conditions (10) Awareness on health (11) Awareness on Social Issues and (12) Women empowerment.
- iv) There is no difference between effectiveness of group based approach and family development approach of Dipshikha towards poverty reduction.

1.6 Definition of Important Terms

Certain frequently used terms are defined and interpreted for clarity of understanding as follows:

Dipshikha

Dipshikha is one of the renowned non-governmental organizations emerged in 1984 with a view to reduce poverty, establish a peaceful and just society in the rural area through various activities like agriculture, education for children, health services, different income generating education and training as well as credit services for the poor people. Awareness development on different health and social issues is one of the vital activities of Dipshikha. It started work in the northern part of Bangladesh.

Poverty

Poverty is referred to lack of resources, underemployment, low income, food insecurity and hunger, lack of shelter, illiteracy, poor health and lack of social security and dignity.

Poverty Line

A person is considered to be poor if his/her consumption or income level touches the minimum level necessary to meet the basic needs. This minimum level is called the poverty line.

Upper poverty line:

The cost of 2122 Kilo calorie energy per capita per day with 30% cost of non-food expenditures (FAO). In this study the upper poverty line is used as Tk. 9,197.76 (BBS, 2005).

Lower poverty line:

The cost of 1805 Kilo calorie energy per capita per day with 30% cost of non-food expenditures (FAO). In this study the lower poverty line is used as Tk. 7,870.80 (BBS, 2005).

Family development approach is a method where all the members of a family are considered to be the parts and parcel of the development process through preparing a five years development plan which leads the family towards a poverty free living condition. At present about 4,500 families are involved with Dipshikha in different areas of northern part of Bangladesh

Family Development Approach (FDA)

under this approach.

Group Based Approach (GBA)

Group based approach is a development process where the NGOs organize the poor people specially the women into small groups at the village level for carry out their development activities in order to reduce poverty. Dipshikha initiated their work through group based approach and about 17,000 rural women are working with Dipshikha through this approach.

Family Development Plan

Family Development Plan is a five years development plan of a family under Dipshikha family development approach. Family development plan is the key factor of FDA. The families involved with Dipshikha prepared their five years development plan through attending a 2 days workshop in Dipshikha by analyzing their problems, resources and opportunities. Afterwards, the families implement their development plan in order to improve their livelihood condition. Dipshikha facilitates the families according to their development plan.

Group Cohesion

Group cohesion refers to the consistency, harmony, unity and solidarity among the members of the group of Dipshikha which lead them to fight against poverty and injustice.

Rural Women

Rural women refers to the women living in the villages and engaged in Dipshikha activities through group based approach or family development approach.

Education

Education refers to the development of desirable knowledge, skill and attitude in individual women through the experience of reading writing, observation and other related activities under Dipshikha development approaches.

Family

Family refers to the number of individuals in the family including husband, wife, children and other dependent members who live and eat together in a household and involved with Dipshikha development process under GBA or FDA.

Respondents

Respondents refer to the women who involved with Dipshikha either in group based approach or in family development approach as a stakeholder and provide family information to the researcher.

Impact

"Impact" refers to the sustained structural changes in development aspects that have long lasting effect due to socio-economic programmes undertaken by an organization. It is the powerful effect of Dipshikha interventions on rural population in relation with education, knowledge, attitude, skills, income, materials well being, social status and living standard.

Utilization of Credit

Utilization of credit means the use of loan by Dipshikha beneficiaries either in productive purpose or in consumption purposes which they get from Dipshikha.

Education

Repayment of Credit

The repayment of credit refers to the refund of credit installment to Dipshikha by the beneficiaries under family development approach or group based approach within the predetermined time.

Loan Received Condition

The loan received condition means the rules which are introduced by Dipshikha for its member family to get a credit or loan either in group based approach or in family development approach.

Training Exposure

Training exposure refers to the attending different workshops, skill and human development trainings by Dipshikha beneficiary or any other member from her family organized by Dipshikha or any other organization.

Productive Assets

The productive assets refer to the means or property by which one can generate some income. The productive assets include poultry, trees, cattle, goat, power tiller, shallow machine, sewing machine and rickshaw van etc.

Non-Productive Assets

The Non-productive assets refer to the properties that are not helpful for income generation for the family. The non-productive assets include furniture, radio, cassette player, television, utensils, jewelry etc.

Housing Condition

The housing condition refers to the number of houses possessed by the family and the materials which is used for construction.

Social Awareness

Social awareness refers to the consciousness of the beneficiaries of Dipshikha on different social issues like early marriage, dowry, family laws, education, human and women rights etc.

Health Awareness

Health awareness refers to the consciousness of Dipshikha beneficiaries on different preventive health care in relation with nutrition for children and pregnant mother, personal hygiene, immunization of children etc.

Women Empowerment

Empowerment is the process of obtaining basic opportunities for marginalized people, either directly by those people, or through the help of non-marginalized others who share their own access to opportunities. So, women empowerment refers to the ability of decision making capacity on different family and social issues by the women themselves.

Development

Development is a continues process towards positive changes. The term “development” indicates a quantitative growth in the social and economic areas, which ultimately should result in the process of a qualitative changes reflecting improvement in the living condition of people. In this study development is used to mean the real conscious raising, learning and economic progress of rural women after intervention of Dipshikha activities.

Attitude towards Dipshikha

An attitude may be defined as pre-disposition to act towards an object in a certain manner. It is an enduring physiological system consisting of three interacting components which may be classified as:

Cognitive component - the beliefs about the objects,

The feeling component - the affect connected with the object

The pre-disposition or action tendency component - the pre-disposition to take action with respect to the object

Therefore, the term ‘attitude towards Dipshikha’ of an individual is used to refer to her beliefs, feelings and action tendencies towards the various aspects of Dipshikha.



CHAPTER II

Review of Literature

Review of literature relevant with the objectives of this study is presented in this Chapter

II. Literature and research work in line with the present study were searched in the relevant libraries, research institutions and websites (internet). But no study could be located to be specially undertaken in a systematic way in this direction. Therefore, an attempt has been made in the present chapter to review some interlinked literature in this aspect from home to abroad. The interlinked reviews conveniently presented on the major objectives of the study as far possible.

However, the literatures of available studies have been briefly discussed in this chapter under three sections. The first section deals with the concept of poverty, poverty line, absolute and relative poverty and study relating to participation of poverty alleviation activities by the target beneficiaries. Studies dealing with the relationship and contribution of the 14 selected characteristics of the beneficiaries to the extent of effectiveness of group based approach and family development approach of Dipshikha were described in second section. The conceptual frame work of this study has been discussed in third section.

2.1 Concept of Poverty, Poverty line, Absolute and Relative Poverty and Participation in Poverty Alleviation Activities by the Target Beneficiaries

2.1.1 Concept of Poverty

There is still no internationally accepted definition of poverty - unlike measures such as employment, unemployment, gross domestic product, consumer prices, international trade and so on. This is not surprising, perhaps, given the absence of an international consensus on what poverty is and how it should be measured (Ullah and Routray, 2003; World Bank, 1996; CIRDAP, 1994-5). The lack of an internationally accepted definition has also reflected indecision as to whether an international standard definition should allow comparisons of well being across countries compared to some international norm, or whether poverty lines should be established according

to the norms within each country (NOVIB, 1995). Chowdhury (2001) defined poverty as forms of economic, social and psychological deprivation occurring among people lacking sufficient ownership, control or access to resources to maintain or provide individual or collective minimum levels of living. Poverty has social and cultural ramifications of inadequate income which has causal links with many other forms of deprivation, including inadequate access to health care, housing, educational services and employment opportunities (Ullah and Routray, 2003).

Siddiqui (2000) defined the two features of poverty 'want' and 'deprivation' as failure of flows and failure of stock respectively. Flows are simply goods for immediate consumption whereas, stocks are services derived from materials goods and human capital such as education, housing security etc.

World Bank Group (2003) stated that poverty means hunger, lack of medical treatment, and poor access to basic services, such as electricity and water supply. It means being unable to send children to school and often needing them to work instead. World Bank Group also stated that poverty means lack of assets - such as land or savings - and thus extreme vulnerability to shocks due to economic downturns, family illness or mental disasters. It means social exclusion and a constant feeling of insecurity and stress based on an uncertain future.

Chambers (1983) defined poverty as an interlinked and integrated concept which involves cluster of disadvantages. According to him poor people are perceived to suffer from many forms of deprivation which lead to lack of income and wealth but also social inferiority, physical weakness, disability and sickness, vulnerability, physical and social isolation, powerlessness and humiliation. This concept underlies (Figure - 2.1) the importance of economic vulnerability, physical weakness refers to having poor health with frequent births and deaths, with high ratio of dependents to able-bodied adults, while isolation refers to living far away from centers of communication and information etc, and receiving no or few visits by extension workers, relatives and friends (Siddiqui, 2000; Dale, 2000). Ullah and Routray (2003) defined vulnerability as little

resistance against unexpected and occasionally occurring unfavorable events, which often forces the poor to incur more debt or to sell or mortgage assets.

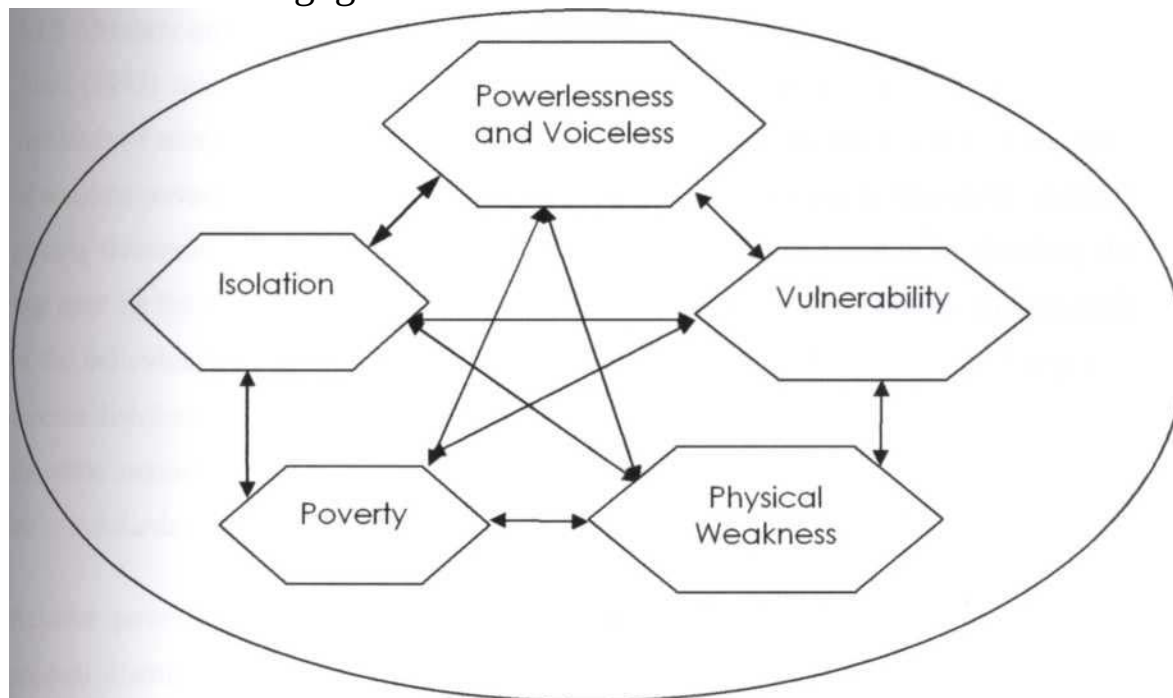


Figure 2.1 A typical form of Rural Poverty (Chambers, 1983)

2.1.2 Poverty Line

Hye (1996) stated that poverty, narrowly, is measured by the percentage of population having income below the minimum expenditures required for meeting the basic needs. A minimum nutritional diet consisting of food items typically consumed is first estimated and the diet is then valued at representative prices. This minimum level of representative prices is termed as poverty line and the people who cannot afford this minimum level are regarded as poor.

Gordon (1999) said that poverty line can be identified prescriptively, in accordance with some norm, or descriptively on the basis that people who fall below the line appear to be poor.

The World Bank (1996) determined poverty line as one dollar (US\$1) per day and the people who are living on less than US \$1 per day is defined as extreme poor and the people, living on less than US \$2 a day is termed as moderate poor. The estimation of World Bank \$370 per annum is not based on the precise assessment of needs; it has been multiplied up from the arbitrary figure of less than \$31 per month, a dollar a day.

2.1.3 Absolute and Relative Poverty

Alam (1993) said Absolute poverty is the income level below which even minimum

standards of nutrition, shelter and personal amenities cannot be maintained. A measure of absolute poverty quantifies the number of people below a poverty threshold, and this poverty threshold is independent of time and place. For the measure to be absolute, the line must be the same in different countries. Such an absolute measure should look only at the individual's power to consume and it should be independent of any changes in income distribution. The intuition behind an absolute measure is that mere survival takes the same amount of goods across the world and that everybody should be subject to the same standards if meaningful comparisons of policies and progress are to be made.

Relative poverty is considered as a relative deprivation of income emerging from unequal distribution of resources. A measure of relative poverty defines "poverty" as being below some relative poverty threshold. An example is when poverty is defined as households who earn less than 25% of the median income is a measure of relative poverty. Notice that if everyone's real income in an economy increases, but the income distribution stays the same, relative poverty will also stay the same. Measures of relative poverty are almost the same as measuring inequality: If a society gets a more equal income distribution, relative poverty will fall. Following this, some argue that the term 'Relative Poverty' is itself misleading and that 'Inequality' should be used instead. They point out that if society changed in a way that hurt high earners more than low ones, then 'relative poverty' would decrease but every citizen of the society would be worse off.

Muzaffar (2001) said that why there is still so much poverty in the world when we have both the knowledge and the techniques to eliminate poverty forever from the face of the earth, it is not difficult to fathom. The misallocation of resources arising from long priorities is undoubtedly one of the major reasons of absolute poverty.

Haider (2001) said that the cause for becoming extreme poor include river erosion, land redistribution and family breakup, flood, bad habit of household heads and inherited poverty.

2.1.4 Studies Relating to Participation in Poverty Alleviation Activities

Khan (1977) stated in an article about the participation of rural women in agricultural activities. He agreed that the activities and contributions of the rural women are invisible to most men and their contributions are calculated neither in GNP (Gross National Product) nor in the labour force.

Khan (2001) stated that NGOs have already chosen their alternatives programmes like health and family planning, non-formal primary education, credit and savings, income generation, women's issue, environmental problem, disaster management and human rights. All of the above are the causes of insufficient food or nutrition, income or education, which may be responsible for poverty.

Hadi (1997) found that the credit programmes of the NGOs have visible impact on the women's empowerment. The women's bargaining position in the home increased as they enhance their economic contribution to the family. The strength of earning an income together with the strength of belonging to the group helps women establish new roles for themselves.

Ahmed (2003) reported that the impact of micro credit has been very positive. The main benefits of micro credit enumerated as follows: (a) has increased family income and quality of life, and as won-represent 90 percent of the borrowers, their contribution is noteworthy; (b) it has promoted savings among poor women borrowers; (c) it has raised awareness and empowered women to various socio economic activities; and (d) it has motivated women to take an active role of political sphere of Bangladesh.

Mayoux, *et al.* (1998) described that microfinance programmes for women are currently promoted not only as a strategy for alleviation of poverty but also for women's empowerment.

Pallavi-Chavan *et al.* (2002) stated that NGOs led micro credit as an effective and financially viable alternative to the existing methods of addressing rural poverty through the provision of credit in India, it is also revealed that micro credit programmes have been able to bring about a marginal improvement in the beneficiaries income.

BBS (2002) found that after forming groups of Grameen Bank, the income of the members increased by 70 percent within 2 to 3 years. On an average, the income increased from Tk. 5806 to 9366, which was 55 percent higher than it was before. After forming the groups, only 5 percent of the members took loan from non-institutional sources.

Robinson (1991) dealt with the impact of NGOs in rural poverty alleviation in India. Four case studies were reported in his paper. The results of the four cases showed that NGOs showed some successes in improving the income and the consumption levels of the poor but encountered difficulties for a favourable local environment, especially, in economic and climatic factors.

Khan (2006) found in his study that the income, food consumption, assets, housing condition, use of sanitary latrine and own tube well for drinking water increased significantly after involvement with Grameen Bank micro credit programme.

2.2 Studies Relating to the Poverty Reduction and the Selected Characteristics of the Target Beneficiaries

The selected characteristics of the beneficiaries of Dipshikha under FDA and GBA were selected as independent variables of this study. No literature was found that determined the contribution of selected characteristics to the extent of effectiveness of GBA and FDA towards poverty reduction. Some literatures were available those determined the relationship between the selected characteristics of the beneficiaries with their poverty alleviation which are presented below:

2.2.1 Involvement with NGO and Poverty Reduction

Alam (2001) in his study found a significant positive relationship between length of involvement of the respondents with TMSS and their changes in health status.

Samad (2004) found that involvement with NGO of the rural women had no significant relationship with their poverty reduction.

Rahman (2005) in his study on “Role of an NGO intervention on poverty alleviation in a selected area of Dinajpur district” found a significant relationship between the duration of involvement with TMSS and their changes in food consumption and housing environment.

Khan (2006) in his study found that involvement with Grameen Bank had no significant relationship with the impact of Grameen Bank micro credit programme.

2.2.2 Age and Poverty Reduction

Begum (1998) found that age of the rural women had no significant relationship with their poverty reduction in ASA activities.

Naher (2000) in her study found that there was no significant relationship between age and participation in homestead vegetable cultivation, post harvest practices, poultry raising and goat rearing, while the activities in vegetable

cultivation are mostly participated by the younger houses wives.

Samad (2004) reported that the age of the rural women had no significant relationship with their poverty reduction activities.

Khan (2006) found his study on “Impact of Dipshikha Rural Development Activities as Perceived by the Participating Women” that age of the respondents under Dipshikha had no significant relationship with their impact of participation of Dipshikha rural Development activities.

Khan (2006) reported that the age of the rural women of Grameen Bank had significant relationship with the impact of Grameen Bank micro credit programme.

2.2.3 Education and Poverty Reduction

Devi (1995) found that own education of had a significant positive impact on labour force participation.

Kaur (1998) observed that education influenced the opinion the women about the project activity adoption of vegetable gardening, animal husbandry etc.

Begum (1998) in her study on “Poverty Alleviation of the Rural Women Organized by Association of Social Advancement” observed that education of the rural women had a positive significant relationship with their poverty alleviation owing to participation in ASA activities.

Rahman (2005) found in his study on “Role of an NGO intervention on poverty alleviation in a selected area of Dinajpur district” an insignificant relationship between education of the rural women and their changes in income but found a significant positive relationship with their changes in food consumption and housing environment.

2.2.4 Family Size and Poverty Reduction

Kaur and Punia (1988) found in their study that size of land holdings was found to be correlated negatively and significantly with participation in harvesting, transplanting, winnowing and weeding.

Akanda (1994) showed that family size of the rural women had significant positive relationship with the cultivation of fruit trees.

Islam (2002) reported that the number of family members of the respondents had positive significant relationship with their poverty reduction.

Khan (2006) found that family size had no significant relationship with the impact of Grameen Bank micro credit program.

2.2.5 Farm Size and Poverty Reduction

Basak (1997) found that homestead size of the rural women under BRAC had a significant relationship with their impact of participation in BRAC rural development activities.

Begume (1998) observed that homestead size of the rural women had no significant relation with their poverty reduction due to their participation in ASA development activities.

Sarkar (2002) observed a positive significant relationship between farm size of the RDRS beneficiaries and their changes in food consumption in Integrated Aquaculture Development Project, RDRS.

Samad (2004) reported that the farm size of the respondents had positive significant relationship with their poverty reduction.

2.2.6 Annual Income and Poverty Reduction

Quadir (1981) found that income earning activities had positive impact on women status and their family welfare. The author recommended for the expansion of women's participation in traditional agricultural activities.

Khandker et al. (1995) observed that family income of the rural women had positive significant influence on their improvements of household materials well being.

Khan (2006) stated that the annual income of the respondents under Dipshikha had significant positive relationship with their impact of participation in Dipshikha rural development activities.

2.2.7 Family Saving and Poverty Reduction

Islam (2001) found in his study on "Impact of Adarsha Gram Project in Alleviation Poverty of the Landless Settlers" that savings of the family of the landless settlers had significant positive relationship with their poverty reduction through participating in Adrarsha Gram Project.

Ali (2003) reported that the savings of the family of the participating women in BRAC micro credit programme had significant relationship with their impact of micro credit programme.

Rahman (2005) found in his study on “Role of an NGO intervention on poverty alleviation in a selected area of Dinajpur district” an insignificant relationship between yearly savings of the family of the rural women and their changes in food consumption but found a significant positive relationship with their changes in income and housing environment.

2.2.8 Implementation of Family Development Plan and Poverty Reduction

No relevant study was found even after massive searches in different libraries, Internet and journals.

2.2.9 Group Cohesion and Poverty Reduction

Khandker (1998) reported on his book “Fighting Poverty with Microcredit - Experiences in Bangladesh” that Group viability depends on the willingness of group members to adhere to the programme rules. He also said that group dynamics depend on the staffs commitment to enforcing the programme through interaction with and close monitoring of the groups.

2.2.10 Credit Availability and Poverty Reduction

Begum (1995) in her study found that credit availability of rural women had positive relationship with their income.

Khandker et al. (1995) found in their study that the role of credit availability improved women’s participation in economic activities.

Khan (2006) found his study on ‘impact of Dipshikha Rural Development Activities as Perceived by the Participating Women’ that credit availability of the respondents under Dipshikha had significant positive relationship with their impact of participation of Dipshikha rural Development activities.

Khan (2006) reported that the credit availability of the rural women of Grameen Bank had significant positive relationship with the impact of Grameen Bank micro credit programme.

2.2.11 Utilization of credit and Poverty Reduction

Kokab (2001) found in his study on “Utilization on micro-credit provides by Punjab Rural Support Programme (PRSP) to the females of Satiana and Jhumra district Faisalabad in Pakistan” that micro-credit for females of rural areas is accepted an affective method to reduce poverty and improved them economically and socially. The study reveals that majority of the respondent's income increased to some extent after getting credit and they utilized their loan in income generating activities and only 5.83 percent used in household

activities and Majority of the respondents said that their husband used the credit. Pakistani society is male dominated society, so the females are pressurized in every field of life certainly they are economically depend upon their husbands, father, brother etc. if they will be provided by income and started their own business they become more confident and strong.

Ullah and Routray (2003) stated on their books “NGOs and Development-Alleviation Rural Poverty in Bangladesh” that the difference between the purpose of taking loan and using loan was significantly high. It means that the NGO beneficiaries used their loan for the purposes the NGO did not wish them to use.

Khan (2006) found his study that utilization of credit by the respondents had significant positive relationship with their impact of participation of Dipshikha rural Development activities.

2.2.12 Repayment of Credit and Poverty Reduction

Stiglitz (1990) stated that the loan recovery rate of micro credit programmes so high due to the group based lending introduces peer pressure and monitoring.

Besley and Coate (1995) reported that group based lending creates social pressure to enforce loan contracts.

Ullah and Routray (2003) stated that the highest number of the respondents (23.17%) paid their installment from the principal loan since they had to start paying the installment back from next week of loan disbursement.

2.2.13 Acceptance of Loan Received Condition and Poverty Reduction

Kokab (2001) found in his study that majority of the female loaners were satisfied to great extent with credit procedure especially to females.

2.2.14 Training Exposure and Poverty reduction

Samad (2004) reported that the agricultural knowledge of the respondents had positive significant relationship with their poverty reduction.

Khan (2006) found his study that training received by the respondents had significant positive relationship with their impact of participation of Dipshikha rural Development activities.

2.2.15 Attitude towards Dipshikha and Poverty Reduction

Islam (1991) found that attitude of the farmers towards technology gether influenced their adoption.

Khan (2006) found his study on “Impact of Dipshikha Rural Development Activities as Perceived by the Participating Women” that attitude of the respondents towards Dipshikha had significant positive relationship with their impact of participation of Dipshikha rural Development activities.Khan (2006) reported that the attitude of the rural women towards Grameen Bank had significant positive relationship with the impact of Grameen Bank micro credit programme.

2.3 Conceptual Framework of the Study

In scientific research, selection and measurement of variables constitutes an important task. The hypothesis of a research while constructed properly contains at least two important elements i.e. a dependent variable and an independent variable. A dependent variable is that factor which appears, disappears or varies as the researcher induces, removes or varies the independent variables (Townsent, 1953). An independent variable is that factor which is manipulated by the researcher in his attempt to ascertain its relationships to an observed phenomenon. The value of independent variables determines the value of dependent variables. It was therefore, assumed that the effectiveness of family development approach and group based approach of Dipshikha towards poverty reduction of the respondents might have influenced by their various characteristics. So the conceptual framework of the study was find out how the characteristics of the beneficiaries contribute to the effectiveness of family development approach and group based approach of Dipshikha towards poverty reduction. The selected characteristics were involvement with Dipshikha, age, education, family size, farm size, family annual income, savings, implementation of family development plan (only for FDA), group cohesion (only for GBA), credit availability, credit utilization, credit repayment, acceptance of loan received condition, training exposure and attitude towards Dipshikha. Below the conceptual framework is shown in Figure 2.2

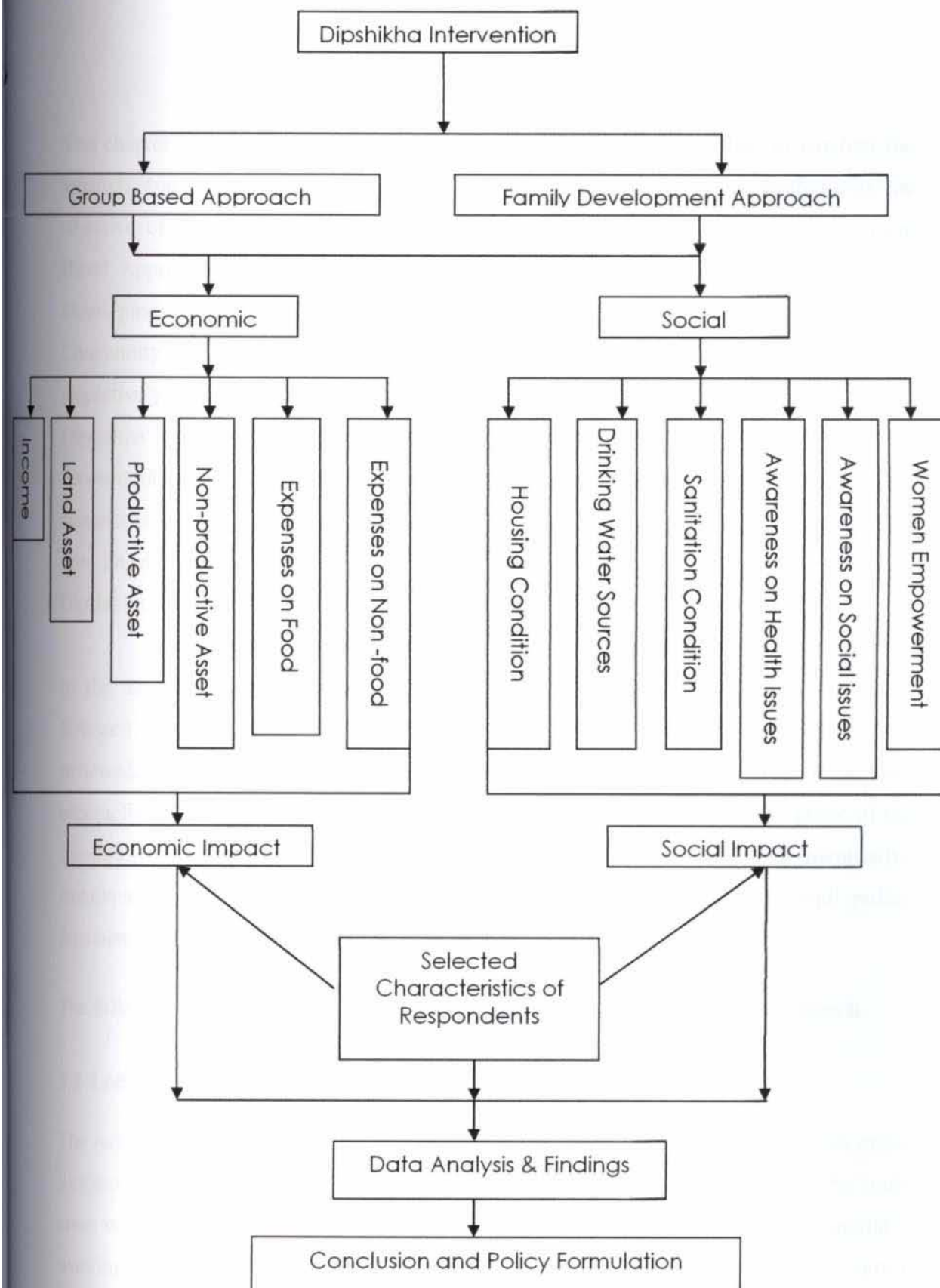


Figure 2.2 Conceptual Framework of the Study

CHAPTER III

METHODOLOGY

This chapter is designed to discuss the methods and techniques applied to conduct the research study. Since comparison of performance among the two approaches was the objective of the study, the data of Family Development Approach (FDA) and Group Based Approach (GBA) were collected separately from Dipshikha Integrated Family Development Project under Tarash Upazila of Sirajganj district and Dipshikha Integrated Community Development Project under Bochaganj Upazila of Dinajpur district respectively. The attention of the study was paid to examine the contribution of Dipshikha interventions on the rural poor through GBA and FDA. So the differences between situation before joining Dipshikha and situation after joining Dipshikha were considered in both approaches to examine the effectiveness of Dipshikha contribution. Pre- Dipshikha period referred to the situation before joining Dipshikha and Post-Dipshikha period referred to the situation after joining Dipshikha.

In the design, the research questions and objectives, at the quest, were formulated followed by formulation of hypothesis. Then the relevant literatures were extensively reviewed. Identification of variables and development of their measurement tools were accomplished. Once all the above mentioned activities were performed, the phase of the operation starts with data collection from the field. The data analysis using quantitative techniques were followed by data interpretation, analysis, findings and policy formulation.

The following procedures and methods were used for the conduction of the research.

3.1 Locale of the Study

The research work was carried out in Dipshikha working area of Tarash Upazila under Sirajganj District and Bochaganj Upazila of Dinajpur district. The locations of the study areas were provided in the Figure nos. 3.1; 3.2; 3.3; 3.4 and 3.5. In Tarash, Dipshikha is working in 30 villages under two Union Parishads namely Madhainagar and Deshigram with 1,000 families for more than 3 years (Figure: 3.4 and 3.5) through FDA. In Bochaganj, Dipshikha is working since 1999 in 30 villages under Ishania Union Parishad

with 1,255 beneficiaries (Figure: 3.2 and 3.3) through GBA. The distances of Tarash and Bochaganj area from the district head quarters are 40 kilometers and 36 kilometers respectively. These two areas were purposely selected for many reasons such as good communication, cooperation from Dipshikha officials and familiarity with the socioeconomic condition of the areas.

3.2 Population and Sampling of the Study

A total 2, 255 beneficiaries of Dipshikha from two different projects as mentioned above were the population of the study. An updated list of the beneficiaries belonged to two study areas was collected from Dipshikha head office. Through a simple random sapling method, a representative sample population was selected at the rate of 7.97% and 10% from Bochaganj and Tarash respectively (Table 3.1). Thus a total 200 beneficiaries, 100 from each approach, were finally retained as respondents of the study.

Table 3.1 Distribution of the Beneficiaries Involved in Dipshikha GBA and FDA

Sl. No	Area	Approach	Population (N)	Sample size (n)	%
1	Bochaganj	Group Based	1,255	100	7.97%
2	Tarash	Family Development	1,000	100	10%
Total		Both Approaches	2,255	200	8.87%

3.3 Instruments of Data Collection:

This study was conducted based on both primary and secondary source of data. Data from primary sources were obtained by personal interview using both open and close ended interview schedule. Keeping in mind, the objectives of the study, two separate interview schedules one for GBA and one for FDA were prepared having obtained expert views from the

teachers of the Department of Agricultural Extension and Information
System of Sher-e-Bangla Agricultural University (Annex A).

Map of Bangladesh

■ NILPHAMARK LAL

DINAJPUR
SIRAJGANJ

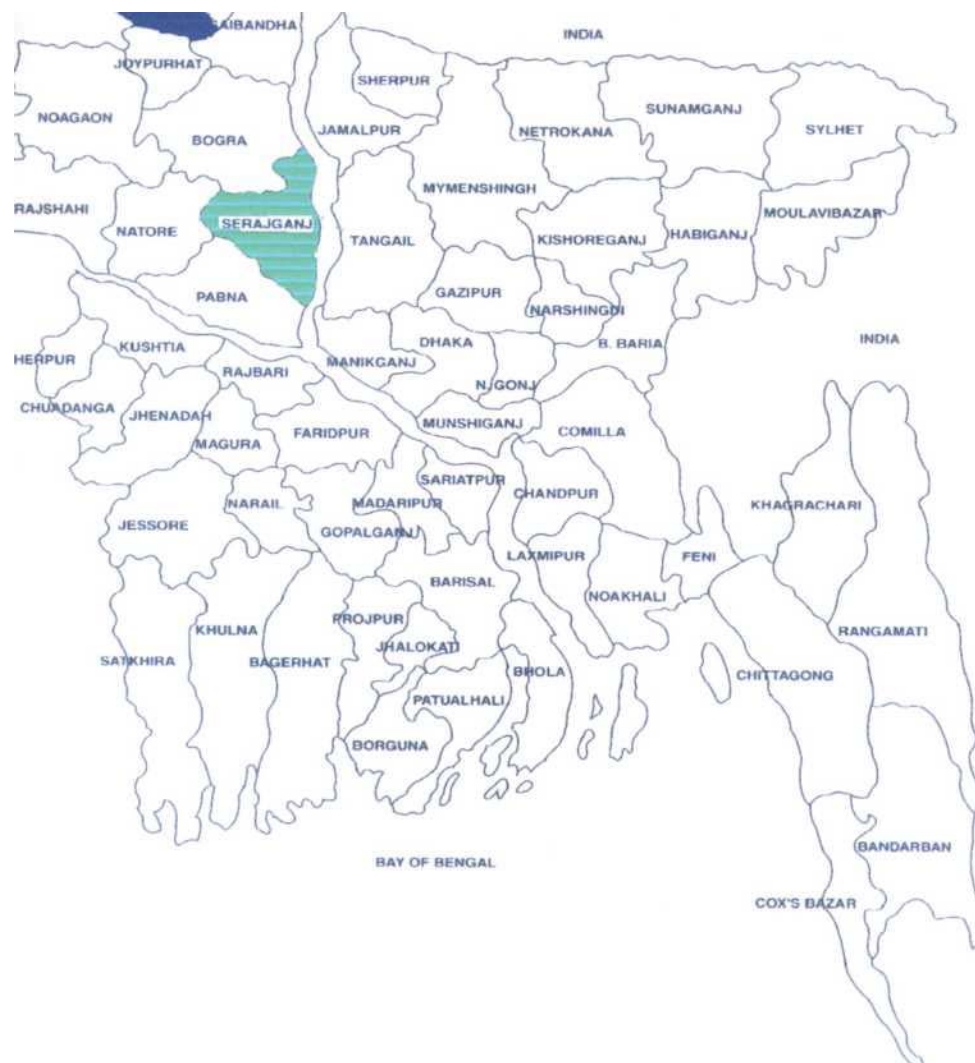


Figure 3.1 Map of Bangladesh Showing the Study Areas



Figure 3.2 Map of Dinajpur District Showing Bochaganj Upazila



Figure 3.3 Map of Bochaganj Upazila Showing Ishania Union

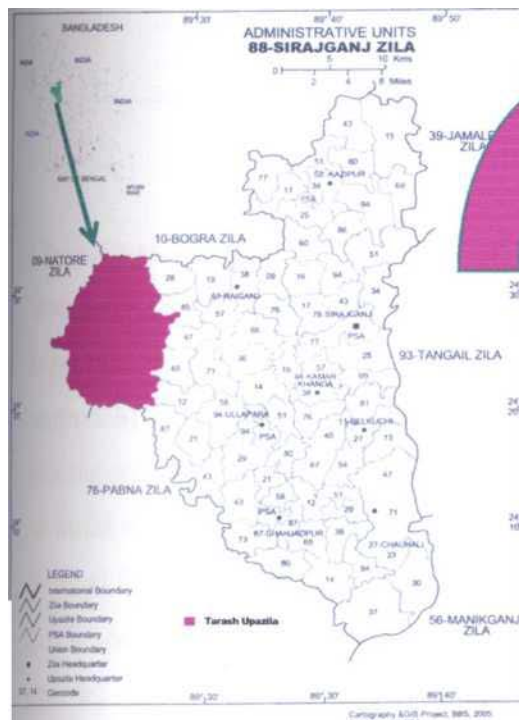


Figure 3.4 Map of Sirajganj District Showing Tarash Upazila
Figure 3.5 Map of Tarash Upazila Showing Deshigram and Madhainagar Union



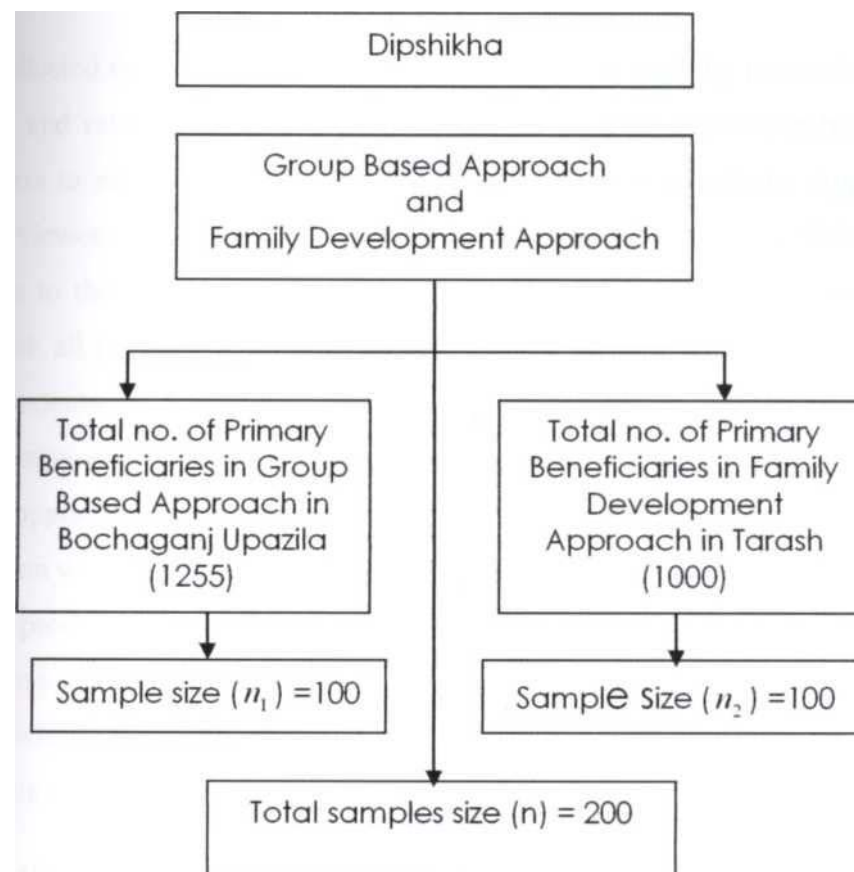


Figure 3.6 Sampling Framework

Convenience in data entry, measuring, quantifying, data gathering, understanding for the interviewees etc. were considered in designing the interview schedules. The interview schedules were pre-tested by collecting data directly from 20 beneficiaries (10 for each approach) of two Dipshikha areas. Necessary corrections, additions, alternations and rearrangements were made in the schedule on the basis of experiences of pretest in order to build an effective tool of data collection. The interview schedule was then printed in its final form for data collection.

For secondary sources, annual reports, baseline survey documents of Dipshikha, savings profile, credit pass and ledger books of the respondents and family development card were used.

3.4 Data Collection

Data were collected from primary and secondary sources directly by researcher himself. To get valid and relevant information from primary sources the researcher made all possible efforts to explain the purpose of the study to the respondents. Appointments with the interviewees were made in advance with the help of Dipshikha officials. In case of failure due to their pre-occupation a revisit was made with prior appointment. The researcher took all possible efforts to establish desired rapport with the respondents so that the respondents did not feel any hesitation to furnish proper information. Questions were asked systematically and explanation was made whenever it was felt necessary. The information supplied by the respondents was recorded directly on the interview schedule. The information was duly checked in order to minimize errors. The data for pre-Dipshikha period were collected both for the GBA and FDA mainly from Base line survey documents of Dipshikha and Family Development Card of respondents while, in some cases recalling data also collected through interview schedules. Data were collected from early October to early November, 2006.

3.5 Compilation of Data

The collected data were compiled, tabulated and analyzed in accordance with the objectives of the study. To facilitate tabulation, the responses of Dipshikha beneficiaries to the questions in the interview schedule were transferred to a master sheet. Tabulation and cross tabulation were done on the basis of categories developed by the researcher himself. Qualitative data were converted into quantitative forms by assigning appropriate score.

3.6 Selection of Variables of the Study

In scientific research, selection and measurement of variables constitute an important task. The hypothesis of a research while constructed contains at least two important variables such as “a dependent variable” and “an independent variable.” The variable which becomes the ‘cause’ of any

‘result or happening’ is known as independent variable and the variable which is influenced by independent variable is known as dependent variable (Karim, 1999).

To determine the extent of effectiveness of GBA and FDA of Dipshikha towards poverty reduction was the main focus of this study. Reasonably, it constituted the dependent variable. A variety of factors might influence the extent of effectiveness of group based approach and family development approach of Dipshikha towards poverty reduction. But, it is very difficult to deal with all the factors in a single study. It was therefore, necessary to limit the independent variables. As the study was conducted to compare the performance of two different approaches, so the characteristics of rural people in some cases are different. Variables of the study were selected on the basis of the literatures available, experts’ view, time and resources allocated for the research. Thus fourteen independent variables for each approach in relation to GBA and FDA were identified through a comprehensive search. The variables were (1) involvement with Dipshikha, (2) age, (3) education, (4) family size, (5) farm size, (6) annual income, (7) family savings, (8) group cohesion (Only for GBA), (9) implementation of family development plan (only for FDA), (10) credit availability, (11) utilization of credit, (12) repayment of credit, (13) acceptance of loan received condition, (14) training exposure, and (15) attitude towards Dipshikha. The group cohesion belongs to the independent variables list of GBA only and implementation of family development plan belongs to the list of FDA only.

3.6.1 Measurement of Dependent Variable

Extent of effectiveness of (i) group based approach and (ii) family development approach of Dipshikha towards poverty reduction were the dependent variables of this study. They were measured on the basis of the extent of change occurred in twelve selected dimensions of Dipshikha beneficiaries due to participation in Dipshikha activities. So situation before joining Dipshikha and situation after joining Dipshikha in twelve selected indicators were considered in both approaches. The selected

indicators were (1) annual income (2) expenditure for food and nutrition (3) expenditure for health, education and others (4) land assets (5) productive assets other than land (6) nonproductive assets (7) housing condition (8) drinking water sources (9) sanitation conditions (10) awareness on health (11) awareness on social Issues and (12) women empowerment. A rating scale was used for measuring the changes of the participants of Dipshikha between pre and post Dipshikha period. The score used for computing the changes of participation is given below:

The change in family annual income was measured by percentage of increased income in taka between pre and post Dipshikha period through different interventions by Dipshikha. Based on the change of annual income, the respondents were categorized into ‘extreme change’, ‘high change’, ‘moderate change’, ‘little change’ and ‘no change’ having more than 150%, above 100% to 150%, above 50% to 100%, up to 50% and 0 respectively and the change score were 4, 3, 2, 1 and 0 accordingly. The change score was computed as follows;

Level of Income	Score
No Change (Status quo)	0
Little change (income increased up 50%)	1
Moderate change (income increased above 50% to 100%)	2
High Change (income increased above 100% to 150%)	3
Extreme change (income increased above 150%)	4

3.6.1.2 Changes in Annual Expenditure for Food and Nutrition

The change in family annual expenditures for food and nutrition was measured by percentage of increased expenditures in taka between pre and post Dipshikha period annually. The change score was computed as follows;

Expenditure level of Food and nutrition	Score
No Change (Status quo)	0
Little change (expenditure increased up 25%)	1
Moderate change (expenditure increased 26% to 50%)	2
High Change (expenditure increased 51% to 75%)	3
Extreme change (expenditures increased above 75%)	4

3.6.1.3 Changes in Annual Expenditure for health, education and others

The non food items include education, treatment, dress and clothing, transport, investment and interest for bank loan etc. The change in family annual expenditures on non-food items was measured by percentage of increased expenditures in taka between pre and post Dipshikha period annually. The change score was computed as follows;

Expenditure level of health, education & others	Score
No Change (Status quo)	0
Little change (expenditure increased up 25%)	1
Moderate change (expenditure increased 26% to 50%)	2
High Change (expenditure increased 51% to 75%)	3
Extreme change (expenditures increased above 75%)	4

3.6.1.4 Changes in Land Assets

Amount of land holding is one of the important variables which indicating the status of households in the society. The change of amount of land assets in the family was measured by the increased amount of land in decimal between pre and post Dipshikha period. The change score was computed as follows;

Level of Land Assets	Score
No Change (Status quo)	0
Little change (land increased up 10 dm)	1
Moderate change (land increased 11 to 20 dm)	2
High Change (land increased 21 to 30 dm)	3
Extreme change (land increased above 30 dm)	4

3.6.1.5 Changes in Productive Assets other than Land

The productive assets referred to the means or property by which one can generate some income. The productive assets include poultry, trees, cattle, goat, power tiller, shallow machine, sewing machine and rickshaw van etc. It was measured by the total value of the assets which increased between pre and post Dipshikha period. The change score was computed as follows;

Level of Productive Assets other than Land	Score
No Change (Status quo)	0
Little change (value increased up to 25%)	1
Moderate change (value increased 26% to 50%)	2
High Change (value increased 51% to 75%)	3
Extreme change (value increased above 75%)	4

3.6.1.6 Changes in Non-Productive Assets

The Non-productive assets referred to non earning property of the family. The nonproductive assets include furniture, radio, cassette player, television, utensils, jewelry etc. It was measured by the total value of the assets which increased between pre and post Dipshikha period. The change score was computed as follows;

Level of Non-Productive Assets	Score
No Change (Status quo)	0
Little change (value increased up to 25%)	1
Moderate change (value increased 26% to 50%)	2
High Change (value increased 51 % to 75%)	3
Extreme change (value increased above 75%)	4

3.6.1.7 Changes in Housing Condition

The housing condition referred to the number of houses possessed by the family and the materials which is used for construction. The family has straw roof with bamboo fencing house (m_1) scored 1 point multiply by number of houses, Straw roof with mud wall (m_2) scored 2 points multiply by number of houses, tin roof with mud wall () scored 3 points multiply by number of houses, tin roof with tin wall (m_A) scored 4 points

multiply by number of houses and tin roof with brick wall () scored 5 points multiply by number of houses. The sum of total points was the scores of a particular family. It was expressed by the following formula;

$$S = w_1 + n_1m_1 + n_2m_2 + n_3m_3 + n_4m_4 + n_5m_5 \text{ Where,}$$

S= Total housing score of a particular family

M_i = Number of houses

w_i, m₁, m₂, m₃, m₄, m₅ = Points for different materials

The change of housing condition was measured by the increase of scores between pre and post Dipshikha period. The change score was computed as follows;

Level of Housing Condition	Score
No Change (Status quo)	0
Little change (score increased up to 2)	1
Moderate change (score increased 3 to 4)	2
High Change (score increased 5 to 6)	3
Extreme change (score increased above 6)	4

3.6.1.8 Changes in Drinking Water Source

Drinking water source referred to the means from where the family get water supply for drink. The family which had own tube well scored 5 point, use others tube well scored 4 points, use mud hole water scored 3 points, use pond water scored 2 points and use river water scored 1 point. The specific point was the score of a particular family. The changes of drinking water sources were measured by the increased scores between pre and post Dipshikha period. The change score was computed as follows;

Level of Drinking Water Source	Score
No Change (Status quo)	0
Little change (score increased up to 1)	1
Moderate change (score increased up to 2)	2
High Change (score increased up to 3)	3
Extreme change (score increased up to 4)	4

In order to reduce water born and contaminated diseases, the sanitation condition of a family plays an important role. The family used open toilet got 1 point. Thus the family used pacca latrine, ring/slab with fence, ring/slab without fence and pit latrine, got 5, 4, 3 and 2 points respectively. The specific point was the score of a particular family. The change in sanitation condition was measured by the increased of scores between pre and post Dipshikha period. The change score was computed as follows;

Level of Sanitation Condition	Score
No Change (Status quo)	0
Little change (score increased up to 1)	1
Moderate change (score increased up to 2)	2
High Change (score increased up to 3)	3
Extreme change (score increased up to 4)	4

3.6.1.10 Changes in Awareness on Health Issues

Awareness on health issues include eight different subject which is very related to daily life such as (1) washing hand before eating, (2) washing hand after defecation, (3) immunization, (4) preparation of oral saline, (5) washing vegetables before cutting, (6) using of iodize salt, (7) Nutrition for child and (8) Nutrition for pregnant mother. If the respondent knew the information about the specific subject, s/he got 1 point for each subject. So the score ranged from 0 to 8. The change in awareness on

health issues was measured by the increased scores between pre and post Dipshikha period. The change score was computed as follows;

Level of Awareness on Health Issues	Score
No Change (Status quo)	0
Little change (score increased up to 2)	1
Moderate change (score increased 3 to 4)	2
High Change (score increased 5 to 6)	3
Extreme change (score increased above 6)	4

3.6.1.11 Changes in Awareness on Social Issues

Awareness on social issues include five different subject which is very related to daily life such as (1) family laws, (2) laws against dowry, (3) laws against early marriage, (4) legal aid and (5)

schooling age. If the respondent knew the information about the specific subject, she got 1 point for each subject. So the score ranged from 0 to 5. The change in awareness on social issues was measured by the increased of scores between pre and post Dipshikha period. The change score was computed as follows;

Level of Awareness on Social Issues	Score
No Change (Status quo)	0
Little change (score increased up to 1)	1
Moderate change (score increased up to 2)	2
High Change (score increased up to 3)	3
Extreme change (score increased above 3)	4

3.6.1.12 Changes in Women Empowerment

Seven indicators were considered to measure women empowerment. The indicators were (1) ability to make small purchase, (2) participation in decision making, (3) freedom in family. (4) free from dominance by other family members, (5) participation in political activities, (6) increased social mobility and (7) involvement with IGA. If the respondent had practiced or involved in the process, she got 1 point for each indicator. So the score ranged from 0 to 7. The change in women empowerment was measured by the increased scores between pre and post Dipshikha period. The change score was computed as follows;

Level of Awareness on Social Issues	Score
No Change (Status quo)	0
Little change (score increased up to 1)	1
Moderate change (score increased 2 to 3)	2
High Change (score increased 4 to 5)	3
Extreme change (score increased above 5)	4

The changes occurred by the intervention of Dipshikha was determined by summing the changed scores for all the above mentioned 12 items. The possible range of the change scores was from 0 to 48, where zero (0) indicated “no change” and 48 indicated “high change”. For the convenience of calculation and description, the following models were used for assessment of effectiveness of group based approach and family development approach of Dipshikha towards poverty reduction

$$Y = Y_1 + Y_2 + Y_3 + Y_4 + Y_5 + Y_6 + Y_7 + Y_8 + Y_9 + Y_{10} + Y_{11} + Y_{12}$$

$$Z = Z_1 + Z_2 + Z_3 + Z_4 + Z_5 + Z_6 + Z_7 + Z_8 + Z_9 + Z_{10} + Z_{11} + Z_{12}$$

Where.

Y = Score of Effectiveness of Group Based Approach of

Dipshikha and Z = Score of Effectiveness of Family

Development Approach of Dipshikha For GBA-

$$F_i = \text{Change score of annual income}$$

Y_2 = Change score of expenditure for food and nutrition

Y_3 = Change Score of expenditure for health, education and others

Y_4 = Change score of land assets

Y_5 = Change score of productive assets other than land

Y_6 = Change score of non-productive assets

Y_7 - Change score of housing condition

F_8 = Change score of drinking water sources

Y_9 = Change score of sanitation condition

Y_w = Change score of awareness on health

Y_u - Change score of awareness on social issues and

Y_n = Change score of women empowerment

For FDA-

Z_1 = Change score of annual income Z_2 = Change

score of expenditure for food and nutrition Z_3 =

Change Score of expenditure for health, education

and others Z_4 = Change score of land assets Z_5 =

Change score of productive assets other than land Z_6

= Change score of non-productive assets Z_7 =

Change score of housing condition Z_8 = Change

score of drinking water sources Z_9 = Change score of

sanitation condition Z_{10} = Change score of awareness

on health Z_{11} = Change score of awareness on social

issues and Z_{12} = Change score of women

empowerment

3.6.2 Measurement of Poverty

There are different approaches such as, economic or non-economic to understand the extent of poverty and its other dimension. The economic approach measures poverty by income, expenditures or nutritional outcomes. The non-economic approach measures poverty through different dimensions like health care, housing, educational services, environment, employment opportunity, working condition, job security and freedom to choose job etc. In this study poverty, its depth and severity were measured through economic approach by using (i) Head count method (H), (ii) Poverty Gap method (PG) and (iii) squared poverty gap method (SPG). All three measures of poverty had been proposed by Foster, Greer and Thorbecke (1984). The three are not, however, alternative measures of poverty; they merely represent the three dimensions of poverty.

3.6.2.1 Head Count Poverty Measurement

The simplest and generally used method for estimating poverty is the head count (H) index. It is the proportion of the population who live in households with a per capita income or consumption less than poverty line (Gordon and Spicker, 1999). It can be shown by the following formula;

$$H = \frac{Q}{N}$$

Where,

Q = Population below the poverty

line N = Total number of

population

3.6.2.2 Poverty Gap

Poverty gap (PG) is the best measure, which is based on aggregate deficit of the poor relative to the poverty line that gives a good indication of the depth of poverty. Poverty gap denotes how far the poor households from the poverty line are and also how many are above or below the poverty line (Ullah and Routray, 2003). Poverty gap is expressed by the following

$$PG = \sum \frac{1}{n} \left(\frac{z - y_i}{z} \right) \text{ way;}$$

n = Total population Where,

size z = Poverty line

y_i - Per capita income of the households

3.6.2.3 Square Poverty Gap

To measure the severity of the poverty among the Dipshikha beneficiaries, the square poverty gap (SPG) index was used, which was proposed by Foster-Greer-Thorbecke (1984). It can be defined as the mean of the

squared proportionate poverty gaps. Thus SPG is simply,

In this study, the respondents were classified according to the results of SPG by using Foster-Greer-Thorbecke (FGT) method which is described below;

Extreme Poor: The households, whose per capita income were less than poverty

line and had value of SPG more than 0.

Poor: The households, whose per capita income slightly varied from

poverty line up or down and the value of SPG was 0.

Moderate Poor: The households, whose per capita income were above than poverty line and the value of SPG were more than 0 to 0.10.

Middle Class: the households, whose per capita income were above poverty line

and had value of SPG more than 0.10.

3.6.3 Measurement of Independent Variables for FDA and GBA

The selected characteristics of the respondent constituted independent variables of this study. The independent variables were operational zed as follows;

3.6.3.1 Involvement with Dipshikha

Involvement with Dipshikha was referred to how many years a respondent is associated with Dipshikha activities. It was measured by the period of time from her joining at Dipshikha to the time of interview and expressed in terms of years on the basis of record available in Dipshikha. A score of 1 was assigned for each year of her involvement with Dipshikha. It means, a respondent, who involved with Dipshikha for 5 years, her score for involvement with Dipshikha was 5.

3.6.3.2 Age

Age of a respondent was referred to the period of time from her birth to the time of interview. Age was measured in terms of years on the basis of

her response. A score of 1 was assigned for each year of her age. For example, a respondent of 23 years of age scored 23.

3.6.3.3 Education

Education was measured on the basis of respondents' years of schooling in the educational institute. A score of 1 was assigned for each completed year of schooling. If a respondent had 10 years of schooling, her education score was assigned 10. A respondent who did not attend in school was given the score 0 while, a score of 0.5 was given to a respondent who only could sign her name.

3.6.3.4 Family Size

The family size of a respondent was referred to the total number of individuals in her family including herself, her husband, children and other dependents who jointly live and eat together during interview time. It was measured by computing total number of members in the family. A score of 1 was assigned to each member of the family.

3.6.3.5 Farm size

Farm size of the beneficiaries was measured based on total land possessed by the respondent and it was expressed in hectare. The farm size of a respondent was calculated by using the following formula;

$$FS = L_1 + L_2 + L_3 + L_4$$

Where,

FS = Farm Size

L_1 = Homestead area owned by a

respondent L_2 = Cultivated area owned by

a respondent L_3 = Land taken from others

(leased)

L_4 = Pond and others owned by the respondent

3.6.3.6 Annual Income

Family income of a respondent woman was measured in Taka on the basis of her (as well as the members of the family) total yearly earnings from

different sources like cow rearing, goat rearing, poultry rearing, crops and vegetable cultivation, small business, grocery, rice business, wheat business, small trading, tailoring, rickshaw/van pulling and other sources. Income from a respondent and other members of her family were then added together to obtain her total family income.

3.6.3.7 Family Savings

Family savings was referred to the total money which is accumulated by the members of the family to carry out some activities either in a productive form or in a non-productive form to face the crisis. Savings of a respondent was measured in terms of Taka on the basis of her and other members of her family's total deposited in mud pot, Dipshikha or in any other bank or NGOs.

3.6.3.8 Group Cohesion

Group cohesion was referred to the consistency, harmony, unity and solidarity among the members of the group. Ten indicators were considered to measure group cohesion. The indicators were (1) resolved local problem through arbitration, (2) received legal aid from Dipshikha, (3) participating in raising voice for demand of Govt, resources, (4) protest dowry demand, (5) resolved household crisis, (6) action taken against human rights abuses, (7) resolved divorce attempt, (8) increase income, (9) credit installment paid by other members and (10) creation of employment. If the respondent had practiced or involved in the process, she got 1 point for each indicator. So the score ranged from 0 to 10.

3.6.3.9 Implementation of Family Development Plan

Family Development Plan is a five years development plan of a family under Dipshikha family development approach. It was measured by the degree of action taken against family development plan of the respondent's family. The implementation of family development plan were classified into 'very high implementation', 'high implementation', 'medium implementation', 'low implementation', 'very low implementation' and no implementation with assigned score 5, 4, 3, 2, 1, and 0 respectively.

3.6.3.10 Credit availability

Credit availability of a respondent woman was referred to the amount of money received by her/ other members of the family as loan from Dipshikha during last year under its specified terms and conditions. It was expressed in Taka.

Credit utilization was measured by the percent of the credit amount spent in the similar purpose which was proposed in credit application by the respondent. The process for computing the score against utilization of credit of a respondent woman is stated below:

- 0= 0% of the credit amount spent in the similar purpose as proposed.
- 1 = 1-25% of the credit amount spent in the similar purpose as proposed.
- 1 = 26-50% of the credit amount spent in the similar purpose as proposed.
- 3= 51-75% of the credit amount spent in the similar purpose as proposed.
- 4= 75 -95% of the credit amount spent in the similar purpose as proposed.
- 5= 100% of the credit amount spent in the similar purpose as proposed.

3.6.3.12 Repayment of credit

The repayment of credit was measured by the percent of number of installment repaid to Dipshikha within the stipulated time. If a member family repaid 100% number of installment within the set time period was referred to regular repayment and less than 100% was termed as irregular repayment. The member who failed to repay the credit money within the fixed period was termed as overdue credit. The scale for computing the score against repayment of credit of a respondent woman stated below:

- 0 = Over due credit
- 1 = Irregular repayment
- 2 = Regular repayment

3.6.3.13 Acceptance of Loan Received Condition

The loan received condition means the rules which were introduced by Dipshikha for its member family to get a credit or loan and the acceptance of loan received condition referred that how far these rules were accepted by the respondent. It was measured through the degree of perceived acceptance of each condition introduced by Dipshikha. A total six conditions were mentioned to get the opinion about the rules of Dipshikha credit. A four point scale have been used^[47] for measuring satisfaction level

of each respondent such as ‘Highly Accepted’, ‘Accepted’, ‘Not Accepted’, and ‘Not at all Accepted’ with the corresponding weight 3, 2, 1, and 0 respectively. So the score level could range from 0 to 18. The acceptance level of each condition was calculated by using Weighted Mean Index (WMI) with the following

$$WMI = \frac{(w_1f_1 + w_2f_2 + w_3f_3 + \dots + w_nf_n)}{(f_1 + f_2 + f_3 + \dots + f_n)} = \frac{\sum w_i f_i}{\sum f_i}$$

Where,

WMI= Weighted Mean Index

w, = assigned weight for the particular scale

f_t - Corresponding frequency of that class

3.6.3.14 Training Exposure

Training Exposure is referred to participation level in training by the respondent or any other member from the family participated in training offered by Dipshikha. The training exposure was measured by the total days of training received by the respondent and any other member from the family. The total days were measured by using following formula

$$TD = d_r + d_m$$

Where, TD = Total days of training received,

d_r — Days of training received by respondent and

d_m — Days of training received by other family member

3.6.3.15 Attitude towards Dipshikha

An attitude may be defined as predisposition to act towards an object in a certain manner. Attitude of a respondent towards Dipshikha was used to refer her feeling, belief and action tendency towards the various aspects of Dipshikha.

Likert-type attitude scale was used to determine the attitude towards Dipshikha. The variable was measured by constructing an attitude scale of ten statements (five positive and five negative). A statement was

considered positive if it possessed an idea favourable towards Dipshikha. On the other hand, a statement was considered negative if it was unfavorable towards Dipshikha. The respondents were asked to express their opinions in the form of “strongly agree”, ‘agree”, “agree to some extent”, “disagree” and “strongly disagree”. A score of 4 was given to “strongly agree”, 3 to ‘agree’ 2 to ‘agree to some extent’, 1 to ‘disagree’ and 0 to ‘strongly disagree’, if the statement was positive. A reverse scoring method was followed in case of statements considered negative. Attitude towards Dipshikha score of a respondent was determined by summing the scores obtained by her/him for all the items in the scale. The attitude scores of a respondent could range from 0 to 40, showing highest score for favourable attitude and lowest score for unfavorable attitude.

3.7 Data Analysis

Cross tabulation and bar chart were used for data presentation. With a view of describing data mean, standard deviation, percentage and frequency were applied to delve into various dimensions of poverty and Dipshikha interventions and impacts.

Paired sample T-test was applied to compare a range of indicators of well being of Dipshikha members between pre and post Dipshikha period for both approaches. An independent sample T-test was employed to compare the effectiveness on selected dimensions between group based approach and family development approach.

Step wise Multiple Regression analysis was employed to find out the contribution of selected variables to the extent of effectiveness of (i) group based approach and (ii) family development approach of Dipshikha towards poverty reduction.

CHAPTER IV

Findings and Discussion

Chapter IV has been designed to describe and discuss the findings of the study. In accordance with the objectives, the result and discussion are presented in three sections. In first section, the selected fourteen characteristics of the respondents of Dipshikha beneficiaries under group based approach and family development approach are discussed. The extent of effectiveness of Dipshikha (i) group based approach and (ii) family development approach on poverty reduction are presented in second section. The third section is divided into two sub-sections. In first sub-section, contributions of selected characteristics of Dipshikha respondents to the extent of effectiveness of GBA of Dipshikha towards poverty reduction are discussed. Contributions of the selected characteristics of the respondents of Dipshikha beneficiaries to the extent of effectiveness of FDA towards poverty reduction are presented in second sub-section.

4.1 Selected Characteristics of Dipshikha respondents

The purpose of this section is to understand the 14 selected characteristics of the respondents under both approaches. A brief summary of the measuring unit and basic statistics are presented in table 4.1.

S.I. No.	Name of categories	Measuring unit	Ranges			Mean		Standard deviation	
			Possible scores range	Observed scores range		GBA	FDA	GBA	FDA
				GBA	FDA				
1	Involvement with Dipshikha	No. of years	Unknown	3-8	2-5	6.61	3.49	0.85	0.78
2	Age	No. of years	Unknown	21-70	18-55	36.44	32.03	10.83	7.82
3	Education	Year of schooling	Unknown	0-10	0-9	2.16	1.28	2.97	1.96
4	Family size	Number of	Unknown	2-17	1-7	4.71	4.30	2.52	1.35
5	Farm size	Hectare	Unknown	.00-4.411	0-2.059	0.425	0.255	0.71	0.30
6	Annual income	Taka	Unknown	10100-371000	9700-153000	55593.90	40880.76	57421.43	23541.29
7	Savings	Taka	Unknown	0-12000	0-14000	1977.78	2298.52	1807.51	3058.50
8	Group cohesion	Scores	0-10	0-10	NA*	3.10	NA*	2.49	NA*
9	Implementation of family planning	Scores	0-5	NA*	0-5	NA*	3.44*	NA	1.57
10	Credit availability	Taka	Unknown	0-55000	600-28000	4885	5276.66	5632.63	4260.11
11	Credit utilization	Scores	0-5	0-5	0-5	2.11	4.62	2.30	0.86
12	Credit repayment	Scores	0-2	0-2	1-2	0.92	1.85	0.97	0.35
13	Acceptance of loan received	Scores	0-18	5-15	6-17	9.47	10.63	2.00	2.43
14	Training exposure	Number of days	Unknown	0-35	4-16	4.66	6.67	7.03	2.57
15	Attitude towards Dipshikha	Scores	0-40	15-40	19-39	30.66	30.77	5.46	5.36

Note: * NA - Not Applicable

4.1.1 Involvement with Dipshikha

Involvement with Dipshikha is one of the central ways to gather knowledge, information and experiences in order to reduce poverty. The involvement with Dipshikha of the respondents ranged from 2 to 5 years and 3 to 8 years for FDA and GBA respectively. The average involvement with Dipshikha was 3.49 years with a standard deviation of 0.78 in FDA and the average was 6.61 years with a standard deviation of 0.85 in GBA.

On the basis of involvement with Dipshikha, the respondents were classified into three categories as shown in Table 4.2.

Table 4.2 Distribution of Respondents According to their Involvement with

Categories according to involvement with Dipshikha	Family Development Approach		Group Based Approach	
	Frequency (/)	%	Frequency (/)	%
Low involvement (up to 3 years)	42	42%	1	1%
Medium involvement (>3 to	58	58%	10	10%
High involvement (> 5 years)	0	0%	89	89%
Total	100	100%	100	100%
Mean	3.49		6.61	
Standard deviation	0.78		0.85	

Data presented in table 4.2 showed that the largest proportion i.e. 58 percent of the respondents under FDA had medium involvement with Dipshikha while, 42 percent of the respondent had low involvement. On the other hand, about nine tenth (89 percent) of the respondents had high involvement under GBA with Dipshikha, where as very negligible proportion (11 percent) of the respondents had low to medium involvements. As the FDA was a new intervention, the involvement with Dipshikha of the respondent was limited to medium and short duration in it. On the other hand, as the GBA is an old intervention almost all the respondents belonged to high involvement category. However, it is, therefore, revealed that time has not come yet to comment which approach would be liked by the respondents.

4.1.2 Age

The age of the respondents ranged from 18 to 55 years with a mean of 32.03 years and the standard deviation of 7.83 in FDA while, the age ranged from 21 to 70 years with an average 36.44 years and the standard deviation of 10.83 in GBA. On the basis of age, the respondents were classified into three categories as shown in table 4.3

Categories according to age	Family Development Approach		Group Based Approach	
	Frequency (/)	%	Frequency (/)	%
Young Aged Group (18 to 35)	77	77%	64	64%
Middle Aged Group (> 35 to 50)	21	21%	25	25%
Old Aged Group (> 50 Years)	2	2%	11	11%
Total	100	100%	100	100%
Mean	32.03		36.44	
Standard deviation	7.83		10.83	

The table 4.3 revealed that in both FDA and GBA the highest proportion i.e. 77 percent and 64 percent of the respondents were young respectively compared to other categories. Less than one forth of the respondents fell in middle aged (21 percent) and old aged (2 percent) categories under FDA compared to one third under GBA. It could be concluded that comparatively young families were involved with Dipshikha intervention. In fact, the young needs to explore income generation avenues to build up their economic and social lives. To speak the truth, Dipshikha provides training, education and loan to encourage them involve in income generation activities.

4.1.3 Education

Level of education is an important indicator of individual's quality of life. The education level of the respondents ranged from 0 to 9 and 0 to 10 for FDA and GBA respectively. The average education level was 1.28 with a standard deviation of 1.96 in FDA and it was 2.16 with a standard deviation of 2.97 in GBA. On the basis of level of education, the respondents were classified into four categories as shown in Table 4.4

Categories	Family Development Approach		Group Based Approach	
	Frequency (/)	%	Frequency (/)	%
Illiterate (0)	6	6%	2	2%
Can Sign only (0.5)	77	77%	70	70%
Primary level (1-5)	13	13%	13	13%
Secondary level (6-10)	4	4%	15	15%
Total	100	100%	100	100%
Mean	1.28		2.16	
SD	1.96		2.97	

Out of total respondents of FDA of Dipshikha, 6 percent were illiterate. The largest proportion (77 percent) could sign their name and address only while, 13 percent had primary level of education and only 4 percent completed secondary level of education. On the other hand, only 2 percent of the total respondents of GBA were illiterate. The highest number of respondents (70 percent) could sign their name, 13 percent of the J respondents had primary level of education while, only 15 percent had secondary level of education. From the table 4.4, it was revealed that on an average in both the respondent groups about three fourth of the respondents were almost illiterate while about one third were literate ranged from primary to secondary level. Conclusion could be drawn that Dipshikha made its member-society with the people who had no education, no economic support and had no social status. The respondents who could sign only, it is the contribution of Dipshikha's literacy programme. With the time passes it is expected that in future Dipshikha -member society would be highly literate society.

4.1.4 Family Size

The number of members of the family of the respondents ranged from 1 to 7 with an average 4.30 and a standard deviation of 1.35 in FDA. The number of family members ranged from 2 to 17 with an average 4.71 and standard deviation of 2.52 in GBA. Based on the family size, the respondents of both

the approaches were classified into three categories small, medium and large family as shown in table 4.5.

Table 4.5 Distribution of Respondents according to their Family Size

Categories	Family Development Approach		Group Based Approach	
	Frequency (f)	%	Frequency (f)	%
Small Family (up to 4)	56	56%	53	53%
Medium family (5-6)	40	40%	35	35%
Large Family (>6)	4	4%	12	12%
Total	100	100%	100	100%
Mean	4.30		4.71	
SD	1.35		2.52	

Data contained in table 4.5 indicate that majority (56 percent and 53 percent) of the respondents in both the approaches fell under small family category. Forty percent and 35 percent had medium family size under FDA and GBA respectively. The lowest proportion 4 percent in FDA and 12 percent in GBA had large family. During the collection of data, it was observed that respondents having more than 4 family members felt timid which, indicates the awareness level on keeping small family increased among the members due to intervention of Dipshikha activities. Dipshikha intervention considered to be the key factor to keep the Dipshikha-member family small.

4.1.5 Farm Size

The farm size of the respondents ranged from 0 to 2.0598 hectares and 0 to 4.4110 hectares for FDA and GBA respectively. The average farm size was 0.25 hectare with a standard deviation of 0.30 for FDA and the average was 0.42 hectare for GBA with a standard deviation of 0.71. On the basis of farm size, the respondents were classified into five categories as shown in table 4.6.

Table 4.6 Distribution of Respondents According to their Farm size

Categories	Family Development Approach		Group Based Approach	
	Frequency (/)	%	Frequency (/)	%
Landless (up to 0.02 hec)	10	10%	32	32%
Marginal (>0.02 - 0.2 hec)	48	48%	19	19%
Small (>0.2-1 hec)	39	39%	36	36%
Medium (>1 -3 hec)	3	3%	11	11%
Large (>3 hec)	0	0%	2	2%
Total	100	100%	100	100%
Mean	0.25		0.42	
SD	0.30		0.71	

Data contained in table 4.6 show that almost all the respondents of FDA belonged to marginal (48 percent) and small (39 percent) category while, one tenth of the respondents were landless. Only 3 percent of the respondents had medium farm size. It was amazing that nobody of FDA belonged to large farm size category. In GBA, 36 percent of the respondents had small farm size followed by 32 percent, 19 percent and 11 percent for landless, marginal and medium farm size respectively. Only 2 percent of the respondents under GBA had large farm size. The majority proportion of the respondents under both approaches fell below small category which indicates that Dipshikha is working with the resource poor people of the rural area.

4.1.6 Annual Income

Annual income ranged from Tk. 9,700.00 to Tk. 153,000.00 with an average of Tk.

40,880.76 and a standard deviation of 23541.29 in FDA. On the other hand, annual income of the respondents of GBA ranged from Tk. 10,100.00 to Tk.

192,000.00 with an average of Tk. 50,166.80 and a standard deviation of 36,368.77 which indicates a high variation among the respondent families in respect of annual income. The respondents were classified into five categories on the basis of their annual income.

Table 4.7 Distribution of Respondents According to their Annual Income

Categories	Family Development Approach		Group Based Approach	
	Frequency (/)	%	Frequency (/)	%
Very Poor (up to Tk. 35,000)	52	52%	43	43%
Poor (> Tk. 35000 to Tk. 45000)	18	18%	12	12%
Moderate Poor (>Tk. 45000 toTk. 55000)	6	6%	12	12%
Middle class (>Tk. 55000 to Tk. 100,000)	24	24%	33	33%
Total	100	100%	100	100%
Mean	40880.76		50166.80	
SD	23541.29		36368.77	

The table 4.7 revealed that more than one half of the respondents under FDA were very poor and a little less than one fourth fell under middle class category. The rest were distributed to the category of poor by 18 percent and moderate poor by 6 percent. On the other hand, more than four tenth of the respondents were very poor under GBA followed by 12 percent, 12 percent and 33 percent were poor, moderate poor and middle class respectively. The data showed that 52 percent of the respondents from FDA and 43 percent from GBA still are very poor. The data also revealed that Dipshikha is working with the poorest of the poor families.

4.1.7 Savings

The savings accumulation of the respondents ranged from Tk. 0 to Tk. 14,000 and Tk. 0 to Tk. 12,000 for FDA and GBA respectively. The average savings accumulation was Tk. 2,298.52 with a standard deviation 3058.50 for FDA and with GBA the mean and standard deviation were Tk. 1,977.78 and 1807.51 respectively. On the basis of savings accumulation, the respondents were classified into four categories as shown in table 4.8.

Table 4.8 Distribution of Respondents According to their Savings Accumulation

Categories	Family Development Approach		Group Based Approach	
	Frequency (/)	%	Frequency (/)	%
No Saving (0)	4	4%	6	6%
Small Savings (>0-4,000 Tk.)	79	79%	85	85%
Medium Saving (>4,000 - 8,000)	11	11%	8	8%
Large Savings (> Tk. 8000)	6	6%	1	1%
Total	100	100%	100	100%
Mean	2,298.52		1,977.78	
SD	3,058.50		1,807.51	

Data contained in table 4.8 indicate that almost all the respondents of both FDA and GBA had savings ranged from small to large savings. A negligible proportion of the respondents in both the cases had no savings. About four fifth of the respondents of FDA and more than four fifth respondents of GBA had small savings up to Tk. 4,000.00. However, it was encouraging that 17 percent respondents of FDA and 9 percent respondents of GBA had savings ranged from medium to large an amount of above Tk. 4,000.00 to Tk. 8,000.00 and more than Tk. 8,000.00 respectively. Normally the poor people live hand to mouth. They had no savings tendency. But with the blessing of Dipshikha intervention Dipshikha society members have learned to save

from their earning to some extent for future use. The table 4.8 revealed that the respondents of FDA accumulated more savings compared to the respondents of GBA although the respondents of GBA had longer time of involvement with Dipshikha (table 4.2). During the collection of data, it was observed that the respondents of GBA saved Tk. 5.00 per week while, the beneficiaries under FDA saved money as per their investment and long term savings plan which created scope to accumulate more savings for the members of FDA.

4.1.8 Group Cohesion

The score of group cohesion of the respondents ranged from 0 to 10 with an average of

3.10 and a standard deviation of 2.49. Based on group cohesion the respondents were classified into three categories as shown in table 4.9.

Categories	Group Based Approach	
	Frequency (/)	%
Low Cohesion (0-3)	61	61%
Medium Cohesion (4 to 6)	27	27%
High Cohesion (>6)	12	12%
Total	100	100%
Mean	3.10	
SD	2.49	

Data contained in the table 4.9 show that largest proportion (61 percent) of the I respondents had low cohesion, while a little more than one third had medium (27 Percent) to high (12 percent) group cohesion. Indeed the overall group cohesion is poor. However, the respondents might not understand the role of group cohesion in the society. It has multi-dimensional benefit such as (i) unity, (ii) psychological shelter, (iii) empathy, (iv) humility etc. it was the responsibility of Dipshikha to create group cohesion among the members by adopting different techniques and methods. But Dipshikha failed to establish cohesiveness among the respondents in this regard. It was observed during the collection of data that most of the respondents did not attend in group meetings as they are defaulter or irregular in repayment of credit.

4.1.9 Implementation of Family development plan

The scores of implementation of family development plan of the

respondents under FDA ranged from 0 to 5. The average was being 3.44 with a standard deviation 1.57. The respondents were classified into three categories on the basis of their degree of implementation of family development plan.

Family Development Plan

Categories	Family Development Approach	
	Frequency (/)	%
Low Implementation (up to 1)	15	15%
Medium Implementation (2 to 3)	29	29%
High Implementation (4 to 5)	56	56%
Total	100	100%
Mean	3.44	
SD	1.57	

Data presented in table 4.10 pointed that overwhelming majority (85 percent) the respondents belonged to medium (29 percent) to high (56 percent) implementation category of family development plan. Only 15 percent of the respondents had low implementation. The data indicated that the beneficiaries of Dipshikha under family development approach highly accepted family plan as a development tool. Due to the proper monitoring, guide and follow up by the staff of Dipshikha and proper understanding on family development plan led them to implement family development plan.

4.1.10 Credit Availability

The credit availability of the respondents ranged from Tk. 600.00 to Tk. 28,000.00 and Tk. 0 to Tk. 55,000.00, the average being Tk. 5,276.66 and Tk. 4,885.00 with a standard deviation 4,261.11 and 5632.63 for FDA and GBA respectively. Based on credit availability, the respondents were classified into three categories as shown in table 4.6.

Table 4.11 Distribution of Respondents According to their Credit Availability

Categories	Family Development Approach		Group Based Approach	
	Frequency (/)	%	Frequency (/)	%
Small Credit (Up to Tk. 4000)	47	47%	58	58%
Medium Credit (> Tk. 4000 - Tk. 8000)	40	40%	34	34%
Large Credit (> Tk. 8000)	13	13%	8	8%
Total	100	100%		
Mean	5276.66		4885.00	
SD	4260.11		5632.63	

Computed data show that majority of the respondents of FDA were medium (40 percent) to large (13 percent) credit holders. However, almost equal proportion (47 percent) belonged to small credit holder. On the other hand, in GBA, the picture was near to vice versa i.e. 58 percent of the respondents belonged to the small credit category and the rests fell into medium (34 percent) and large (8 percent) credit category. The data pointed that the respondents from FDA had more available credit compared to the respondents of GBA, as majority of the respondents under FDA belonged to medium and large categories. The high standard deviation in GBA indicated that the credit was not equally available for all the respondents. The credit repayment condition, regular credit repayment, accumulation of savings, proper implementation of family development plan and support from staff of Dipshikha made credit more available for the respondents of FDA. On the other hand, the weekly credit repayment system, non repayment of credit and non-utilization of credit in productive purpose made credit non- available to the indents of GBA.

4.1.11 Utilization of Credit

The utilization of credit by the respondents ranged from 0 to 5, the average being 4.62 and a standard deviation 0.86 in case of FDA. In case of GBA it ranged from 0 to 5, the average being 2.11 and a standard deviation 2.30.

Based on utilization of credit, the indents of both the approaches were

classified into four categories as shown in table

4.12

Table 4.12 Distribution of Respondents According to their Degree of Credit Utilization

Categories	Family Development Approach		Group Based Approach	
	Frequency (/)	%	Frequency (/)	%
No Utilization (0)	1	1%	51	51%
Low Utilization (1-2)	1	1%	7	7%
Medium Utilization (3-4)	18	18%	9	9%
High Utilization (5-6)	80	80%	33	33%
Total	100	100%	100	100%
Mean	4.62		2.11	
SD	0.86		2.30	

The data contained in table 4.12 revealed that the highest proportion i.e. 80 percent of the respondents of FDA had utilized their credit in productive purpose while, only 1 percent experienced no utilization or low utilization of the credit. On the other hand, there was a reverse situation in GBA. The majority 51 percent respondents from GBA did not utilize their credit in productive purpose while, only 33 percent belonged to high utilization category. Distribution of materials as credit, project preparation for credit approval, involvement of other family members and monitoring and guide from the staff of Dipshikha led the respondent families to utilize credit in proper way in FDA. Cash distribution, lack of proper monitoring, hand over credit to spouse and low group cohesion made the respondents of GBA to not utilize credit in productive purpose.

4.1.12 Credit Repayment

The credit repayment scores of the respondents ranged from 1 to 2 and 0 to 2 for FDA and GBA respectively. The average credit repayment score was 1.85 with a standard deviation of 0.35 for FDA and the average was 0.92 for GBA with a standard deviation of 0.97. On the basis of credit repayment, the respondents were classified into three categories as shown in table 4.13.

Table 4.13 Distribution of Respondents According to their Credit Repayment Condition

Categories	Family Development Approach		Group Based Approach	
	Frequency (f)	%	Frequency (f)	%
Defaulter (0)	0	0%	51	51%
Irregular (1)	15	15%	6	6%
Regular (2)	85	85%	43	43%
Total	100	100%	100	100%
Mean	1.85		0.92	
SD	0.35		0.97	

The data presented in table 4.13 indicated that overwhelming majority of the respondents (85 percent) of FDA repaid their credit regularly while, only 15

percent were irregular but none of them were defaulter in FDA. On the other hand about one half (51 percent)

of the respondents of GBA were found defaulter and 43 percent were regular in credit repayment. Only 6 percent of the respondents were irregular in credit repayment. The condition of loan received, non utilization of credit in proper way, lack of group cohesion, absence of peer and organizational pressure and dependency on spouse made the respondents defaulter in GBA. On the other hand, monthly or seasonal installment, proper utilization of credit, involvement of other family members in development process and implementation of family development plan led the respondents to repay their credit regularly in FDA.

4.1.13 **Acceptance of Loan Received Condition**

The acceptance of loan received condition score ranged from 6 to 17 and 5 to 15, their average being 10.63 and 9.47 with standard deviation 2.43 and 2.00 for FDA and GBA respectively. The respondents were classified into three categories on the basis of their acceptance of loan received condition.

Table 4.14 Distribution of Respondents According to their Acceptance of Loan Received Condition

Categories	Family Development Approach		Group Based Approach	
	Frequency (/)	%	Frequency (/)	%
Low Acceptance (up to 6)	7	7%	6	6%
Medium Acceptance (7-12)	73	73%	86	86%
High Acceptance (>12)	20	20%	8	8%
Total	100	100%	100	100%
Mean	10.63		9.47	
SD	2.43		2.00	

The data presented in table 4.14 revealed that majority i.e. 73 percent (FDA) and 86 percent (GBA) of the respondents belonged to medium acceptance category. One fifth respondents of FDA and less than one tenth respondents of GBA opined the high acceptance of loan conditions. Very negligible

number of respondents opined low acceptance of loan condition. However, it is revealed from the analysis that the loan condition should be reviewed in GBA.

The data indicate that the loan received conditions of family development approach were highly accepted compared to the conditions of GBA. It means, the respondents like to share their savings for income generation activities, they want to repay their credit in monthly or seasonal basis, they preferred materials or inputs as credit rather than cash.

4.1.14 Training Exposure

The training exposure score ranged from 4 to 16 with an average 6.67 and standard deviation 2.57 in FDA. The training exposure ranged from 0 to 35 in GBA with an average 4.66 and standard deviation 7.03. Based on training exposure, the respondents of both the approaches were classified into five categories as shown in table 4.12

able 4.15 Distribution of Respondents According to their Training Exposure

Categories	Family Development Approach		Group Based Approach	
	Frequency (/)	%	Frequency (/)	%
No Training (0)	0	0%	37	37%
Very Low Training (1-6)	57	57%	40	40%
Low Training (7-12)	39	39%	14	14%
Medium Training (13-18)	4	4%	5	5%
High Training (>18)	0	0%	4	4%
Total	100	100%	100	100%
Mean	6.67		4.66	
SD	2.57		7.03	

Computed data in table 4.15 show that 57 percent of the respondents of FDA received very low training compared to 39 percent low and 4 percent medium training category. None of them received high training or received no trainings. In GBA, 40 percent of the respondents had very low training followed by 37 percent had no training. The remaining 23 percent received low training (14 percent) and medium training (5 percent) and high training (4 percent). The data indicates that the respondents under FDA had more training exposure compared to the respondents under GBA due to the arrangement of family development

workshops by Dipshikha.

The scores against attitude towards Dipshikha ranged from 19 to 39 for FDA and 15 to 40 for GBA, the average being 30.77 and 30.66 with standard deviation 5.36 and 5.46 respectively. The respondents of both the approaches were classified into three categories on the basis of their attitude towards Dipshikha as shown in table 4.16.

Dipshikha
Table 4.16 Distribution of Respondents According to their Attitude towards

Categories	Family Development Approach		Group Based Approach	
	Frequency (/)	%	Frequency (/) '	%
Medium Attitude (14 to27)	26	26%	25	25%
High Attitude (28to 40)	74%	74%	75	75%
Total	100	100%	100	100%
Mean	30.77		30.66	
SD	5.36		5.46	

The data computed in table 4.16 pointed out that none of the respondents from both approaches had low attitude towards Dipshikha. It also shows that the largest proportion of the respondents from FDA and GBA had high attitude with almost equal value. Similarly the respondents of both the approaches with equal proportion (26 percent and 25 percent) opined medium attitude towards Dipshikha. It was observed during the collection of data that the respondents from GBA had highly satisfied with Dipshikha due to less pressure for credit repayment as well as for the behavior of the staff. Conversely, the respondents of FDA were highly satisfied due to new loan condition, integrated approach, family development plan and behavior of staff as well.

4.2 Extent of effectiveness of Dipshikha (i) Group based Approach and (ii) Family Development Approach towards Poverty Reduction

Participation in Dipshikha activities under GBA or FDA by the respondent families had played a very important role in changing their socio-economic status towards poverty reduction. For measuring the extent of effectiveness of Dipshikha (i) group based approach and (ii) family development approach towards poverty reduction of the respondent families, the socio-economic status of the beneficiaries prior to joining Dipshikha activities were compared to the present conditions in relation with annual income, expenditure for

food and nutrition, expenditure for health, education and others, land assets, productive assets other than land, non-productive assets, housing condition, drinking water sources, sanitation conditions, awareness on health, awareness on social issues and women empowerment in both the approaches.

4.2.1 Changes in Annual Income

The findings indicated that the income of the respondents under both the approaches increased in post Dipshikha period compared to pre-Dipshikha period. Increase of income ranged from 2.70 percent to 400 percent in FDA and from 0 to 279.47 percent in GBA. On the basis of their income level the respondents were classified into four categories.

Table 4.17 Distribution of Respondent Families in Different Annual Income Groups between Pre and Post Dipshikha Period under FDA and GBA

Categories	Family Development Approach				Group Based Approach			
	Pre-Dipshikha Period		Post Dipshikha Period		Pre-Dipshikha Period		Post Dipshikha Period	
	(/)	%	(/)	%	(/)	%	(/)	%
Very Poor (up to Tk. 35,000)	97	97%	52	52%	75	75%	43	43%
Poor (>Tk. 35000 to Tk. 45,000)	2	2%	18	18%	7	7%	12	12%
Moderate Poor (> Tk. 45000 toTk. 55000)	1	1%	6	6%	5	5%	12	12%
Middle class (>Tk. 55000)	0	0%	24	24%	13	13%	33	33%
AH Classes	100	100%	100	100%	100	100%	100	100%
Mean	20,74	14.20	41,028.56		408*	10.76	50166.80	
SD	7,288.22		23,512.50		23541.29		36368.77	
Significance	P<0.001				P<0.001			

The hierarchical economic status of FDA and GBA respondents were ranged from very poor to middle class. In both the cases hierarchical position changed after involvement with Dipshikha. Data presented in the table 4.17 showed that the very poor people gained status of poor, moderate poor and middle class by 16 percent, 5 percent and 24 percent respectively in FDA and it was 5 percent, 7 percent and 20 percent in GBA.

The mean annual income after the involvement with Dipshikha was increased about 97 percent in FDA while it was increased only about 23 percent in GBA.

The pair t-test clearly indicated that the annual income of the respondent families increased significantly between pre and post Dipshikha period in both the approaches ($P < 0.000$) (Table 4.17). It means the interventions of Dipshikha under both approaches had created significant difference on annual income between pre and post Dipshikha period. On the basis of changes in income, the beneficiaries were classified into five categories as shown in Table 4.18.

Table 4.18 Salient Features on the Effectiveness of FDA and GBA of Dipshikha on Income

Dimension of Effectiveness	Categories	Family Development Approach		Group Based Approach	
		Frequency (/) '	%	Frequency (/) '	%
Changes in Income (Tk)	No Changes (status quo)	0	0%	3	3%
	Little Change (Increased up to 50%)	34	34%	37	37%
	Moderate Change (Increased >50% to 100%)	26	26%	35	35%
	High Change (Increased > 100% to 150%)	19	19%	14	14%
	Extreme Change (Increased >150%)	21	21%	11	11%
	Total	100	100%	100	100%
	Mean	97.46		79.421	
	SD	85.99		62.03	
	Significance	P = D.090			

The data in Table 4.18 revealed that the maximum 34 percent respondents under FDA had ‘Little Change’ in their annual income between pre and post Dipshikha period where as minimum 19 percent had ‘high change’. About 21 percent and 26 percent of the respondents fell under ‘extreme change’ and ‘moderate change’ respectively. None of them fell under ‘no change’ category in FDA. The mean income change was 97.46 percent with a standard deviation of 85.99 showed that a moderate change occurred after involvement with Dipshikha. Implementation of family development plan, savings, credit available from Dipshikha, intervention of agricultural technologies and utilization of resources made the changes in annual income of the respondents under FDA.

The maximum 37 percent of the respondents under GBA fell into category ‘Little Change’ followed by 35 percent, 14 percent, 11 percent and 3 percent in ‘Moderate Change’, ‘High Change’, ‘Extreme Change’ and ‘No Change’ categories respectively. The mean annual income change was 79.42 percent with a standard deviation of 62.03 in GBA which indicated that a moderate changes occurred between pre and post Dipshikha period. Utilization of possessed land, savings of the family, attitude towards Dipshikha and utilization of credit had created the

changes in annual income of the respondents under GBA.

An independent sample t- test was run to compare the difference between the changes of annual income of the respondents under FDA and GBA. As the P value is higher than 0.05, there was no significant difference between changes of annual income of FDA and GBA (Table 4.18). So, the researcher concluded that there was no difference between the effectiveness of FDA and the effectiveness of GBA on changes in annual income of the respondents.

4.2.1.1 Beneficiaries According to the Poverty Line by Income

Through raising income of the beneficiaries, Dipshikha intended to reduce the number of people below poverty line. The respondents under FDA and GBA were categorized on the basis of their annual per capita income by using the Foster Greer Thornbacks (FGT) index. Poverty line (z) was taken as the upper poverty line of Rajshahi Division Tk.

9,197.76 (BSS, 2005), population (N) as the total respondents under each approach and “x” as the average annual per capita income. Clearly, as the income exceeds poverty line, the value of $(1 - z/x)$ became negative. The squared poverty gap (SPG) has been computed for getting an idea of intensity of poverty or how significant was the income with respect to the poverty line (Appendix-B).

The per capita income of the respondent under FDA ranged from Tk. 1,667.67 to Tk.

15,450.0 in Pre Dipshikha period and Tk. 2,583.33 to Tk. 38,250.00 in Post Dipshikha period. The average per capita income was Tk. 5,233.50 with a standard deviation of

2,378.14 and the average was Tk. 10,211.33 with a standard deviation of 7,335.41 in Pre

and Post Dipshikha period respectively. On the other hand, in GBA, the per capita income ranged

from Tk. 1,720.00 to Tk. 20,000.00 and the average was Tk. 6,687.23 with a standard deviation of

4,029.43 in pre Dipshikha period while, the per capita income ranged from Tk. 2,000.00 to Tk.

37,120.00 and the average was Tk. 11,424.11 with a standard deviation of 7335.41 in post

Dipshikha period. The respondents were classified into four categories on the basis of their square

poverty gap as shown in table 4.19;

Table 4.19 Distribution of Respondent Families on the basis of Square Poverty Gap [between Pre and Post Dipshikha Period under FDA and GBA

Category	Family Development Approach				Group Based Approach			
	Pre Dipshikha period		Post Dipshikha period		Pre Dipshikha period		Post Dipshikha period	
	(/)	%	(/)	%	(/)	%	(/)	%
Extreme Poor (Tk. 1,666.67-8,500)	88	88%	51	51%	75	75%	43	43%
Poor (Tk. 8,585.71 -9,800)	6	6%	8	8%	6	6%	11	11%
Moderate Poor (Tk. 9,866.67 - 12,166.67)	4	4%	16	16%	7	7%	12	12%
Middle Class (Tk. 12,250-38,250)	2	2%	25	25%	12	12%	34	34%
Total	100	100%	100	100%	100	100%	100	100%
Mean	5233.50		10211.33		665	17.23	114	24.11
SD	2378.14		6426.75		4029.43		7335.41	
Significant	P<C1.000				P <0.000			

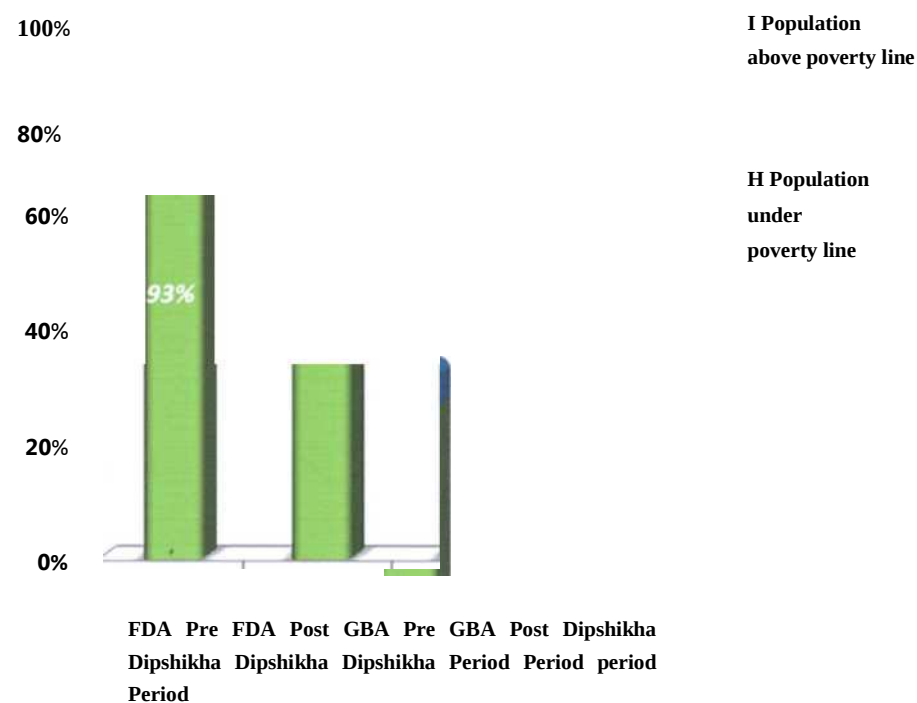
The data presented in table 4.19 indicated that during Pre Dipshikha period 88 percent of the respondents lived in extreme poor category. During the same time 6 percent, 4 percent and 2 percent of the respondents possessed hierarchical economic status of poor, moderate poor and middle class respectively under FDA. However, during post Dipshikha period extreme poor was reduced by 37 percent and the numbers were increased in every hierarchical economic status such as poor increased from 6 percent to

8 percent, moderate poor from 4 percent to 16 percent and middle class from 2 percent to 25 percent. Similarly in GBA, 75 percent of the respondents lived in extreme poor category during pre- Dipshikha period which was reduced by 32 percent during post Dipshikha period. The numbers of respondent were increased in every hierarchical economic status such as poor increased by 5 percent, moderate poor by 5 percent and middle class by 22 percent.

A paired t- test was employed to test the difference on per capita income between pre and post Dipshikha period. The result showed that as the P value is less than 0.05, there was a significant difference on per capita income at 95% confident level between pre and post Dipshikha period. From the table the researcher concluded that poverty level of the respondents under both the approaches were reduced significantly in post Dipshikha period by the intervention of Dipshikha activities.

The Head Count method of poverty measurement also showed that the poverty level was reduced significantly between pre and post Dipshikha period under both the approaches (Figure 4.1). Evidently, under FDA, 93 percent of the respondents were under upper poverty line in pre Dipshikha period which was reduced by 39 percent during post Dipshikha period. On the other hand, in GBA 77 percent respondents were lived under poverty line in pre Dipshikha period which was reduced by 31 percent during post Dipshikha period. The data showed that some middle class families were selected as beneficiaries of Dipshikha under GBA while, almost 100 percent families were selected as beneficiaries of Dipshikha from the poorest of poor section of the society under FDA.

Figure 4.1 Distribution of Families on the basis of their Poverty Level between Pre and Post Dipshikha period under FDA and GBA.



The Figure 4.1 revealed that in post Dipshikha period 54 percent and 46 percent of the respondents still remain under poverty level in FDA and GBA respectively which are just about equal to the estimate for rural areas of Rajshahi Division as 52.3 percent (BBS, 2005).

4.2.2 Changes in Expenditure on Food and Nutrition

The expenditures on Food and Nutrition ranged from Tk. 5,928.00 to Tk. 32,448.00 in pre Dipshikha period and Tk. 7,384.00 to Tk. 50,804.00 in Post Dipshikha period under FDA. The expenditures on food and nutrition ranged from Tk. 6,305.00 to Tk. 88,400.00 in pre Dipshikha period while, the range was Tk. 8,330.00 to Tk. 115,440.00 in post Dipshikha period under GBA. The average expenditure was Tk. 23,310.20 with a standard deviation of 8,922.79 in post Dipshikha period while, the average was Tk.

14,903.83 with a standard deviation of 4947.23 in pre Dipshikha period under FDA. The average expenditure in post Dipshikha period was Tk. 28,503.14 with a standard deviation of 17806.82 and in pre Dipshikha period the average was Tk. 18,026.28 with a standard deviation of 11826.10 under GBA. The respondents were classified into three categories on the basis of their expenditures on food and nutrition.

Table 4.20 Distribution of Respondent Families in Different Expenditure Groups on Food and Nutrition between Pre and Post Dipshikha Period under FDA and GBA

Categories	<u>Family Development Approach</u>				<u>Group Based Approach</u>			
	<u>Pre-Dipshikha Period</u>		<u>Post Dipshikha Period</u>		<u>Pre-Dipshikha Period</u>		<u>Post Dipshikha Period</u>	
	(/)	O/ o	(/)	%	(/)	%	(/)	%
s	60	60%	17	17%	49	49%	21	21%
Expenditure to Tkum	39	39%	61	61%	40	40%	46	46%
Expenditure to 15000								
Expenditure to 30000		1%	22	22%	11	1%	33	33%
Expenditure >ATC classes	100	100%	100	100%	100	100%	100	100%
30000 can	14,903.83		23,310.20		18026.28		28503.14	
SD	4947.23		8922.79		11826.10		17806.82	
<u>Significance</u>	P<0.000				P<0.000			

The data presented in Table 4.20 clearly showed that the expenditures on food and nutrition increased in Post Dipshikha period compared to pre Dipshikha period under both the approaches. A paired t- test was employed to compare the differences between pre and post Dipshikha period on the expenditures of food and nutrition. The findings showed that there was a significant difference on expenditures of food and nutrition between before involvement with Dipshikha and after involvement with Dipshikha at 95% confidence level in both approaches (P< 0.000) (Table 4.20). Increase of annual income, increase of awareness on health and nutrition issues made the changes in expenditures on food and nutrition after involvement with Dipshikha.

The increase of expenditures on food and nutrition ranged from 2.37 percent to 290.80 percent in FDA while the increase of expenditures ranged from 0 percent to 247.33 percent in GBA. The average changes were 61.67 and 62.08 with a standard deviation of 55.84 and 46.98 in FDA and GBA respectively which indicated that high changes had occurred in expenditures on food and nutrition under both approaches. The respondents

were classified into five categories on the basis of changes in expenditures on food and nutrition.

Table 4.21 Salient Features on the Effectiveness of FDA and GBA of Dipshikha on Expenditures of Food and Nutrition

Expenditures of Food and Nutrition					
Dimension of Effectiveness	Categories	Family Development Approach		Group Based Approach	
		Frequency (/)	%	Frequency (/)	%
Changes in Expenditures of Food and Nutrition (Tk)	No Changes (status quo)	0	0%	1	1%
	Little change (Increased up 25%)	25	25%	24	24%
	Moderate change (Increased 26% to 50%)	28	28%	26	26%
	High Change (Increased 51% to 75%)	15	15%	20	20%
	Extreme change (Increased above 75%)	32	32%	29	29%
	Total	100	100%	100	100%
	Mean	61.67		62.08	
	SD	55.84		46.98	
	Significance	P = < .955			

The findings from Table 4.21 revealed that maximum 32 percent of the respondents under FDA and maximum 29 percent of the respondents under GBA fell under Extreme change category. Only 1 percent from GBA had no change in food and nutrition expenditures while none of the respondents from FDA fell under this group. Twenty five percent, 28 percent and 15 percent of the respondents had little change, moderate change and high change respectively in FDA while 24 percent, 26 percent and 20 percent of Dipshikha beneficiaries under GBA had little change, moderate change and high change respectively.

Independent sample t- tests was employed to compare the difference between the changes of expenditures on food and nutrition of the respondents under FDA and GBA. As the P value is higher than 0.05, there was no significant difference at 95 percent confidence level between change of expenditures on food and nutrition of FDA and GBA (Table 4.21). So, the researcher concluded that there was no difference between the effectiveness of FDA and the effectiveness of GBA on changes in expenditures on food and nutrition of the respondents.

Increased of expenditures on health, education and others is one of the important indicators of poverty reduction. The findings from the study demonstrated that the expenditures on health, education and others of the respondent families increased after involvement with Dipshikha

4.2.3 Changes in Expenditures on Health, Education and others

compared to before involvement. The expenditures on health, education and others ranged from Tk. 1,050.00 to 17,060.00 and the average was Tk. 4,962.20 with a standard deviation of 2934.71 in pre Dipshikha period while it was ranged from Tk. 2,150.00 to 84,600.00 and the average was Tk. 11,790.76 with a standard deviation of 12076.22 after involvement with Dipshikha under FDA. On the other hand. In GBA, the expenditures on health, education and others ranged from

Tk. 450.0 to Tk. 85,400.00 and Tk. 270.00 to Tk. 39,700.00 in post Dipshikha period and pre Dipshikha period respectively. The average expenditure was Tk. 12,254.94 with a standard deviation of 13,560.25 in post Dipshikha period while it was Tk. 5635.05 with a standard deviation of 6915.43 in pre Dipshikha period under GBA. On the basis of expenditures on health, education and others the respondents were classified into three categories shown in Table 4.22.

Table 4.22 Distribution of Respondent Families in Different Expenditure Groups on Education, Health and others between Pre and Post Dipshikha Period under FDA and GBA

Categories	Family Development Approach				Group Based Approach			
	Pre-Dipshikha Period		Post Dipshikha Period		Pre-Dipshikha Period		Post Dipshikha Period	
	(/)	%	(/)	%	(/)	%	(/)	%
Less Expenditure (Up to Tk. 5000)	64	64%	24	24%	69	69%	36	36%
Medium Expenditure (>5000)	32	32%	36	36%	19	19%	23	23%
High Expenditure (> Tk. 10000)	4	4%	40	40%	12	12%	41	41%
All Classes	100	100%	100	100%	100	100%	100	100%
Mean	4962.20		11790.76		5635.05		12254.94	
SD	2934.71		12076.22		6915.43		13560.25	
Significance	P<0.000				P<0.000			

The data in table 4.22 pointed out that the respondents under less expenditure category were decreased by 40 percent under FDA during post Dipshikha period compared to pre Dipshikha period. This 40 percent was distributed to other category. So, medium expenditure category was increased by 4 percent and high expenditure category by 36

percent. On the other hand in GBA, the respondents under less expenditure category were decreased by 33 percent in post Dipshikha period which was distributed to medium (4 percent) and high (29 percent) expenditure categories.

A paired t test was run to compare the difference of expenditures on health, education and others between before involvement with Dipshikha and after involvement with Dipshikha. The findings indicated that there was a significant difference in expenditures on health, education and others between pre and post Dipshikha period under both the approaches at 95 percent confidence level (PO.OOO) (Table 4.22). From the fact, the researcher concluded that the expenditures on health, education and others had significantly increased after involvement with Dipshikha compared to before involvement with Dipshikha.

The changes in expenditures on health, education and others ranged from 0 to 1592 percent in FDA and it ranged from 0 to 1272.73 percent in GBA. The respondents were classified into five categories on the basis of changes in expenditures on health, education and others.

Table 4.23 Salient Features on the Effectiveness of FDA and GBA of Dipshikha on ^ Expenditures of Health, Education and others

Dimension of Effectiveness	Categories	Family Development _____ £		Group Based Approach	
		Frequency (/)	%	Frequency (/)	%
Changes in Expenditures of Health, Education and others (Tk)	No Changes (<u>status quo</u>)		5%		4%
	Little change (<u>Increased up 25%</u>)	19	19%		7%
	Moderate change (<u>Increased 26% to 50%</u>)		8%	26	26%
	High Change (<u>Increased 51 % to 75%</u>)	13	13%	20	20%
	Extreme change (<u>Increased above 75%</u>)	55	55%	43	43%
	Total	100	100%	100	100%
	Mean	154.22		170.23	
	SD	246.90		234.09	
	<u>Significance</u>		P = 0.638		

The table 4.23 indicated that the majority of the respondents (55%) had extreme change in expenditures on health, education and others under FDA after involvement with Dipshikha wtylp 43 percent of the respondents under GBA had extreme change in expenditures in post Dipshikha period. The lowest 5 percent and 4 percent of the

respondents in FDA and GBA respectively fell under no change category while 19 percent from FDA and 7 percent from GBA had little change in expenditures on health, education and others after involvement with Dipshikha compared to pre Dipshikha period. About 8 percent and 13 percent of the respondents under family development approach had moderate and high change respectively in post Dipshikha period where, 26 percent and 20 percent of the respondents had moderate and high change under GBA in post Dipshikha period. The average change was 154.22 percent in FDA and 173.23 percent in GBA. The average changes indicated that extreme change was occurred in both approaches concerning expenditures on health, education and others.

Independent

sample t- tests was employed to compare the difference between the changes of expenditures on health, education and others of the respondents under FDA and GBA. As the P value is higher than 0.05, there was no significant difference at 95 percent confidence level between change of expenditures on health, education and others of FDA and GBA (Table 4.23). So, the researcher concluded that there was no difference between the effectiveness of FDA and the effectiveness of GBA on changes in expenditures on health, education and others of the respondents.

4.2.4 Changes in Land Assets

The amount of land assets of the respondents ranged from 0.0081 hectare to 1.2383 hectares in pre Dipshikha period and 0.0081 hectare to 2.0598 hectares in Post Dipshikha period under FDA. The amount of land assets ranged from 0.00 hectare to 4.41 hectares in pre Dipshikha period while the range was 0.00 to 4.41 hectares in post Dipshikha period as well under GBA. The average land holding size was 0.25 hectare with a standard deviation of 0.30 in post Dipshikha period while it was 0.20 hectare with a standard deviation of 0.22 in pre Dipshikha period under FDA. The average land size in post Dipshikha period was 0.39 hectare with a standard deviation of 0.64 and in pre Dipshikha period the average was 0.33 hectare with a standard deviation of 0.58 under GBA. The respondents were classified into five categories on the basis of their land holding size as shown in table 4.24.

Table 4.24 Distribution of Respondent Families in Different Land Holding Groups between Pre and Post Dipshikha Period under FDA and GBA

Categories	Family Development Approach				Group Based Approach			
	Pre-Dipshikha Period		Post Dipshikha Period		Pre-Dipshikha Period		Post Dipshikha Period	
	(/)	%	(/)	%	(/)	%	(/)	%
Landless (0-0.02 hec.)	15	15%	10	10%	40	40%	32	32%
Marginal (>0.02-0.2 hec)	46	46%	48	48%	17	17%	19	19%
Small (>0.2-1 hec)	37	37%	39	39%	33	33%	36	36%
Medium (>1-3 hec)	2	2%	3	3%	9	9%	11	11%
Large (>3 hec)	0	0%	0	0%	1	1%	2	2%
All Classes	100	100%	100	100%	100	100%	100	100%
Mean	0.21		0.25		0.33		0.39	
SD	0.22		0.30		0.58		0.64	
Significance	P<0.016				P<0.012			

The data presented in table 4.24 pointed out that the landless families decreased by 5 percent in post Dipshikha period compared to pre Dipshikha period under FDA. This 5 percent were distributed to other categories by 2 percent in marginal, 2 percent in small and 1 percent in medium category. None of the respondents fell under large category in pre Dipshikha period and post Dipshikha period as well.

On the other hand, in GBA, landless families decreased by 8 percent which were distributed to the other categories by 2 percent in marginal, 3 percent in small, 2 percent in medium and 1 percent in large category.

A paired t test was run to compare the difference of land holding size of the respondents between before involvement with Dipshikha and after involvement with Dipshikha. The findings indicated that there was a significant difference in land holding size between pre and post Dipshikha period under both the approaches at 95 percent confidence level as the P value is less than 0.05 (Table 4.24).

The changes in amount of land assets ranged from 0 to 459 decimal in FDA and it ranged from 0 to 493 decimal in GBA. The respondents were classified into five categories on the basis of changes in amount of land assets.

Table 4.25 Salient Features on the Effectiveness of FDA and GBA of Dipshikha on Land Assets

Assets					
Dimension of Effectiveness	Categories	Family Development Approach		Group Based Approach	
		Frequency (/)	%	Frequency (/)	%
Changes in Land Assets (Decimal)	No Changes (status quo)	67	67%	71	71%
	Little change (increased up 10 dm)	13	13%	8	8%
	Moderate change (increased 11 to 20 dm)	7	7%	7	7%
	High Change (increased 21 to 30 dm)	3	3%	5	5%
	Extreme change (increased above 30 dm)	10	10%	9	9%
	Total	100	100%	100	100%
	Mean	13.13		13.76	
	SD	50.46		53.92	
.. —	Significance	P = 0.930			

The data showed in table 4.25 pointed out that the majority proportion of the respondents had no change in their land assets under both approaches between pre and post Dipshikha period. However, in FDA, 33 percent had experienced changes in the category of little change 13 percent, moderate change 7 percent, high change 3 percent and extreme change 10 percent. On the other hand in GBA, 29 percent of the respondents had experienced changes in the category of little change 8 percent, moderate change 7 percent, high change 5 percent and extreme change 9 percent. The average change was

13.13 with a standard deviation of 50.46 under FDA and it was 13.76 with standard deviation 53.92 in GBA. The high standard deviation in both approaches indicated that the increase of land assets were not equally distributed among the members and the average change indicated that moderate change was occurred in both the approaches concerning land assets after involvement with Dipshikha.

An independent sample t- test was run to compare the difference between the changes of land assets of the respondents under FDA and GBA. As the P value is higher than 0.05, there was no significant difference at 95 percent confidence level between change of land assets of FDA and GBA (Table 4.25). So, the researcher concluded that there was no difference between the effectiveness of FDA and the effectiveness of GBA on changes in land assets of the respondents.

Increase of productive assets is one of the determinants of increase income. The findings from the study demonstrated that the productive assets of the respondent families increased after involvement with Dipshikha compared to before involvement. The value of productive assets ranged from Tk. 0.00 to Tk. 99,000.00 and the average being Tk. 20,928.97 with a standard deviation of 19827.11 in post Dipshikha period while the value of productive assets was ranged from Tk. 0.00 to 45,000.00 and the average was Tk. 13,530.50 with a standard deviation of 12,356.83 before involvement with Dipshikha under FDA. On the other hand, under GBA the value of productive assets ranged from Tk. 600.00 to Tk. 126,000.00 and Tk. 600.00 to Tk. 69600.00 in post Dipshikha period and pre Dipshikha period respectively. The average value of productive assets was Tk. 24,492.35 with a standard deviation of 26535.75 in post Dipshikha period while the average was Tk. 15,621.10 with a standard deviation of 16,873.17 in pre Dipshikha (Kriod under GBA. On the basis of value of productive assets, the respondents were classified into three categories as shown in Table 4.26.

Table 4.26 Distribution of Respondent Families in Different Productive Assets Holding [Groups between Pre and Post Dipshikha Period under FDA and GBA]

Categories	Family Development Approach				Group Based Approach			
	Pre-Dipshikha Period		Post Dipshikha Period		Pre-Dipshikha Period		Post Dipshikha Period	
	(/)	%	(/)	%	(/)	%	(/)	%
Small Assets Holder (Up to Tk. 10000)	50	50%	34	34%	55	55%	42	42%
Medium Assets holder (> 10000 to 20000)	26	26%	30	30%	20	20%	16	16%
Large Assets Holder (> 20000)	24	24%	36	36%	25	25%	42	42%
AH Classes	100	100%	100	100%	100	100%	100	100%
Mean	13539.50		20928.97		15621.10		24492.35	
SD	12356.83		19827.11		16873.17		26535.75	
Significance	P<0.000		P<0.000		P<0.000		P<0.000	

The changes in value of productive assets ranged from 0 to 1250 percent in FDA and it ranged from 0 to 697.67 percent in GBA. The average change was 99.23 percent with a standard deviation of 212.26 under FDA and it was 71.83 with a standard deviation of

105.81 in GBA. The high standard deviation in both approaches pointed out that the productive assets were not equally increase among the respondent families. The respondents were classified into five categories on the basis of changes in value of productive assets as shown in table 4.27.

Table 4.27 Salient Features on the Effectiveness of FDA and GBA of Dipshikha on Productive Assets other than Land

Productive Assets other than Land					
r 1 Dimension of 1 Effectiveness	Categories	Family Development Approach		Group Based Approach	
		Frequency (/)	%	Frequency (/)	%
Changes in I Productive 1 Assets other than Land (Value in Tk.)	No Changes (status quo)	18	18%	18	18%
	Little change (value increased up to 25%)	22	22%	23	23%
	Moderate change (value increased 26% to 50%)	14	14%	18	18%
	High Change (value increased 51 % to 75%)	12	12%	12	12%
	Extreme change (value increased above 75%)	34	34%	29	29%
	Total	100	100%	100	100%
	Mean	99.23		71.83	
	SD	212.26		105.81	
	Significance	P = 11.249			

The data presented in table 4.27 revealed that 18 percent of the respondents had no change in their productive assets under both approaches between pre and post Dipshikha period while maximum 34 percent and 29 percent had extreme change from FDA and GBA respectively. Only 12 percent from both approaches had high change in their productive assets after involvement with Dipshikha. Fourteen percent and 22 percent of the respondents under FDA had moderate change and little change respectively where as only 18 percent and 23 percent had moderate change and little change respectively in GBA. The average change indicated that high change was occurred in both approaches concerning productive assets after involvement with Dipshikha.

An independent sample t- test was run to compare the difference between the changes of productive assets of the respondents under FDA and GBA. As the P value was higher than 0.05, there was no significant difference at 95 percent confidence level between change of productive assets of Family development approach and group based approach

(Table 4.27). So, the researcher concluded that there was no difference between the effectiveness of FDA and the effectiveness of GBA on changes in productive assets of the respondents.

4.2.6 Changes in Non-productive Assets

The value of non-productive assets ranged from Tk. 350.00 to Tk. 86,000.00 and the ,iverage was Tk. 18,560.91 with a standard deviation of 17471.46 in post Dipshikha period while the value of non-productive assets ranged from Tk. 350.00 to Tk. 52,000.00 and the average was Tk. 14,062.11 with a standard deviation of 12,420.87 in pre Dipshikha period under FDA. On the other hand, under group based approach, the value of non-productive assets ranged from Tk. 500.00 to Tk. 230,000.00 and Tk. 500.00 to Tk. 170,000.00 in post Dipshikha period and pre Dipshikha period respectively. The average value of non-productive assets was Tk. 24,908.20 with a standard deviation of 32,389.46 in post Dipshikha period while, the average was Tk. 18,410.70 with a standard deviation of 23,899.23 in pre Dipshikha period under GBA. On the basis of value of nonproductive assets, the respondents were classified into three categories as shown in Table 4.28.

Table 4.28 Distribution of Respondent Families in Different Non-Productive Assets Holding

Categories	Family Development Approach				Group Based Approach			
	Pre-Dipshikha Period		Post Dipshikha Period		Pre-Dipshikha Period		Post Dipshikha Period	
	(/)	%	(/)	%	(/)	%	(/)	%
Small Assets Holder (<u>to Tk. 10000</u>)	52	52%	40	40%	49	49%	41	41%
Medium Assets Holder (> 10000 to 20000)	25	25%	32	32%	23	23%	23	23%
Large Assets Holder (> 20000)	23	23%	28	28%	28	28%	36	36%
Total	100	100%	100	100%	100	100%	100	100%
Mean	14062.11		18560.91		18410.70		24908.20	
SD	12420.87		17471.46		23899.23		32389.46	
Significance	P<(.000				P<0.000			

The data presented in table 4.28 revealed that the small assets holders under FDA reduced by 12 percent from 52 to 40 percent while the medium assets holders and the large assets holder increased by 7 percent from 25 to 32 percent and 5 percent from 23 to 28 percent respectively between pre and post Dipshikha period. On the other hand, in GBA, the percent of small assets holders reduced by 8 percent from 49 to 41 percent and no change occurred in medium assets holders between pre and post Dipshikha period. The large asset holders increased by 8 percent from 28 to 36 percent after involvement with Dipshikha.

A paired t test was employed to compare the difference of non-productive assets between pre and post Dipshikha period. The findings indicated that there was a significant difference in non-productive assets between pre and post Dipshikha period under both the approaches at 95 percent confidence level ($P < 0.000$) (Table 4.28).

The changes in value of productive assets ranged from 0 to 175.44 percent in FDA and it ranged from 0 to 250 percent in GBA. The average change was 35.66 percent with a standard deviation of 37.67 under FDA and it was 36.41 with standard deviation 43.29 in GBA. The respondents were classified into five categories on the basis of changes in value of productive assets as shown in table 4.29.

Table 4.29 Salient Features on the Effectiveness of FDA and GBA of Dipshikha on Non- Productive Assets

Dimension of Effectiveness	Categories	Family Development Approach		Group Based Approach	
		Frequency (/)	%	Frequency (/)	%
Changes in Non-Productive Assets (Value in Tk.)	No Changes (status quo)	23	23%	24	24%
	Little change (value increased up to 25%)	23	23%	28	28%
	Moderate change (value increased 26% to 50%)	25	25%	22	22%
	High Change (value increased 51 % to 75%)	15	15%	13	13%
	Extreme change (value increased above 75%)	14	14%	13	13%
	Total	100	100%	100	100%
	Mean	35.66		36.41	
	SD	37.67		43.29	
	Significance	P = C .895			

The data in table 4.29 revealed that 23 percent of the respondents had no change in their non-productive

assets under FDA between pre and post Dipshikha period while 24 percent had no change under GBA. The maximum 25 percent respondents had moderate change followed by 23 percent, 15 percent and 14 percent had little change, high change and extreme change respectively in FDA.

The maximum 28 percent of the respondents had little change while only 13 percent had extreme change in post Dipshikha period under GBA. Twenty percent and 13 percent of the respondents under GBA had moderate change and high change respectively after involvement with Dipshikha. The average change indicated that moderate change was

occurred in both approaches concerning non-productive assets after involvement with Dipshikha.

An independent sample t- test was run to compare the difference between the changes in non-productive assets of the respondents under FDA and GBA. As the P value was higher than 0.05, there was no significant difference at 95 percent confidence level I between change of non- productive assets of FDA and GBA (Table 4.27). So, the researcher concluded that there was no difference between the effectiveness of FDA and the effectiveness of GBA on changes in non-productive assets of the respondents.

4.2.7 Changes in Housing Condition

The score of housing condition ranged from 1 to 13 and the average was 4.93 with a standard deviation of 2.45 in post Dipshikha period while the score ranged from 1 to 10 and the average was 3.79 with a standard deviation of 1.956 in pre Dipshikha period under FDA. On the other hand, in GBA, the score of housing condition ranged from 1 to 22 and 1 to 18 in post Dipshikha period and pre Dipshikha period respectively. The average score of housing condition was 5.82 with a standard deviation of 4.10 in post Dipshikha period while, the average was 4.72 with a standard deviation of 3.61 in pre Dipshikha period under GBA.

A paired t test was employed to compare the difference housing condition between pre and post Dipshikha period of both approaches. The findings indicated that there was a

Hfificant difference in housing condition between pre and post Dipshikha period under both approaches at 95 percent confidence level (PO.OOO) (Table 4.30).

On the basis of housing condition, the respondents were classified into three categories as shown in Table 4.30.

Table 4.30 Distribution of Respondent Families in Different House Holding Groups _____ b

Categories	<u>Family Development Approach</u>				<u>Group Based Approach</u>			
	<u>Pre-Dipshikha Period</u>		<u>Post Dipshikha Period</u>		<u>Pre-Dipshikha Period</u>		<u>Post Dipshikha Period</u>	
	(/)	%	(/)	®/ /O	(/)	%	(/)	%
Small House Holders (Up	74	74%	57	57%	71	71%	58	58%
Medium House Holders	26	26%	41	41%	20	20%	28	28%
Large House Holders		0%		2%		9%	14	14%
All classes	100	100%	100	100%	100	100%	100	100%
Mean	3.79		4.93		4.72		5.82	
	1.96		2.45		3.61		4.10	
<u>Significance</u>		P<0.000				P<0.000		

The data presented in table 4.30 pointed out that the majority proportion of the respondents under both the approaches still small house holders. Although, there was a significant difference in housing condition between before and after involvement with Dipshikha. The data revealed that the small house holders under FDA reduced by 17 I percent from 74 to 57 percent while the medium house holders and the large house holder increased from 26 percent to 41 percent and 0 percent to 2 percent respectively between pre and post Dipshikha period. On the other hand, in GBA, the percent of small house holders reduced by 13 percent from 71 to 58 percent and the medium house holders and the large house holder increased from 20 percent to 28 percent and 9 percent to 14 percent respectively between pre and post Dipshikha period. It was appeared that more respondents under GBA hold large housing facilities than FDA in post Dipshikha period.

The change scores in housing condition of the respondents ranged from 0 to 9 in FDA and the changes ranged from 0 to 8 in GBA. The average change was 1.14 with a standard deviation of 2.174 under FDA and the average was 1.12 with a standard

deviation of 1.665 in GBA. The respondents were classified into five categories on the basis of changes in housing condition as shown in table 4.31.

Table 4.31 Salient Features on the Effectiveness of FDA and GBA of Dipshikha on Housing Condition

Dimension of Effectiveness	Categories	Family Development Approach		Group Based Approach	
		Frequency (/)	%	Frequency (/)	%
Changes in Housing Condition (Score)	No Changes (status quo)	69	69%	58	58%
	Little change (Score increased up to 2)	12	12%	21	21%
	Moderate change (Score increased 3 to 4)	9	9%	14	14%
	High Change (Score increased 5 to 6)	4	4%	6	6%
	Extreme change (Score increased above 6)	6	6%	1	1%
	Total	100	100%	100	100%
	Mean	1.14		1.12	
	SD	2.174		1.665	
	Significance	P = 0.941			

The data showed in table 4.31 pointed out that the majority proportion of the respondents had no change in their housing condition under both approaches between pre and post Dipshikha period. Only 31 percent of the respondents had changed their housing condition after involvement with Dipshikha from which 12 percent had little change, 9 percent had moderate change, 4 percent had high change and only 6 percent had extreme change in their housing condition under FDA. In GBA, 21 percent of the respondents had little change where as only 1 percent had extreme change in post Dipshikha period. The moderate change was 14 percent while high change was only 6 percent. The average change indicated that little change was occurred in both the approaches concerning the housing condition of the respondents after involvement with Dipshikha.

An independent sample t- test was employed to compare the difference between the changes of housing condition of the respondents under FDA and GBA. As the P value was higher than 0.05, there was no significant difference between change of housing condition in FDA and GBA at 95 percent confidence level (Table 4.31). So, the

researcher concluded that there was no difference between the effectiveness of FDA and the effectiveness of GBA on changes in housing condition of the respondents.

4.2.8 Changes in Drinking Water Sources

Safe drinking water is one of the vital determinants of healthy life. People of the rural areas often suffer from diarrhea due to drinking of unsafe water from pond or other water bodies. In order to reduce water born diseases in the rural areas Dipshikha supplied tube- well to its beneficiaries. The score of Drinking water source ranged from 4 to 5 and 3 to

5 in post and pre Dipshikha period respectively under both the approaches. The average was 4.73 with a standard deviation of 0.45 in post Dipshikha period and the average was 4.23 with a standard deviation of 0.45 in pre Dipshikha period under FDA. On the other hand, In GBA, The average score of housing condition was 4.79 with a standard deviation of 0.41 in post Dipshikha period while, the average was 4.48 with a standard deviation of 0.52 in pre Dipshikha period under GBA. The respondents were classified into three categories as shown in table 4.32.

Table 4.32 Distribution of Respondent Families according to their Drinking Water Sources

Categories	Family Development Approach				Group Based Approach			
	Pre-Dipshikha Period		Post Dipshikha Period		Pre-Dipshikha Period		Post Dipshikha Period	
	(/)	%	(/)	%	(/)	%	(/)	%
Pond	1	1%	0	0%	1	1%	0	0%
Tube Well (Neighbors)	75	75%	27	27%	50	50%	21	21%
Tube Well (Own)	24	24%	73	73%	49	49%	79	79%
All Classes	100	100%	100	100%	100	100%	100	100%
Mean	4.23		4.73		4.418		4.79	
SD	0.45		0.45		0.52		0.41	
Significance	P<0.000				P<0.000			

The computed data in table 4.32 revealed that 100 percent of the respondents under both the approaches drink tube well water either from their own tube well or from neighbor's tube well in post Dipshikha period. The overwhelming proportion (73% and 79%) of the respondents used their own tube well water under both approaches in post Dipshikha period compared to pre Dipshikha period. None of them used pond water in post

Dipshikha period. The use of neighbor's tube well by Dipshikha beneficiaries reduced by 48 percent from 75 to 27 percent in post Dipshikha period under FDA and it was reduced by 29 percent from 50 to 21 percent under GBA in post Dipshikha period.

A paired t test was employed to compare the difference of drinking water source between pre and post Dipshikha period of both the approaches. The findings indicated that there was a significant difference in drinking water source between pre and post Dipshikha period under both approaches at 95 percent

confidence level ($P < 0.000$) (Table 4.32). From the fact, the researcher concluded that the use of drinking water from own tube well increased significantly after involvement with Dipshikha compared to before involvement with Dipshikha.

The change scores in drinking water source of the respondents ranged from 0 to 2 in FDA and it ranged from 0 to 1 in GBA. The average change was 0.50 with a standard deviation of 0.52 under FDA and the average was 0.31 with a standard deviation of 0.46 in GBA. The respondents were classified into three categories on the basis of changes in drinking water source as shown in table 4.33.

**Table 4.33 Salient Features on the Effectiveness of FDA and GBA of Dipshikha on _____
Drinking Water Sources**

Drinking Water Sources					
Dimension of Effectiveness	Categories	Family Development Approach		Group Based Approach	
		Frequency (/)	%	Frequency (/)	%
Changes in Drinking Water Sources (Score)	No Changes (status quo)	51	51%	69	69%
	Little change (Score increased up to 1)	48	48%	31	31%
	Moderate change (Score increased up to 2)	1	1%	0	0%
	Total	100	100%	100	100 %
	Mean	0.50		0.31	
	SD	0.52		0.46	
	Significance	P = 0.007			

The computed data presented in table 4.33 pointed out that the majority proportion of the respondents had no change in their drinking water source under both approaches between pre and post Dipshikha period. Fifty one percent of the respondents from FDA and 69 percent from GBA had no change in their drinking water source between pre and post Dipshikha period. Forty eight percent of the respondents had little change under FDA where as 21 percent from GBA had little change in drinking water source. Only 1 percent had moderate change in post Dipshikha period under FDA. The average change indicated that little change was occurred in both approaches concerning drinking water source of respondents after involvement with Dipshikha.

An independent sample t- test was employed to compare the difference between the changes of drinking water source of the respondents under FDA and GBA. As the P value was less than 0.05, there was a significant difference between change of drinking water source in FDA and GBA at 95 percent confidence level (Table 4.33). From the fact, the researcher concluded that the effectiveness of FDA of Dipshikha on

drinking water source is higher than that of effectiveness of GBA.

4.2.9 Changes in Sanitation

The score of sanitation condition of the respondents ranged from 1 to 4 and the average was 3.25 with a standard deviation of 1.04 in post Dipshikha period while the score ranged from 1 to 4 and the average was 1.95 with a standard deviation of 1.10 in pre Dipshikha period under family development approach. On the other hand, under group based approach, the score of sanitation condition ranged from 1 to 5 in both post and pre Dipshikha period. The average was 2.48 with a standard deviation of 1.54 in post Dipshikha period while, the average was 1.38 with a standard deviation of 0.98 in pre Dipshikha period under GBA.

A paired t test was employed to compare the difference of sanitation condition between pre and post Dipshikha period under both approaches. The findings indicated that there was a significant difference in sanitation condition between pre and post Dipshikha period under both approaches at 95 percent confidence level (PO.OOO) (Table 4.34).

On the basis of sanitation condition the respondents were classified into five categories as shown in Table 4.34.

Table 4.34 Distribution of Respondent Families according to their Sanitation Condition I _____ b

Categories	Pre-Dipshikha Family Development Period		Post Dipshikha Approach Period		Pre-Dipshikha Period		Post Dipshikha Group Based Approach Period	
	(/)	%	(/)	%	(/)	%	(/)	%
Open Field	53	53%	13	13%	85	85%	51	51%
Pit Latrine		9%		5%		4%		1%
Sanitary Latrine with	28	28%	26	26%		0%		0%
Sanitary Latrine with	10	10%	56	56%	10	10%	45	45%
Brick Latrine		0%		0%		1%		3%
All Classes	100	100%	100	100%	100	100%	100	100%
Mean	1.95		3.25		1.38		2.48	
SD	1.10		1.04		0.98		1.54	
Significance		P<0.000				P<0.000		

The table 4.34 revealed that user of open place, pit latrine and sanitary latrine without fence reduced from 53 percent to 13 percent, 9 percent to 5 percent and 28 percent to 26 percent respectively while, the user of sanitary latrine with fence increased from 10 percent to 56 percent after involvement with Dipshikha in FDA. On the other hand, still 51 percent of the respondents use open places for sanitation which was 85 percent in pre Dipshikha period under GBA. The user of pit latrine reduced as well from 4 percent to 1 percent while, the user of sanitary latrine with fence increased from 10 percent to 45 percent in post Dipshikha period under GBA. The brick latrine user increased as well in post Dipshikha period under GBA from 1 percent to 3 percent. None of the respondents had brick latrine under FDA. From the fact, it is clear that the sanitation condition of the respondents improved after involvement with Dipshikha under both approaches.

The change scores in sanitation condition of the respondents ranged from 0 to 3 in both approaches. The average change was 1.30 with a standard deviation of 1.34 under FDA and the average was 1.10 with a standard deviation of 1.40 in GBA. The respondents were classified into four categories on the basis of changes in sanitation condition as shown in table 4.35.

Table 4.35 Salient Features on the Effectiveness of FDA and GBA of Dipshikha on Sanitation Condition

Dimension of Effectiveness	Categories	Family Development Approach		Group Based Approach	
		Frequency (/)	%	Frequency (/)	%
Changes in Sanitation Condition (Score)	No Changes (status quo)	46	46%	60	60%
	Little change (Score increased up to 1)	11	11%	3	3%
	Moderate change (Score increased up to 2)	10	10%	4	4%
	High Change (Score increased up to 3)	33	33%	33	33%
	Total	100	100%	100	100%
	Mean	1.30		1.10	
	SD	1.34		1.40	
	Significance	P =		8.304	

The data presented in table 4.35 indicated that the highest proportion (46% and 60%) of the respondents under both approaches had no change in their sanitation condition after involvement with Dipshikha while, 33 percent of the respondents had high change in their sanitation condition after involvement with Dipshikha under both approaches. Eleven percent and 10 percent of the respondents from FDA fell under little and moderate change categories respectively while only 3 percent and 4 percent from GBA fell under little and moderate change in their sanitation condition after involvement with Dipshikha.

An independent sample t- test was employed to compare the difference between the changes of sanitation condition of the respondents under FDA and GBA. As the P value was higher than 0.05, there was no significant difference between change of sanitation condition in FDA and GBA at 95 percent confidence level (Table 4.35). So, the researcher concluded that there was no difference between the effectiveness of FDA and the effectiveness of GBA on changes in sanitation condition of the respondents.

The score of health awareness of the respondents ranged from 3 to 8 and the average was 7.36 with a standard deviation of 1.24 in post Dipshikha period while the score ranged from 0 to 8 and the average was 2.65 with a standard deviation of 1.85 in pre Dipshikha period under family development approach. On the other hand, under group based approach, the score of awareness on health ranged from 2 to 8 and 0 to 8 in post and pre Dipshikha period respectively. The average was 7.00 with a standard deviation of 1.40 in post Dipshikha period while, the average was 2.48 with a standard deviation of 1.57 in pre Dipshikha period under GBA. The respondents were classified into three categories on the basis of their awareness on health as shown in table 4.36.

Table 4.36 Distribution of Respondent Families according to their Awareness on Health Issues Between Pre and Post Dipshikha Period under FDA and GBA

Categories	Family Development Approach				Group Based Approach			
	Pre-Dipshikha Period		Post Dipshikha Period		Pre-Dipshikha Period		Post Dipshikha Period	
	(/)	%	(/)	%	(/)	%	(/)	%
Low Awareness (Up to 3)	75	75%	2	2%	79	79%	4	4%
Medium Awareness (4 to 6)	19	19%	15	15%	20	20%	21	21%
[High Awareness (>6)	6	6%	83	83%	1	1%	75	75%
All Classes	100	100%	100	100%	100	100%	100	100%
Mean	2.65		7.36		2.48		7.00	
SD	1.85		1.24		1.57		1.40	
Significance	P<€ .000				P<0.000			

The computed data in table 4.36 pointed that the overwhelming majority of the respondents (83 percent and 75 percent) under both approaches had high awareness on health after involvement with Dipshikha compared to before involvement with Dipshikha. The percent of respondents under low awareness category reduced significantly after involvement with Dipshikha in the both approaches. A paired t test was employed to compare the difference of awareness on health between pre and post Dipshikha period under both approaches. The findings indicated that there was a significant difference in awareness issues between pre and post Dipshikha period under both approaches at 95 percent confidence level (P<0.000) (Table 4.36).

The change scores in health awareness of the respondents ranged from 0 to 8 in both approaches. The average change was 4.71 with a standard deviation of 1.89 under FDA and the average was 4.52 with a standard deviation of 2.02 in GBA. The respondents were classified into five categories on the basis of changes in health awareness as shown in table 4.37.

Table 4.37 Salient Features on the Effectiveness of FDA and GBA of Dipshikha on Health Awareness

Dimension of Effectiveness	Categories	Family Development ———— £		Group Based <u>Approach</u>	
		Frequency (/)	%	Frequency (/)	%
Changes in Health Awarene ss (Score)	No Changes (status quo)		7%		3%
	Little change (score <u>increased up to 2</u>)		4%	16	16%
	Moderate change (score <u>increased 3 to 4</u>)	26	26%	31	31%
	High Change (score <u>increased 5 to 6</u>)	51	51%	33	33%
	Extreme change (score <u>increased above 6</u>)	12	12%	17	17%
	Total	100	100%	100	100%
	Mean	4.71		4.52	
	SD	1.89		2.02	
P = 0.408					

The data presented in table 4.37 indicated that maximum 51 percent of the respondents had high change in health awareness under FDA while minimum 4 percent had little change. More than one fourth percent of the respondents had moderate change where only 12 percent had extreme change in their health awareness. Seven percent of the respondents fell under no change category under family development approach while, only 3 percent of the respondents from GBA had no change in their health awareness. The maximum 33 percent of the respondents had high change in GBA followed by 31 percent of moderate change. Sixteen percent of the respondents had little change in their health awareness in post Dipshikha period compared to pre Dipshikha period where 17 percent had extreme change under group based approach.

An independent sample t- test was employed to compare the difference between the changes of health awareness of the respondents under FDA and GBA. As the P value was higher than 0.05, there was no significant difference between change of health

awareness in Family development approach and group based approach at 95 percent confidence level (Table 4.37). So, the researcher concluded that there was no difference between the effectiveness of FDA and the effectiveness of GBA on changes in sanitation condition of the respondents.

4.2.11 Changes in Awareness on Social Issues

The score of social awareness of the respondents ranged from 0 to 5 both in pre and post Dipshikha period. The average was 3.39 with a standard deviation of 1.63 in post Dipshikha period while, the average was 1.15 with a standard deviation of 1.18 in pre Dipshikha period under FDA. On the other hand, under GBA, the score of social awareness ranged from 0 to 5 and 0 to 4 in post and pre Dipshikha period respectively. The average was 3.82 with a standard deviation of 1.55 in post Dipshikha period while, the average was 1.04 with a standard deviation of 1.02 in pre Dipshikha period under GBA. The respondents were classified into three categories on the basis of their awareness on social issues as shown in table 4.38.

Table 4.38 Distribution of Respondent Families according to their Awareness on Different Social Issues Between Pre and Post Dipshikha Period under FDA and GBA

Categories	Family Development Approach				Group Based Approach			
	Pre-Dipshikha Period		Post Dipshikha Period		Pre-Dipshikha Period		Post Dipshikha Period	
	(/)	O/ o	(/)	O/ o	(/)	%	(/)	%
Low Awareness	61	61%	16	16%	61	61%	12	12%
Medium Awareness (2 up to 3)	34	34%	29	29%	38	38%	12	12%
High Awareness (>3)		5%	55	55%		1%	76	76%
All Classes	100	100%	100	100%	100	100%	100	100%
Mean	1.15		3.39		1.04		3.82	
SD	1.18		1.63		1.02		1.55	
Significance	P<0.000				P<0.000			

The table 4.38 pointed that the respondents fell under low and medium awareness categories reduced from 61 percent to 16 percent and 34 percent to 29 percent after involvement with Dipshikha while, high awareness category increased from 5 percent to 55 percent after involvement with Dipshikha in FDA. On the other hand, 76 percent of the respondents were in high awareness category after involvement with Dipshikha while, it was only 1 percent before involvement with Dipshikha under GBA. The

respondents under low and medium awareness categories reduced as well after involvement with Dipshikha under GBA.

A paired t test was employed to compare the difference of awareness on social issues between pre and post Dipshikha period under both approaches. The findings indicated that there was a significant difference in awareness on social issues between pre and post (Dipshikha period under both the approaches at 95 percent confidence level ($P < 0.000$) (Table 4.38). It means the activities of Dipshikha concerning increase of awareness on different social issues had made a significant impact among the beneficiaries of Dipshikha under both approaches.

" The change scores in social awareness of the respondents ranged from 0 to 5 in both approaches. The average change was 2.24 with a standard deviation of 1.30 under FDA while, the average was 2.78 with a standard deviation of 1.49 in GBA. The respondents were classified into five categories on the basis of changes in social awareness as shown in table 4.39.

Table 4.39 Salient Features on the Effectiveness of FDA and GBA of Dipshikha on Social Awareness

Dimension of Effectiveness	Categories	Family Development Approach		Group Based Approach	
		Frequency (/)	%	Frequency (/)	%
1 Changes in I Awareness on Social Issues (Score)	No Changes (status quo)	12	12%	11	11%
	Little change (score increased up to 1)	15	15%	8	8%
	Moderate change (score increased up to 2)	31	31%	17	17%
	High Change (score increased up to 3)	24	24%	36	36%
	Extreme change (score increased above 3)	18	18%	28	28%
	Total	100	100%	100	100%
	Mean	2.24		2.78	
	SD	1.30		1.49	
	Significance	P = 0.006			

The data presented in table 4.39 showed that maximum 31 percent of the respondents had moderate change in their social awareness after involvement with Dipshikha under FDA while, maximum 36 percent respondents under GBA had high change in their social awareness after involvement with Dipshikha. Twenty eight percent respondents made extreme change in social awareness under GBA while, only 18 percent from FDA had extreme change in their social

awareness. Twenty four percent, 15 percent and 12 percent fell under high, little and no change categories under FDA where as, 17 percent, 8 percent and 11 percent of the respondents under GBA had moderate , little and no change in their social awareness after involvement with Dipshikha. The average change under both approaches pointed out that a high change had occurred in the life of the respondents concerning social awareness after involvement with Dipshikha.

An independent sample t- test was employed to compare the difference between the changes of social awareness of the respondents under FDA and GBA. As the P value is less than 0.05, there was a significant difference between change of social awareness in family development approach and group based approach at 95 percent confidence level (Table 4.39). From the fact, the researcher concluded that the effectiveness of group based approach of Dipshikha on social awareness is higher than that of effectiveness of family development approach. It means group based approach of Dipshikha performed a significant higher impact on social awareness compared to family development approach of Dipshikha.

4.2.12 Changes in Women Empowerment

The score of women empowerment of the respondents ranged from 0 to 7 both in pre and post Dipshikha period. The average score was 3.96 with a standard deviation of 1.91 in post Dipshikha period while, the average was 1.84 with a standard deviation of 1.80 in pre Dipshikha period under FDA. On the other hand, under GBA, the score of awareness on health ranged from 0 to 7 in post Dipshikha period and 0 to 6 in pre Dipshikha period. The average was 4.27 with a standard deviation of 1.91 in post Dipshikha period while, the average was 1.91 with a standard deviation of 1.76 in pre Dipshikha period under GBA. The respondents were classified into three categories on the basis of their empowerment as shown in table 4.40.

Table 4.40 Distribution of Respondent Families in Different Empowerment Groups

Categories	Family Development Approach				Group Based Approach			
	Pre-Dipshikha		Post-Dipshikha		Pre-Dipshikha		Post-Dipshikha	
	Period	Period	Period	Period	Period	Period	Period	Period
	(/)	%	(/)	%	(/)	%	(/)	%
Low Empowered	69	69%	21	21%	60	60%	19	19%
Medium Empowered I (Score 2 to 3)	28	28%	58	58%	39	39%	52	52%
High Empowered		3%	21	21%		1%	29	29%
All Classes	100	100%	100	100%	100	100%	100	100%
Mean		1.84		3.96		1.91		4.27
SD		1.80		1.91		1.76		1.91
Significance				P<0.000				P<0.000

The data in table 4.40 exposed that the percent of high empowered women increased 18 percent after involvement with Dipshikha compared to before involvement in FDA while, it was increased 28 percent in GBA. The percent of low empowered women reduced from 69 percent to 21 percent and 60 percent to 19 percent in FDA and GBA respectively. The medium empowered women increased in post Dipshikha period under both approaches (Table 4.40). The mean score of the respondents in post Dipshikha period under both approaches was higher than that of pre Dipshikha period.

A paired t test was employed to compare the difference of empowerment of the respondents between pre and post Dipshikha period under both approaches. The findings indicated that there was a significant difference in empowerment of the rural women between pre and post Dipshikha period under both the approaches at 95 percent confidence level (P<0.000) (Table 4.40). It means Dipshikha generate impact among the beneficiaries through their dedicative, sincere and honest activities concerning empowerment of women under both approaches.

The change scores in women empowerment of the respondents ranged from 0 to 6 in FDA and 0 to 7 in GBA. The average change was 2.21 with a standard deviation of 1.81 under FDA while, the average was 2.36 with a standard deviation of 1.76 in GBA. The respondents were classified into five categories on the basis of changes in women empowerment as shown in table 4.39.

Tabic 4.41 Salient Features on the Effectiveness of FDA and GBA of Dipshikha on Women Empowerment

I Dimension of Effectiveness	Categories	Family Development Approach		Group Based Approach	
		Frequency (/)	%	Frequency (/)	%
■ Changes in Women Empowerment (Score)	No Changes (status quo)	27	27%	17	17%
	Little change (score increased up to 1)	14	14%	20	20%
	Moderate change (score increased 2 to 3)	33	33%	37	37%
	High Change (score increased 4 to 5)	20	20%	22	22%
	Extreme change (score increased above 5)	6	6%	4	4%
	Total	100	100%	100	100%
	Mean	2.12		2.36	
	SD	1.81		1.76	
	Significance	P = C		.342	

The data presented in Table 4.41 showed that 27 percent and 17 percent of the respondent had no change in their empowerment after involvement with Dipshikha under FDA and GBA respectively. Only 6 percent of the respondents under FDA had extreme change on their empowerment while, only 4 percent was in GBA. The maximum 33 percent and 37 percent of the respondents fell under moderate change from FDA and GBA respectively. Twenty percent of the respondents had high change followed by 14 percent of little change in family development approach while, 22 percent had high change followed by 20 per cent of little change in GBA.

I An independent sample t- test was employed to compare the difference between the

I changes of empowerment of the respondents under FDA and GBA. As the P value is higher than 0.05, there was no significant difference between change of women empowerment in FDA and GBA at 95 percent confidence level (Table 4.41). So, the researcher concluded that there was no difference between the effectiveness of FDA and the effectiveness of GBA on changes in empowerment of the respondents.

4.2.13 The extent of effectiveness of family development approach and group based approach of Dipshikha on socio-economic condition of respondent families

The score of changes on socio-economic condition of the respondents under FDA ranged from 6 to 40 and the average was 21.35 with a standard deviation of 7.07. The score under GBA ranged from 7 to 37 and the average was 20.78 with a standard deviation of **6.41**. The average score showed that a medium changes occurred on the respondents under both the approaches. However, the respondents were classified into three categories on the basis of their extent of effectiveness on socio-economic condition under FDA and GBA.

Table 4.42 Salient Features on the Effectiveness of FDA and GBA of Dipshikha

Dimension of Effectiveness	Categories	Family Development		Group Based	
		Frequency		Frequency	
		(/)	%	(/)	%
Socio economic condition	Low change (0 to 16)	27	27%	27	27%
	Medium change (17 to 32)	63	63%	68	68%
	High Change (32 To 48)	10	10%		5%
	Total	100	100%	100	100%
Mean					
SD		7.07			

Significance

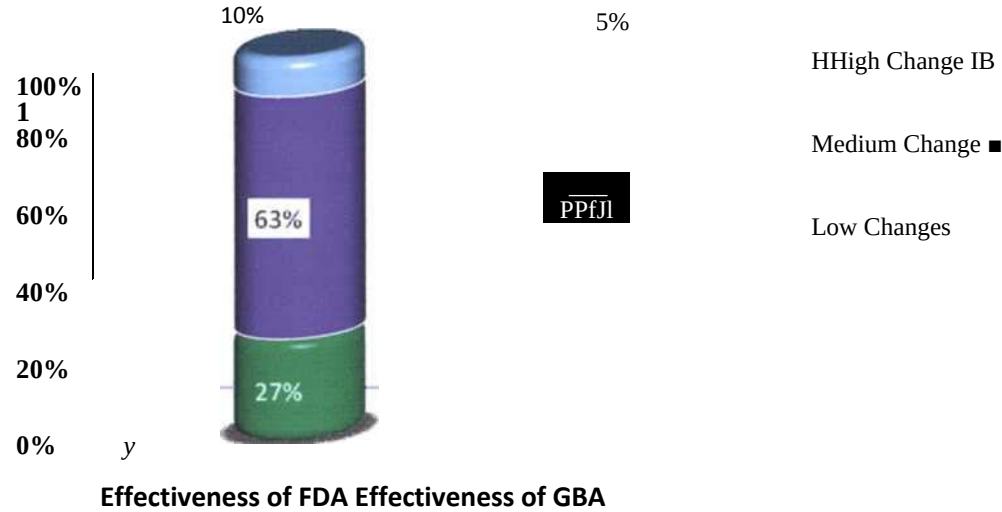
The data presented in table 4.42 indicated that more **21.35** than one fourth of **20.78** the respondents from both approaches fell under low change **6.41** category. It means, the both approaches were low effective for one fourth beneficiaries of Dipshikha. The largest proportion of the respondents from both approaches had medium change after involvement with Dipshikha i.e. from 63 percent in FDA and 68 percent in GBA. It indicated that the approaches were medium effective for about 65 percent of respondent. Only 10 percent from FDA and only 5 percent from GBA had high change in their socio-economic condition after involvement with Dipshikha.

P = 0.5510

An independent sample t- test was employed to compare the difference between the changes of socio-economic condition of the respondents under FDA and GBA. As the P value is higher than 0.05, there was no significant difference between change of socioeconomic condition in FDA and GBA at 95 percent confidence level (Table 4.42). So,

the researcher concluded that there was no difference between the effectiveness of FDA and the effectiveness of GBA towards poverty reduction.

Figure: 4.2 A comparative distributions of respondents according to the effectiveness of FDA and GBA



The figure 4.2 revealed that the effectiveness of FDA was more compared to the effectiveness of GBA in relation with high changes on socio-economic condition of the respondents while, the effectiveness of GBA was more than that of FDA. The low changes were equal in both approaches means there was no difference between the effectiveness of GBA and FDA in relation to low change of the respondents after involvement with Dipshikha. The average changes (table 4.42) also showed that the effectiveness of FDA was higher compared to the effectiveness of GBA although there was no significant difference between the changes in FDA and GBA.

4.3Contributions of selected characteristics of the respondents to the effectiveness of Dipshikha Group Based Approach and Family Development Approach

This section has been design to describe the contribution of the selected characteristics of the respondents from each approach to the (i) effectiveness of Dipshikha GBA towards poverty reduction and (ii) effectiveness of Dipshikha FDA towards poverty reduction. The selected characteristics of the respondents of both approaches have already been

described in chapter I. Each of these selected characteristics from each approach was treated as independent variable. Extend of effectiveness of (i) group based approach and (ii) family development approach of Dipshikha towards poverty reduction were dependent variables of this study. The procedures followed for the measurement of dependent and independent variables were discussed in chapter III. The independent variables in isolation will not give a comprehensive picture of the effects of independent variables on effectiveness of Dipshikha approaches. The different characteristics of the respondents may interact together to contribute a combined effect on the effectiveness of Dipshikha GBA and FDA. Keeping this fact in view, linear multiple regression analysis was used separately for each approach to assess the contributions of the independent variables to the effectiveness of (i) group based approach and (ii) family development approach of Dipshikha.

4.3.1 Contribution of selected characteristics of the respondents to the extent of effectiveness of group based approach of Dipshikha towards poverty reduction.

As far as regression analysis is concerned, general full model of multiple regression (FMMR) was initially run with the 14 independent variables under GBA. The correlation result showed that 12 independent variables namely age, education, family size, farm size, family annual income, savings, group cohesion, credit availability, credit utilization, credit repayment, acceptance of loan received condition and attitude towards Dipshikha had significant relationship with the extent of effectiveness of Dipshikha GBA towards poverty reduction. But it was observed that the FMMR results were misleading due to the existence of interrelationships among the independent variables.

Therefore, to avoid the above mentioned misleading results the method of step wise multiple regression (SMR) was employed in order to determine the best explanatory variables and 14 independent variables were fitted together in SMR analysis. The output showed that out of 14 variables only 3 independent variables namely utilization of credit, annual income and attitude towards Dipshikha were entered into the regression equation to describe the relationship with the extent of effectiveness of GBA. The equation of the fitted model is given below;

$$\text{Extent of effectiveness of GBA} = 8.61123 + 0.98481 \text{ Credit utilization} +$$

¹Significant at 0.01 level

The data presented in table 4.43 showed that the multiple R and R² values were 0.672 and 0.452 respectively. The adjusted R² value was 0.435 and the corresponding F-ratio was 26.390. Since the P-value in the ANOVA table was less than 0.01, there was a statistically significant relationship between the variables at the 99.0% confidence level. It means the variables annual income, credit

$$0.2133572\text{Attitude} + 0.0000707507^{**}\text{Annual Income}$$

The remaining 11 variables i.e. Involvement with Dipshikha, age, education, family size, farm size, savings, group cohesion, credit availability, credit repayment, acceptance of loan received condition and training exposure were not fitted into the regression equation.

Table 4.43 Summary of Step-wise Multiple Regression Analysis of the Respondents' Fourteen Selected Independent Variables with extent _____ of effectiveness of GBA by using Linear Step-wise Technique

Parameter	Unstandardized Coefficients		Standardized partial 'b' Coefficients	F - value	P-Value
	Partial 'b' coefficients	Standard Error			
Effectiveness of GBA	8.611	2.98		26.390**	0.005
Utilization of credit	1.318	0.244	0.472	41.491**	0.000
Annual Income	0.000	0.000	0.218	34.513**	0.000
Attitude towards Dipshikha	0.213	0.98	0.182	9.694*	0.028
Multiple R = 0.672 R-squared = 0.452 Adjusted R-squared = 0.435 Standard Error of Est. = 4.820					

The R-Squared statistic indicated that the model as fitted explained 45.20 percent of the variability in effectiveness of GBA. The adjusted R-squared statistic, which was more suitable for comparing models with different numbers of independent variables, was 43.50 percent i.e. the model explained 43.50 percent of the total variation in effectiveness of GBA towards poverty reduction. But since the partial regression coefficient of 3 variables formed the equation and were significant, it might be assumed that whatever contribution was there, it was due to those 3 variables. The three independent variables contributory to the effectiveness of GBA towards poverty reduction of the respondents have been briefly discussed below in order to their predicative importance:

4.3.1.1 Utilization of Credit

In order to predictive ability, the most important contributory factor to the effectiveness of group based

utilization and attitude towards Dipshikha had positive contribution to the effectiveness of group based approach. Since, the units of measurement were different, unstandardized partial 'b' coefficients were converted into standardized partial 'b' coefficient in order to make variables unit free and put into a meaningful comparison.

2Significant at 0.05 level.

approach towards poverty reduction was utilization of credit. Since the P value was less than 0.01, there is a significant relationship between utilization of credit and the effectiveness of GBA towards poverty reduction. The partial 'b' coefficient showed that the influence was in the positive direction which indicates that the effectiveness of GBA towards poverty reduction of the respondents increased with the increase of utilization of credit. The finding was supported by Khan (2006). It was general expectation that utilization of credit in productive purpose led the borrowers to reduce their poverty by earn more money. The findings revealed that more the utilization of credit, more the effectiveness of group based approach, more the reduction of poverty.

Annual Income

Annual income of the respondent families was the second contributory factor to the effectiveness of GBA of Dipshikha towards poverty reduction. The partial 'b' coefficient of annual income indicated the influence of this factor was positive towards the effectiveness of GBA on poverty reduction. Since the P value was less than 0.05, there is a significant relationship between the effectiveness of GBA on poverty reduction and annual income of the respondents. The findings indicate that the respondents having more annual income were likely to have more effectiveness of GBA towards poverty reduction which is correspondence the result of Quadir (1981) and Khan (2006). The findings also led support to the general expectation that the family having more income should have higher performance through GBA on poverty reduction. Increase of annual income of the poor families is one of the important contributory factors to reduce poverty. In this investigation the annual income of the respondent families changed significantly between before joining Dipshikha and after joining Dipshikha period (Table 4.17) and the poverty level reduced significantly between these two periods as well It means the effectiveness of Dipshikha GBA on poverty reduction increased with the increase of income of the respondents.

Attitude towards Dipshikha

In order to predictive ability, the third important contributory factor to the effectiveness of GBA towards poverty reduction was attitude towards Dipshikha. Since the P value was less than 0.05, there is a significant relationship between utilization of credit and the effectiveness of GBA towards poverty reduction at 95 percent confidence level. The partial 'b' coefficient showed that the influence was in the positive direction which indicates that the effectiveness of GBA towards poverty reduction of the respondents increased with the increase of attitude towards Dipshikha. The finding was supported by Khan (2006). It was general expectation that attitude towards Dipshikha led the beneficiaries to take active participation in Dipshikha activities which contribute to reduce their poverty.

43.2 Contribution of selected characteristics of the respondents to the extent of effectiveness of family development approach of Dipshikha towards poverty reduction.

AFMMR was initially employed with the selected 14 independent variables of FDA. The findings from correlation result demonstrated that the independent variables (1) involvement with Dipshikha, (2) farm size, (3) family annual income, (4) savings, (5) Implementation of Family development plan, (6) credit availability, (7) credit utilization, (8) credit repayment, (9) acceptance of loan received condition, (10) training exposure and (11) attitude towards Dipshikha had significant relationship with the extent of effectiveness of Dipshikha FDA towards poverty reduction. But it was observed that the FMMR results were misleading due to the existence of interrelationships among the aidependent variables.

Therefore, to avoid the above mentioned misleading results, the method of SMR was run in order to determine the best explanatory variables and 14 independent variables were fitted together in SMR analysis. The computed data showed that out of 14 variables only

6 independent variables namely Implementation of family development plan, involvement with Dipshikha, savings of the family, credit availability, acceptance of loan received condition and family size were entered into the regression equation to describe the relationship with the extent of effectiveness of FDA towards poverty reduction. The equation of the fitted model is given below;

Extent of effectiveness of FDA = 0.369056 - 0.896559* Family Size + 2.74704**

Involvement with Dipshikha + 0.000549091** Savings +

0.000277521* Credit availability + 0.610763* condition of

loan received + 1.74893** Implementation of family plan Since the P-value in the ANOVA table is less than 0.01, there is a statistically significant relationship between the variables at the 99.0% confidence level.

The remaining 8 variables i.e. age, education, annual income, farm size, credit utilization, credit repayment, training exposure and attitude towards Dipshikha were not fitted into the regression equation.

Table 4.44 Summery of Step-wise Multiple Regression Analysis of the Respondents' Fourteen Selected Independent Variables with the extent of effectiveness of FDA by using Linear Step-wise Technique

Parameter	Unstandardized Coefficients		Standardized partial 'b' Coefficients	F - value	P-Value
	Partial coefficients	'b' Standard Error			
Effectiveness of FDA	0.369	3.586		18.138**	0.918
Family Size	-0.897	0.395	-0.172	0.020*	0.026
involvement with Dipshikha	2.747	0.644	0.218	15.385**	0.000
Savings	0.001	0.000	0.238	19.816**	0.002
Credit availability	0.000	0.000	0.167	15.718*	0.039
condition of loan received	0.611	0.234	0.210	12.186*	0.011
implementation of family plan	1.749	0.417		49.173**	0.000
Multiple R - 0.734					
Adjusted R-squared 0.539					
Standard Error of Est. 4.95173					
* Significant at 0.05 level					
**Significant at 0.01 level					

The data contained in table 4.44 showed that the multiple R and R^2 values were 0.734 and 0.539 respectively. The adjusted R^2 value was 0.509 and the corresponding F-ratio was 18.138. It revealed that the variables implementation of family plan, involvement with Dipshikha, savings, credit availability, acceptance of loan received condition and family size had significant relationship with the extent of effectiveness of FDA towards poverty reduction. Family size had a negative contribution while the rest five variables had positive contribution to the effectiveness of FDA. Since, the units of measurement were different, unstandardized partial 'b' coefficients were converted into standardized partial 'b' coefficient in order to make variables unit free and put into a meaningful comparison.

The R-Squared statistic indicated that the model as fitted explained 53.90 percent of the variability in extent of effectiveness of FDA. The adjusted R-squared statistic, which was more suitable for comparing models with different numbers of independent variables, was 50.90 percent i.e. the model explained 50.90 percent of the total variation in effectiveness of FDA towards poverty reduction. But since the partial regression coefficient of 6 variables formed the equation and were significant, it might be assumed that whatever contribution was there, it was due to those 6 variables.

The six independent variables contributory to the extent of effectiveness of FDA towards poverty reduction of the respondents have been briefly discussed below in order to their predicative importance:

4.3.2.1 Implementation of Family Development Plan

In order to predictive ability, the most important contributory factor to the extent of effectiveness of FDA towards poverty reduction was implementation of family development plan. The partial 'b' coefficient of implantation of family plan showed that the influence was in the positive direction and as the P value is less than 0.01, there was a significant relationship at 99 percent confidence level between implementation of family development plan with the extent of effectiveness of FDA towards poverty reduction (Table 4.44). It indicated that the effectiveness of FDA towards poverty reduction of the respondents increased with the increase of implementation of family development plan. It was general expectation that implementation of family development plan led the beneficiaries to reduce their poverty in FDA.

The respondent families initiated their economical and other social activities as per their family development plan, so higher the implementation of family development plan of the respondents, higher the effectiveness of FDA on poverty reduction. Similarly lower the implementation of family development plan of the beneficiaries of Dipshikha lower was the effectiveness of FDA on poverty reduction.

Involvement with Dipshikha

The second important contributory factor to the effectiveness of FDA towards poverty reduction was involvement with Dipshikha. The partial 'b' coefficient indicated that the influence was in positive direction and since the P value was less than 0.01, there was a significant relationship between involvement with Dipshikha and effectiveness of FDA towards poverty reduction at 99 percent

confidence level (table 4.44). The data revealed it higher the involvement with Dipshikha under FDA of the respondents higher was the effectiveness of FDA towards poverty reduction. The finding was in agreement with the studies conducted by Rahaman (2005) and Alam (2001). The findings also led support to the general expectation that more involvement of the beneficiaries with Dipshikha activities should have reduced more poverty through the effective application of FDA.

Savings of the family

Next to involvement with Dipshikha, savings of the respondent families was the third important contributory factor to the effectiveness of FDA. Since the P value (0.002) is less than 0.01, there was a significant relationship between the effectiveness of FDA towards poverty reduction and the savings of the families at 99 percent confidence level (table 4.44). The partial 'b' coefficient indicated that savings of the families had positive influence to the effectiveness of FDA towards poverty reduction. It means the effectiveness of FDA towards poverty reduction increased with the increase of savings of the families which is corresponded with the studies of Islam (2001), Ali (2003) and Rahaman (2005).

The families having more savings, have more chance to get more credit as per loan condition of FDA and it would lead them to implement more income generation activities from family development plan. So the effectiveness of FDA towards poverty reduction depends on savings of the families.

Credit Availability

Credit availability of the respondents was the fourth contributory factor to the effectiveness of FDA towards poverty reduction and the partial 'b' coefficient indicates that the influence was in the positive direction. Since the P value is less than 0.05, there was a significant relationship between credit availability of the respondents and the effectiveness of FDA towards poverty reduction at 95 percent confidence level (table

4.44) . The computed value indicated that increase of credit availability of the respondents increased the effectiveness of FDA towards poverty reduction. The findings from the studies of Khandker (1995), Begum (1995), Khan (2006) and Khan (2006) irted the present finding of the study. So it could be concluded that more credit liability of the respondents created more effectiveness of FDA towards poverty 'action.

Acceptance of loan received condition

The fifth contributory factor to the effectiveness of FDA towards poverty reduction was acceptance of loan received condition of the respondents. Since the P value was less than

0.05, there was a significant relationship between acceptance of loan received condition and the effectiveness of FDA towards poverty reduction (Table 4.44). The partial 'b' coefficient showed the positive influence on effectiveness of FDA. The finding indicated that higher the acceptance of loan received condition higher was the effectiveness of FDA on poverty reduction. The result of the study led support to the general expectations.

The acceptance of loan received condition made the respondents more confident to get more credit which led them to implement their IGA activities as per their development plan. They could earn more by the implementation of planned activities in order to reduce poverty. So the researcher concluded that the effectiveness of FDA towards poverty reduction increased with the increase of acceptance of loan received condition.

Family size

In order to predictive ability, the sixth contributory factor to the effectiveness of FDA towards poverty reduction was family size. The partial 'b' coefficient of family size showed that the influence was in the negative direction and since the P value is less than

0.05, there was a significant relationship at 95 percent confidence level between family size of the respondents and the effectiveness of FDA towards poverty reduction (Table 4.44). It indicated that the effectiveness of FDA towards poverty reduction of the respondents increased with the decrease of family size. It means the FDA towards poverty reduction would be effective with the small families. The result is corresponded the findings of Kaur and Punia (1988).

The majority respondents had small family under FDA which gave them the opportunity to organize their family development plan properly in order to active participation in Dipshikha activities. The small families had opportunity to save more money which made available credit as per loan received condition in order to implement their planned activities to earn more money. Similarly the large families had less chance to save money as they had more expenditure to maintain the families. So the researcher concluded that the extent of effectiveness of FDA depends on small family.

CHAPTER V

Summary of the Findings, Conclusion and Recommendations

This chapter is designed to discuss the summary of findings, conclusion and recommendations for policy formulation and further study. The chapter is divided into three sections. In the first section, summary of findings is discussed in relation with selected characteristics of the respondents, changes of situation between pre and post Dipshikha period under both approaches and the contributory factors of changes. The conclusion of the study has been discussed in second section and recommendations for policy implication and further study has been discussed in third section.

5. Summary of the Findings

As the study was carried out to compare the extent of effectiveness of group based approach and family development approach of Dipshikha towards poverty reduction, two Dipshikha project areas in Tarash Upazila under Sirajganj district and Bochaganj Upazila under Dinajpur district was the locale of the study. A sample of 100 respondents from each approach was drawn from a population of 2,255. However, the findings from the study are summarized below;

5.1 Selected Characteristics of the respondents

Fourteen individual characteristics of the farmers from each approach were selected for investigation in this study. The findings of these characteristics of the respondents are summarized below:

5.1.1 Involvement with Dipshikha

In FDA, The involvement with Dipshikha of the respondents ranged from 2 to 5 years and the average was 3.49 years with a standard deviation of 0.78. The highest proportion i.e. 58 percent of the respondents had medium involvement with Dipshikha and 42 percent of the respondents had low involvement (table 4.2). None of them had high involvement.

In GBA, The involvement with Dipshikha of the respondents ranged from 3 to 8 years and the average was 6.61 years with a standard deviation of 0.85. The largest proportion (89 percent) of the respondents had high involvement with Dipshikha compared to 10 percent of medium involvement and the rest 1 percent had low involvement (Table 4.2).

5.1.2 Age

In FDA, the age of the respondents ranged from 18 to 55 years with a mean of 32.03 years and the standard deviation of 7.83. The highest proportions i.e. 77 percent of the respondents were young compared to 21 percent of the being middle aged and the rest 2 percent were old (table 4.3).

In GBA, the age ranged from 21 to 70 years with an average 36.44 years and the standard deviation of 10.83. The majority 64 percent of the respondents belonged to the young aged category. About one fourth of the respondents were found to be middle aged and a slight more than one tenth were old aged (Table 4.3).

5.1.3 Education

In FDA, The education level of the respondents ranged from 0 to 9. The average education level was 1.28 with a standard deviation of 1.96. The largest proportion (77 percent) could sign their name and address. Only 4 percent completed secondary level of education and 6 percent were found illiterate. The rest 13 percent had primary level of education (table 4.4).

In GBA, The education level of the respondents ranged from 0 to 10. The average education level was 2.16 with a standard deviation of 2.97. The highest number of respondents (70 percent) could sign their name and only 2 percent of the total respondents were illiterate. Thirteen percent of the respondents had completed primary level of education and only 15 percent had secondary level of education (table 4.4).

5.1.4 Family Size

In FDA, The number of members of the family of the respondents ranged from 1 to 7 with an average 4.30 and with the standard deviation of 1.35. The majority proportion
i. e. 56 percent of the respondents was found to be small family category in comparison to

40 percent of medium family size and the remaining 4 percent were of large family category (table 4.5). In GBA, The number of family members ranged from 2 to 17 with an average 4.71 and a standard deviation of 2.52. The lowest proportion i.e. 12 percent of the respondents belonged to the large family category compared to 35 percent of medium category. The rest 53 percent were found to be small family category (table 4.5).

5.1.5 Farm Size

In FDA, The farm size of the respondents ranged from 0 to 2.0598 hectares and the average farm size was 0.25 hectares with a standard deviation of 0.30. Forty eighty percent of the respondents belonged to marginal category while, small and landless farm size were 39 percent and 10 percent respectively. Only 3 percent of the respondents had medium farm size (table 4.6).

In GBA, The farm size of the respondents ranged from 0 to 4.4110 hectares and the average was 0.42 hectares with a standard deviation of 0.71. Thirty six percent of the respondents had small farm size followed by 32 percent, 19 percent and 11 percent for landless, marginal and medium farm size respectively. Only 2 percent of the respondents under GBA had large farm size (table 4.6).

5.1.6 Annual Income

In FDA, Annual income ranged from Tk. 9,700.00 to Tk. 153,000.00 with an average of Tk. 40,880.76 and a standard deviation of 23541.29. More than half of the respondents (52%) were found to be very poor in comparison to 24 percent of middles class. Eighteen percent of the respondents were poor and the rest were found moderate poor (table 4.7).

In GBA, annual income of the respondents ranged from Tk. 10,100.00 to Tk. 192,000.00 with an average of Tk. 50,166.80 and a standard deviation of 36,368.77. The maximum 43 percent of the respondents were very poor followed by 12 percent poor and moderate poor equally while, 26 belonged to middle class (table 4.7).

4.1.7 Savings

In FDA, The savings accumulation of the respondents ranged from Tk. 0 to Tk. 14,000. The average savings accumulation was Tk. 2,298.52 with a standard deviation of 3058.50. In GBA, The savings accumulation of the respondents ranged from Tk. 0 to Tk. 12,000 and the average was Tk. 1,977.78 with a standard deviation of 1807.51. about fourth fifth of the respondents in both approaches had small saving i.e. 79 percent in FDA and 85 percent in GBA. The

lowest proportion (4 percent) of the respondents in FDA had no savings while, 6 percent of the respondents in GBA could not accumulated any savings. Only 1 percent of the respondents from GBA accumulated large saving where as, 6 percent from FDA had large amount of savings (table 4.8).

5.1.8 Group Cohesion

The score of group cohesion of the respondents ranged from 0 to 10 with an average of 3.10 and a standard deviation of 2.49. The largest proportion i.e. 61 percent of the respondents belonged to category of low cohesion followed by 27 percent having medium cohesion while, only 12 percent of the respondents fell under high cohesion categories (table 4.9).

5.1.9 Implementation of Family development plan

The scores of implementation of family development plan of the respondents under family development approach ranged from 0 to 5. The average was 3.44 with a standard deviation of 1.57. The majority proportion i.e. 56 percent of the respondents belonged to high implementation category followed by 29 percent had medium implementation of family development plan. Only 15 percent of the respondents were found be low implementation category (table 4.10).

5.1.10 Credit Availability

The credit availability of the respondents ranged from Tk. 600 to Tk. 28,000 and the average credit availability was Tk. 5,276.66 with a standard deviation of 4,260.11 for FDA. The maximum 47 percent of the respondents of FDA belonged to small credit holder category while, medium and large credit holders were 40 percent and 13 percent respectively (table 4.11).

In GBA, The credit availability of the respondents ranged from Tk. 0.00 to Tk. 55,000.00 and the average was Tk. 4,885.00 with a standard deviation of 5632.63. The majority proportion i.e. 58 percent of the respondent had small credit followed by 34 percent and 8 percent had medium and large credit availability respectively (table 4.11).

In FDA, The utilization of credit of the respondents ranged from 0 to 5 with an average 4.62 and a standard deviation of 0.86. The highest 80 percent of the respondents had utilized their credit in productive purpose while, the lowest only 1 percent did not utilize their credit in a proper way. Less than one fifth of the respondents (18%) were found under medium category in comparison to 1 percent of low utilization group (table 4.12).

In GBA, The utilization of credit ranged from 0 to 5 with an average of 2.11 and a standard deviation of 2.30. a slight more than half (51%) respondents did not utilize their credit in productive purpose while, only 33 percent belonged to high utilization category. Only 7 percent fell under low utilization category compared to 9 percent of medium category (table 4.12).

5.1.12 Credit Repayment

The credit repayment scores of the respondents ranged from 1 to 2 and 0 to 2 for FDA and GBA respectively. The average credit repayment score was 1.85 with a standard deviation of 0.35 for FDA and it was 0.92 for GBA with standard deviation 0.97. The highest 85 percent respondents of family development approach repaid their credit regularly while, 15 percent were irregular. None of them were defaulter in FDA where as, the majority 51 percent of the respondents from GBA were defaulter and 43 percent were regular in credit repayment. Only 6 percent of the respondents were irregular in credit repayment (table 4.13).

5.1.13 Acceptance of Loan Received Condition

In FDA, the acceptance of loan received condition score ranged from 6 to 17. The average score was 10.63 with a standard deviation of 2.43. The majority i.e. 73 percent of the respondents belonged to the category of medium acceptance compared to 7 percent of low category and the rest 20 percent fell under high acceptance category (table 4.14).

In GBA, The acceptance of loan received condition score ranged from 5 to 15 and the average was 9.47 with a standard deviation of 2.00. The highest 86 percent of the respondents fell under medium category while, only 8 percent of the respondents highly accepted the loan received condition. The remaining 6 percent were found under low category (table 4.14).

5.1.14 Training Exposure

The training exposure of the respondents ranged from 4 to 16 days with an average 6.67 days and a standard deviation of 2.57. More than one half of the respondents (57%) under FDA belonged to very low training category while, low and medium categories were 39 percent and 4 percent respectively. None of them were fell under 'no' or 'high' training categories.

In GBA, the training exposure ranged from 0 to 35 days with an average 4.66 days and a standard deviation of 7.03. The highest proportion (40%) had very low training followed by 37 percent, 14

percent and 5 percent for no training, low training and medium training respectively. Only 4 percent respondents had high training exposure.

5.1.15 Attitude towards Dipshikha

In FDA, the scores against attitude towards Dipshikha ranged from 19 to 39. The average score was 30.77 with a standard deviation of 5.36. In GBA, The scores against attitude towards Dipshikha ranged from 15 to 40 and the average was 30.66 with a standard deviation of 5.46. None of the respondents from both approaches had low attitude towards Dipshikha. The overwhelming majority of the respondents (74% and 75%) from FDA and GBA respectively had high attitude while, only 26 percent from FDA and 25 percent from GBA had medium attitude towards Dipshikha.

5.2 Extent of effectiveness of Dipshikha (i) Group based Approach and (ii) Family Development Approach towards Poverty Reduction

5.2.1 Changes in Annual Income

Increase of annual income ranged from 2.70 percent to 400 percent in FDA and from 0 to 279.47 percent in GBA. The mean annual income changed was 97.46 percent with a standard deviation of 85.99 under FDA while, it was 79.42 percent with standard deviation 62.03 in GBA which indicated that a moderate changes occurred between pre and post Dipshikha period under both approaches.

The very poor families reduced by 45 percent after involvement with Dipshikha while poor, moderate poor and middle class families were increased by 16 percent, 5 percent and 24 percent respectively under FDA. On the other hand, very poor families reduced by 32 percent under GBA and middle class families were increased by 20 percent. Poor and moderate poor were also increase by 5 percent and 7 percent respectively.

5.2.1.1 Beneficiaries According to the Poverty Line by Income

The respondents under both the approaches were classified on the basis of their annual per capita income by using Foster Greer Thorbecke (FGT) index and poverty line was taken as the upper poverty line of Rajshahi Division Tk. 9,197.76 (BSS, 2005). Ninety three percent of the respondents under FDA

were lived below poverty line before involvement with Dipshikha while it was only 54 percent after involvement with Dipshikha. On the other hand, 77 percent of the respondents under GBA were under poverty line before involvement with Dipshikha which was reduced by 31 percent after involvement with Dipshikha. The result showed that the changes in annual income occurred more rapidly under FDA than GBA, as the duration of involvement of the respondents under GBA were more than FDA.

5.2.2 Changes in Expenditure on Food and Nutrition

The increase of expenditures on food and nutrition ranged from 2.37 percent to 290.80 percent in FDA while it was ranged from 0 percent to 247.33 percent in GBA. The average changes were 61.67 and 62.08 with a standard deviation of 55.84 and 46.98 in FDA and GBA respectively which indicated that high changes had occurred in expenditures on food and nutrition under both approaches.

The respondents under less expenditure category of FDA were reduced by 43 percent while it was reduced by 28 percent under GBA. During the same time, the respondents of medium and high expenditure category were increased by 22 percent and 21 percent under FDA while it was 6 percent and 22 percent under GBA respectively.

5.2.3 Changes in Expenditures on Health, Education and others

The changes in expenditures on health, education and others ranged from 0 to 1592 percent in FDA and it ranged from 0 to 1272.73 percent in GBA. The average change was 154.22 percent in FDA and 173.23 percent in GBA. The average changes indicated that extreme change was occurred in both approaches concerning expenditures on health, education and others.

The respondents under less expenditure category were decreased by 40 percent under FDA during post Dipshikha period compared to pre Dipshikha period. This 40 percent was distributed to other category. So that, medium expenditure category was increased by 4 percent and high expenditure category by 36 percent. On the other hand in GBA, the respondents under less expenditure category were decreased by 33 percent in post Dipshikha period which was distributed to medium (4 percent) and high (29 percent) expenditure categories

5.2.4 Changes in Land Assets

The changes in amount of land assets ranged from 0 to 459 decimal in FDA and it ranged from 0 to 493 decimal in GBA. The average change was 13.13 with a standard deviation of 50.46 under FDA and it was 13.76 with standard deviation 53.92 in GBA. The high standard deviation in both approaches indicated that the increase of land assets were not equally distributed among the members and the

average change indicated that moderate change was occurred in both approaches concerning land assets after involvement with Dipshikha.

The landless families decreased by 5 percent in post Dipshikha period compared to pre Dipshikha period under FDA. This 5 percent were distributed to other categories by 2 percent in marginal, 2 percent in small and 1 percent in medium category. None of the respondents fell under large category in pre Dipshikha period and post Dipshikha period as well. On the other hand, in GBA, landless families decreased by 8 percent which were distributed to the other categories by 2 percent in marginal, 3 percent in small, 2 percent in medium and 1 percent in large category.

5.2.5 Changes in Productive Assets other than Land

The changes in value of productive assets ranged from 0 to 1250 percent in FDA and it ranged from 0 to 697.67 percent in GBA. The average change was 99.23 percent with a standard deviation of 212.26 under FDA and it was 71.83 with a standard deviation of 105.81 in GBA. The average change indicated that high change was occurred in both approaches concerning productive assets after involvement with Dipshikha.

The small assets holder under FDA reduced by 16 percent while the medium and the large assets holders increased by 4 percent and 12 percent respectively between pre and post Dipshikha period. On the other hand, in GBA, the percent of small and medium assets holder reduced by 19 percent in post Dipshikha period compared to pre Dipshikha period which was distributed to the large asset holders category.

5.2.6 Changes in Non-productive Assets

The changes in value of productive assets ranged from 0 to 175.44 percent in FDA and it ranged from 0 to 250 percent in GBA. The average change was 35.66 percent with a standard deviation of 37.67 under FDA and it was 36.41 with standard deviation 43.29 in GBA. The average change indicated that moderate change was occurred in both approaches concerning non-productive assets after involvement with Dipshikha.

The small assets holders under FDA reduced 12 percent while the medium and large assets holder increased by 7 percent and 5 percent respectively between pre and post Dipshikha period. On the other hand, in GBA, the percent of small assets holders reduced by 8 percent and no change occurred in medium assets holders between pre and post Dipshikha period. The large asset holders increased by 8 percent after involvement with Dipshikha.

5.2.7 Changes in Housing Condition

The change scores in housing condition of the respondents ranged from 0 to 9 in FDA and the changes ranged from 0 to 8 in GBA. The average change was 1.14 with a standard deviation of 2.174 under FDA and the average was 1.12 with a standard deviation of 1.665 in GBA. The average change indicated that little change was occurred in both approaches concerning the housing condition of the respondents after involvement with Dipshikha.

The majority proportion of the respondents under both the approaches still small house holders. The small house holders under FDA reduced by 17 percent from 74 to 57 percent while, the medium house holders and the large house holder increased from 26 percent to 41 percent and 0 percent to 2 percent

respectively between pre and post Dipshikha period. On the other hand, in GBA, the percent of small house holders reduced by 13 percent from 71 to 58 percent and the medium house holders and the large house holder increased from 20 percent to 28 percent and 9 percent to 14 percent respectively between pre and post Dipshikha period.

5.2.8 Changes in Drinking Water Sources

The change scores in drinking water source of the respondents ranged from 0 to 2 in FDA and it ranged from 0 to 1 in GBA. The average change was 0.50 with a standard deviation of 0.52 under FDA and the average was 0.31 with a standard deviation of 0.46 in GBA. The average change indicated that little change was occurred in both approaches concerning drinking water source of respondents after involvement with Dipshikha.

Hundred percent of the respondents under both the approaches drink tube well water either from their own tube well or from neighbor's tube well in post Dipshikha period. The overwhelm majority proportion of the respondents used their own tube well water under both approaches in post Dipshikha period compared to pre Dipshikha period. None of them used pond water in post Dipshikha period.

5.2.9 Changes in Sanitation

The change scores in sanitation condition of the respondents ranged from 0 to 3 in both approaches. The average change was 1.30 with a standard deviation of 1.34 under FDA and the average was 1.10 with a standard deviation of 1.40 in GBA. The highest proportion (46% and 60%) of the respondents under both approaches had no change in their sanitation condition after involvement with Dipshikha while, 33 percent of the respondents had high change in their sanitation condition after involvement with Dipshikha under both approaches.

The user of sanitary latrine with fence increased by 46 percent after involvement with Dipshikha in FDA while, it was increased by 35 percent under GBA. Still 51 percent of the respondents under GBA use open places for sanitation while it is only 13 percent in FDA.

5.2.10 Changes in Awareness on Health

The change scores in health awareness of the respondents ranged from 0 to 8 in both approaches. The average change was 4.71 with a standard deviation of 1.89 under FDA and the average was 4.52 with a standard deviation of 2.02 in GBA.

The overwhelming majority of the respondents (83 percent and 75 percent) under both approaches had

high awareness on health after involvement with Dipshikha compared to before involvement with Dipshikha. The respondents under low awareness category were reduced by 73 percent and 75 percent under FDA and GBA respectively.

4.2.11 Changes in Awareness on Social Issues

The change scores in social awareness of the respondents ranged from 0 to 5 in both approaches. The average change was 2.24 with a standard deviation of 1.30 under FDA while, the average was 2.78 with a standard deviation of 1.49 in GBA. The average change under both approaches pointed that a high change had occurred in the life of the respondents concerning social awareness after involvement with Dipshikha.

The respondents fell under low and medium awareness categories reduced 45 percent and 5 percent respectively while, high awareness category increased 50 percent after involvement with Dipshikha in FDA. On the other hand, 76 percent of the respondents were in high awareness category after involvement with Dipshikha while, it was only 1 percent before involvement with Dipshikha under GBA. The respondents under low and medium awareness categories reduced as well after involvement with Dipshikha under GBA.

5.2.12 Changes in Women Empowerment

The change scores in women empowerment of the respondents ranged from 0 to 6 in FDA and 0 to 7 in GBA. The average change was 2.21 with a standard deviation of 1.81 under FDA while, the average was 2.36 with a standard deviation of 1.76 in GBA.

The percent of high empowered women increased by 18 percent after involvement with Dipshikha compared to before involvement in FDA while, it was increased by 28 percent in GBA. The percent of low empowered women reduced from 69 percent to 21 percent and 60 percent to 19 percent in FDA and GBA respectively. The medium empowered women increased in post Dipshikha period under both approaches.

5.3 The extent of effectiveness of family development approach and group based approach of Dipshikha on socio-economic condition of respondent families

The score of changes on socio-economic condition of the respondents ranged from 6 to 40 under FDA and the average was 21.35 with a standard deviation of 7.07. The score under GBA ranged from 7 to 37 and the average was 20.78 with a standard deviation of 6.41. The average score showed

that a medium changes occurred on the respondents under both approaches.

The largest proportion of the respondents from the both approaches had medium changes after involvement with Dipshikha i.e. from 63 percent in FDA and 68 percent in GBA. Twenty seven percent of the respondents from both the approaches had low changes after involvement with Dipshikha compared to before involvement. Only 10 percent from FDA and only 5 percent from GBA had high change in their socio-economic condition after involvement with Dipshikha.

5.4 Contributions of selected characteristics of the respondents to the effectiveness of Dipshikha Group Based Approach and Family Development Approach

The independent variables in isolation will not give a comprehensive picture of the effects of independent variables on effectiveness of Dipshikha approaches. The different characteristics of the respondents may interact together to contribute a combined effect on the effectiveness of Dipshikha group based and family development approach. Keeping this fact in view, step wise linear multiple regression analysis was used separately for each approach to assess the contributions of the independent variables to the effectiveness of (i) group based approach and (ii) family development approach of Dipshikha.

5.4.1 Contribution of selected characteristics of the respondents to the extent of effectiveness of group based approach of Dipshikha towards poverty reduction.

The method of step wise multiple regression was employed in order to determine the best explanatory variables. The output showed that out of 14 variables only 3 independent variables namely utilization of credit, annual income and attitude towards Dipshikha were entered into the regression equation to describe the relationship with the extent of effectiveness of GBA. The multiple R and R^2 values were 0.672 and 0.452 respectively. The adjusted R^2 value was 0.435 and the corresponding F-ratio was 26.390. Since the P-value in the ANOVA table was less than 0.01, there was a statistically significant relationship between the variables at the 99.0% confidence level. It means the variables annual income, credit utilization and attitude towards Dipshikha had positive contribution to the effectiveness of GBA and the effectiveness of the GBA increased with the increase of credit utilization, annual income and attitude towards Dipshikha.

5.4.2 Contribution of selected characteristics of the respondents to the extent of effectiveness of family development approach of Dipshikha towards poverty reduction.

The method of step wise multiple regression was run in order to determine the best explanatory variables. The computed data showed that out of 14 variables only 6 independent variables namely Implementation of family development plan, involvement with Dipshikha, savings of the family, credit availability, acceptance of loan received condition and family size were entered into the regression equation to describe the relationship with the extent of effectiveness of FDA towards poverty reduction. The multiple R and R^2 values were 0.734 and 0.539 respectively. The adjusted R^2 value was 0.509 and the corresponding F-ratio was 18.138. It revealed that the variables implementation of family plan, involvement with Dipshikha, savings, credit availability, acceptance of loan received condition and family size had significant relationship with the extent of effectiveness of FDA towards poverty reduction. Family size had a negative contribution while the rest five variables had positive contribution to the effectiveness of FDA. The effectiveness of FDA towards poverty reduction increased with the decrease of family size but it increased with the increase of implementation of family plan, involvement with Dipshikha, savings, credit availability and acceptance of loan received condition.

5.5 Summery of Hypotheses Testing

- The variables utilization of credit, annual income and attitude towards Dipshikha had positive contribution to the extent of effectiveness of GBA of Dipshikha. But involvement with Dipshikha, age, education, family size, farm size, family savings, group cohesion, repayment of credit, condition of loan received and training exposure had no contribution to the effectiveness of GBA of Dipshikha.
- Implementation of family development plan, involvement with Dipshikha, savings of the family, credit availability and acceptance of loan received condition had positive contribution and family size had negative contribution to the effectiveness of FDA of Dipshikha. But the other variables age, education, farm size, annual income, utilization of credit, repayment of credit, training exposure, and attitude towards Dipshikha had no contribution to the effectiveness of FDA of Dipshikha.

- The difference between the situation before involvement and after involvement with Dipshikha in relation with (1) annual income (2) Expenditure for food and nutrition (3) Expenditure for health, education and others (4) Land Assets (5) Productive assets other than land (6) Non-productive assets (7) Housing condition (8) Drinking water sources (9) Sanitation conditions (10) Awareness on health (11) Awareness on Social Issues and (12) Women empowerment were found under both the approaches at 99 percent significant level.
- There was no difference between the effectiveness of FDA and GBA of Dipshikha towards poverty reduction. On the basis of the findings of the study and the logical interpretation of their meaning in the light of other relevant facts made possible to draw the following conclusion by the researcher:
 - i) The largest proportion of the respondents (58%) had medium involvement with Dipshikha and the involvement with Dipshikha appeared as a contributory factor to the effectiveness of FDA towards poverty reduction while, 89 percent of the respondents from GBA had high involvement with Dipshikha but there was no relationship with the effectiveness of GBA. Findings indicated that after involvement with Dipshikha through FDA the socio economic condition of the respondents changed rapidly compared to the respondents of GBA. FDA took less time for socio economic changes of the respondents as they took initiatives as per their family development plan. Acceptance of loan received condition, availability of credit and family savings made socio economic changes rapidly under FDA.
 - ii) The overwhelming majority of the respondents under both the approaches were young to middle aged group. The young are the future of the country. They need different supports from the development organization to involve them in development process. From the findings it may be concluded that Dipshikha involved comparatively young families as their partner in order to involve young people in development process.
 - iii) Educated people are one of the most important pillars of a nation. Education initiates people to involve in development process. But majority proportion (83% and 72%) of the respondents in both the approaches almost illiterate which prevent participations in development process. The findings indicated that Dipshikha took initiatives through its literacy programme to teach the respondents at least their name and address.

iv) Majority of the respondents (96%) under FDA had small to medium family and the family size had a negative contribution to the effectiveness of FDA towards poverty reduction while 88 percent of the respondents had small to medium family under GBA but there was no significant relationship between family size and effectiveness of GBA. Small families have different benefits like less cost involvement for living, opportunity to save more money, opportunity to implement family development plan properly etc. therefore, it may concluded that the improvement of livelihood condition of the poor people may be increased through FDA those who have small family.

Majority proportion (54%) of the respondents in FDA were living in extreme poor condition while, it was 46 percent in GBA. The annual income of the respondents had positive contribution to the extent of effectiveness of GBA. Increase of annual income is one of the contributory factors for alleviation of rural poverty. The findings indicated that the socio economic condition of the poor people may be improved through the increase of annual income by proper utilization of credit under GBA.

The findings indicated that the families having more savings were more likely to have higher improvement of socio economic condition under FDA. The result showed that the respondents under FDA had more savings compared to GBA due to the savings policy of FDA. The poor people could save more if they have appropriate purpose or direction to use their savings and right to use it. The respondents under FDA saved money for their investment and they know why and how they would use their savings. But the respondents under GBA had weekly savings system but they don't have any access to their saving without prior approval of Dipshikha. It may be concluded that the saving policy under FDA of Dipshikha is better compared to the policy of GBA.

The largest proportion (61%) of the respondents had low group cohesion which indicated that the purposes of groups failed. Group was formed to create unity, shelter and to support each other for growing together. But the intensive adoption of individual credit system prevents to create cohesiveness within the members. More over, non availability and non utilization of credit made the respondents defaulter or irregular in credit repayment which prevent them to attend in group meetings. It may be concluded that there was no contribution of the group cohesion to the effectiveness of GBA.

The overwhelming majority (85%) of the respondents implemented their family development plan properly and it appeared as a contributory factor to the effectiveness of FDA towards poverty reduction. The findings indicated that the improvement of the socio economic condition of the poor people increased with the high implementation of family development plan. Plan is the prerequisite of any development initiatives. The NGOs had their own development plan but they failed to introduce it in root level. Dipshikha had taken initiatives and it was found as a most important contributory factors. Therefore, it may be concluded that Dipshikha started a new dimension in the development approach through adoption of family development plan.

The majority proportion (80%) of the respondents in FDA highly utilized their credit according to their development plan while, 51 percent of the respondents under GBA did not utilize any credit in productive purpose. The utilization of credit in productive purposes appeared as a contributory factor to the extent of effectiveness of GBA towards poverty reduction. It has a positive relationship with the socio economic development of the poor people. It may be concluded that the medium and high utilization of credit in productive purpose may create improvement of the economical condition of the poor people.

The overwhelming majority (85%) of the respondents of FDA repaid their credit installment regularly while, it was only 43 percent in GBA. The highest proportion (51%) of the respondents under GBA were defaulter which matched with non-utilization of credit (51%) in productive purposes under GBA as well. The findings of credit repayment were highly matched with the findings of credit utilization which indicated that there was a strong relationship between credit utilization and credit repayment under both the approaches.

The majority of the respondents (73% and 86%) under both the approaches opined the medium acceptance of loan received condition for FDA and GBA respectively but 20 percent of the respondents under FDA opined high acceptance of FDA credit policy. The loan received condition of FDA appeared as a positive contributory factor to the extent of effectiveness of FDA towards poverty reduction. It may be concluded that the loan received condition of FDA is more suitable for poor people compared to the policy of GBA. The findings of annual income, savings of the family, utilization of credit, availability of credit, repayment of credit showed as well that the FDA credit policy of Dipshikha is more fruitful for the improvement of the poor families.

The findings showed that 100% of the respondents with their family members received training from Dipshikha under FDA which changed their attitude, knowledge and skills towards development. It may be concluded that the approach itself created training facilities which helped the poor people to analyze their situation and gave the direction towards development.

The findings showed that 100 percent of the respondents had medium to high attitude towards Dipshikha under both the approaches. The attitude towards Dipshikha appeared as a positive contributory factor to the effectiveness of GBA towards poverty reduction. It may be concluded that the favorable attitude of the respondents towards Dipshikha improved the socio economic condition of the poor people under GBA.

On the basis of conclusions and on the present and past experiences, the following recommendations are formulated:

- i. Involvement with Dipshikha became a positive contributory factor towards poverty reduction in FDA. That means the degree of poverty reduction increased with the increase of involvement of beneficiaries with Dipshikha. So it is recommended that Dipshikha should continue its effort with the beneficiaries of FDA for a certain period of time which can prevent the vulnerability of the poor people. To sustain the socio economic improvement of the people follow up activities, motivational work, adoption of new technologies, support for different income generation activities and training support should be continued. Fund should be made available for keeping the beneficiaries involved with Dipshikha activities.
- ii. The family size of the respondents had a negative contribution to the effectiveness of FDA towards poverty reduction. Small is beautiful. It is, therefore, recommended that Dipshikha should give emphasis to continue its motivational work for keeping family small.
- iii. Plan directs people to achieve objectives. Almost all the NGOs of Bangladesh are working with the poor people on project basis. The NGOs are implementing their activities on the basis of their findings through PRA about the problems of the people and set their targets on the basis of available fund. But there are limited participations from the beneficiaries in project planning except problem identification. Family development plan of FDA offer participations of target beneficiaries in project planning, in project implementation and even in project monitoring and evaluation. On the other hand, implementation of family development plan has direct positive contribution to the improvement of socio economic development of the beneficiaries through FDA.

iv. It is, therefore, recommended that the development agencies and Dipshikha as well, should introduce the family development plan in their process and support the beneficiaries as per their plan. Dipshikha should continue to support as per development plan of the families.

Lack of capital is one the important weaknesses of the rural poor. Savings is one of the ways to form capital besides taking credits. Savings became a contributory factor to the effectiveness of FDA towards poverty reduction. Therefore, it is recommended that Dipshikha should enhance their motivational works for savings among the members. The member families should save money in house as well as in commercial bank as per their capacity. So that they have every access to their money and can use it as a capital with credit as per family development plan. It is also recommended that Dipshikha should not deposit any saving from beneficiaries in their account. Proper monitoring and guidance may increase the rate of savings.

Credit availability had high positive contribution to the effectiveness of FDA towards poverty reduction. Beside the accumulation of savings for investment, the member families need capital to start new IGAs as per their family development plan. It is, therefore, recommended that Dipshikha should provide available credit in time even two or three credits at a time if the families have the capacity to invest money as per plan. Dipshikha should guide the members to utilize credit according to their plan and provide necessary training. It is also recommended that Dipshikha should continue input supply instead of cash credit as the credit utilization and repayment seems to be high for this reason.

Acceptance of loan received condition appeared as contributory factor to the effectiveness of FDA towards poverty reduction. It is, therefore, recommended that Dipshikha should discuss time to time with beneficiaries on advantages of its credit policy and should try to find out the disadvantages and revise its policy according to the expectation of credit holders. Policy should appear as tools of development process and making the organization effective and sustainable. Policy should not prevent implementation of development plan of the family.

Increase of income is one the main indicators of development. Annual income of the respondents had a positive contribution to the effectiveness of GBA towards poverty reduction. The NGOs, working through GBA, should take much more initiatives to involve the members in different IGAs.

The poor families should have regular income from at least one source but they should have different sources of income. They should have provided available credit for income generation activities with flexible repayment conditions.

- viii. Utilization of credit had positive contribution to the effectiveness of GBA. But the findings showed that the credit utilization and credit repayment were very poor under GBA while it was highly satisfactory in FDA. It is, therefore, recommended that Dipshikha should introduce their FDA credit policy in GBA as the credit policy under FDA had showed potentials to the utilization of credit and repayment as well.
- ix. Attitude towards Dipshikha had positive contribution to the effectiveness of GBA. The study showed that the members had very positive attitude towards Dipshikha. Dipshikha should keep achieve attitude of the beneficiaries by supporting them in different activities.
- x. Approach of development is a crucial issue in order to create sustainable improvement among the poor people. The NGOs are working through GBA since long time. Family development approach is a very new concept but the findings from this study show that it has more potential to improve the socio-economic condition of the rural poor within a short time compared to GBA. It is, therefore, recommended that the development agencies should introduce this approach as a tool for poverty reduction. Dipshikha should transform its activities from GBA to FDA. It is, further, recommended that Dipshikha should cover more geographical area through FDA in order to reduce poverty rapidly from Bangladesh.

5.7.2 Recommendations for further research

- i. Comparative study of group based approach and family development approach of Dipshikha towards poverty reduction conducted for the first time under Dipshikha project area of Bochaganj and Tarash upazila in Dinajpur and Sirajganj district respectively. Findings of the study should be verified and compared by similar study in other Dipshikha project area.
- ii. The finding of the study indicated that time has not to come to say which approach is most effective towards poverty reduction. Therefore, it is recommended that research should be continued to identify the most effective approach towards poverty reduction.
- iii. Contribution of fourteen characteristics of the respondents to the extent of effectiveness of GBA and FDA towards poverty reduction was investigated in this study. Further research should be undertaken

to explore the contribution of other personal, social, economical and psychological characteristics of the respondents to the extent of effectiveness of GBA and FDA towards poverty reduction.

- iv. To assess the extent of effectiveness of GBA and FDA of Dipshikha towards poverty reduction twelve dimension of socio economic condition have been considered in this research. It is , therefore, recommended that further research should be undertaken involving other dimension like changes in social status, changes in agricultural practices, changes in food deficiency and habit etc.
- v. Almost all the NGOs of Bangladesh are working with GBA and Dipshikha has initiated their FDA. It is, therefore, strongly recommended that comparative study should be under taken between FDA of Dipshikha and GBA of other NGO in order to gain more meaningful insight of GBA and FDA.

Bibliography

- Ahmed, K.F. 2003. Micro credit as a Tool for Women Empowerment: The Case of Bangladesh. Development Studies, London School of Economics.
- Akanda, M.W. 1994. Participation of Rural Women in Different farm and Non-farm Activities in Two Selected Villages of Mymensingh District. *M. Sc. (Ag.Ex.Ed.) Thesis*, Department of Agricultural Extension Education and Teachers' Training, Bangladesh Agricultural University, Mymensingh.
- Alam, J. 1993. Poverty Alleviation Program in Bangladesh. The Experience of Nongovernment and Government Organization. In Amin, M.N. (ed). Government of Bangladesh in Poverty Alleviation. Dhaka: Bangladesh Rural Development Board.
- Alam, M.S. 2001. Performance of Thengamara Mohila Sabuj Shangha Beneficiaries of Three Unions under Sadar Upazila of Bogra District. *M. Sc. (Ag.Ex.Ed.) Thesis*, Department of Agricultural Extension Education and Teachers' Training, Bangladesh Agricultural University, Mymensingh.
- Ali, M.Z. 2003. Impact of Micro Credit in the Poverty Alleviation of BRAC Women Beneficiaries in a selected Area of Dinajpur District. *M. Sc. (Ag.Ex.Ed.) Thesis*, Department of Agricultural Extension Education and Teachers' Training, Bangladesh Agricultural University, Mymensingh.
- Basak, N.C. 1997. Impact of BRAC Rural Development Activities As perceived by the participating Women. *M. Sc. (Ag.Ex.Ed) Thesis*, Department of Agricultural Extension Education and Teachers' Training, Bangladesh Agricultural University, Mymensingh.
- BBS. 2002. Monthly Statistical Bulletin in Bangladesh. August, 2002. Bangladesh Bureau of Statistics, Ministry of Planning, Government of the People's Republic of Bangladesh.
- BBS. 2005. Household Survey Report, 2005. Bangladesh Bureau of Statistics, Ministry of Planning, Government of the People's Republic of Bangladesh.
- Begum, A. 1998. Poverty Alleviation of the Rural Women Organized by Association of Social Advancement. *M. Sc. (Ag.Ex.Ed) Thesis*, Department of Agricultural Extension Education and Teachers' Training, Bangladesh Agricultural University, Mymensingh.
- Begum, S.A. 1995. Influence of BRAC Credit Programme on Socio Economic Development of Rural Women: A of Five Villages of Jamalpur District. *M Sc. (Ag.Ex.Ed.) Thesis*, Department of Agricultural Extension Education and Teachers' Training, Bangladesh Agricultural University, Mymensingh.
- Besley, T. and S. Coate. 1995. "Group Lending, Repayment Incentives and social Collateral." *Journal of Development Economics* 46(1): 1 -18
- Carter,V. Good. 1945. Dictionary of Duration. New York and London: McGraw-Hill Book Company, Inc.
- Chambers, R. 1983. Rural Development: Putting the Last First. London. Longman. Intermediate Technology Publications.
- Chowdhury, A. 2001. <http://www.newint.org/issue332/local.htm>.
- CIRDAP. 1996. Report on Rural Development in CIRDAP member Countries 1994/95. Dhaka.
- Dale, R. 2000. Organizations and Development: Strategies, Structures and Processes. New Delhi. Sage Publication.

- Devi, L.K.R. 1995. 'Determinants of Labour Force Participation among Women in Kerala: Some Evidence from Micro Level Study'. *Asian Economic Review*. 38(1): 102-115.
- FAO. 1997. Human Nutrition in the Developing World. Rome: FAO of the United Nations.
- Goode, W.J. and P.K. Hatt. 1952. Method of Social Research. New York: McGraw-Hill Book Company, Inc.
- Gordon, D. 1999. Theories of Poverty and Underemployment. Lexington Books USA.
- Hadi, A. 1997. The NGO Intervention and Women's Empowerment- the Bangladesh experience. Swedish association for Sexual Education, Stockholm.
- Haider, S.R. 2001. The Extreme Poor and Their Development Needs: An Exploration Study, Dhaka BRAC.
- Hye H. A. 1996. Below the Line: Rural Poverty in Bangladesh. Dhaka. University Press Ltd.
- Islam, M.M. 1991. "Comparative Analysis of Knowledge, Attitude and Practice between the Contact and Non- contact Farmer." Unpublished *M. Sc. (Ag.Ex.Ed.) Thesis*, Department of Agricultural Extension Education and Teachers' Training, Bangladesh Agricultural University, Mymensingh.
- Islam, M.O. 2002. Poverty Alleviation of the Rural Women Through Some of the Selected Activities of Grameen Bank. *M. Sc. (Ag.Ex.Ed.) Thesis*, Department of Agricultural Extension Education and Teachers' Training, Bangladesh Agricultural University, Mymensingh.
- Islam, M.R. 2001. Impact of Adarsha Gram project in Alleviation Poverty of the landless Settlers. *M. Sc. (Ag.Ex.Ed.) Thesis*, Department of Agricultural Extension Education and Teachers' Training, Bangladesh Agricultural University, Mymensingh.
- Kaur, M.R. 1998. An Evaluation of Study of Women Development Programme under Indo-German Dhauladhar Project Palampur, District Kumgra, H.P. *Thesis Abstract*, Haryana Agricultural University, Hissar India. 16(4): 258
- Kaur, S and R.K. Punia. 1988 "Work Participation of Women in Rural Household: An Emperical Study." *Guru Nanak Journal of Sociology*. 9(2):52-77
- Khan, A.B. 2001. Bangladesh NGOs and Poverty Alleviation. The Bangladesh Observer. September 2, 2001, Dhaka.
- Khan, M.A. 2006. Impact of Grameen Bank Micro-credit Program towards Uplifting the Socio Economic Condition of Rural Women Beneficiaries. *M. S. (AEIS) Thesis*, Department of Agricultural Extension and Information System, Sher-e- Bangla Agricultural University, Dhaka, Bangladesh.
- Khan, M.A.R. 2006. Impact of Dipshikha Rural Development Activities as Perceived by the Participating Women. *M. S. (AEIS) Thesis*, Department of Agricultural Extension and Information System, Sher-e-Bangla Agricultural University, Dhaka, Bangladesh.
- Khandker, S.R. 1998. Fighting Poverty with Micro Credit: Experiences in Bangladesh. New York. Oxford University Press, Inc.
- Khandker, S.R. and O.H. Chowdhury. 1995. Targeted Credit Programme and Rural Poverty in Bangladesh. Paper prepared for Workshop of Research Project. RPO 676-59. "Credit Programme for the Poor." Held in Dhaka. March. 1995, World Bank and BIDS.
- Kokab, F. 2001. Utilization on micro-credit provides by Punjab Rural Support Programme (PRSP) to the females of Satiana and Jhumra district Faisalabad. Dept, of Rural Sociology, University of Agriculture, Faisalabad (Pakistan).
- Mayoux, L and S. Singha. 1998. Participation Learning for Women's Empowerment in Micro-finance Program: Negotiating Complexity Conflict and Change. Micro Credit: Impact, Targeting and sustainability. *IDS-Bulleting*. 29(4):39-50 [128]

- Mustafa, S. *et.al.* 1996. Becon of Hope: An Impact Assessment Study of BRAC: Rural Development Programme. Research and Evaluation Division. BRAC. Dhaka.
- Muzaffar, C. 2001. Global Poverty: Gap between Rich and Poor. Kualalampur: International Movement for a Just World.
- Naher, K. 2000. Participation of Rural Women in Homestead Agriculture in a Selected Area of Gazipur District. *M. Sc. (Ag.Ex.Ed.) Thesis*, Department of Agricultural Extension Education and Teachers' Training, Bangladesh Agricultural University, Mymensingh.
- NOVIB.1995. Structural Poverty Alleviation in Bangladesh. Dhaka.
- Pallavic-chavan, R. ramakumar and P. Chavan. 2002. Micro Credit and Rural Poverty: An Analysis of Empirical Evidence. *Economical and Political Weekly*. 37(10):955-965
- Quadir, S.R. 1981. "Women's Income Activities and Family Welfare in Bangladesh." *Women for Women*, Dhaka, Bangladesh.
- Rahaman, M.T. 2005. Role of an NGO Intervention on Poverty Alleviation in a Selected Area of Dinajpur District. *M. Sc. (Ag.Ex.Ed.) Thesis*, Department of Agricultural Extension Education and Teachers' Training, Bangladesh Agricultural University, Mymensingh.
- Robinson, M.A. 1991. Evaluating the Impact of NGOs in Rural Poverty Alleviation, India Country Study. ODI Working Paper No. 49.pp.131.
- Samad, K.M.A. 2004. Poverty Alleviation of the Rural Women through Selected Improved Agricultural Practices. *M. Sc. (Ag.Ex.Ed.) Thesis*, Department of Agricultural Extension Education and Teachers' Training, Bangladesh Agricultural University, Mymensingh.
- Sarker, A.K. 2002. Impact of Integrated Aqua-culture Development Project Conducted by RDRS Bangladesh. *M. Sc. (Ag.Ex.Ed.) Thesis*, Department of Agricultural Extension Education and Teachers' Training, Bangladesh Agricultural University, Mymensingh.
- Siddiqui, K. 2000. Poverty and Social Change in Rural Bangladesh. University Press Ltd. Dhaka.
- Stiglitz, J.E. 1990. "Peer Monitoring and Credit Markets." *Bangladesh Development Studies*. Vol. 18, No 3, BIDS: Dhaka.
- Townsend, P. 1953. Measurement and Explanation of Poverty in High Income and Low Income Countries: The Problems of Operationalizing the Concepts of Development, Class and Poverty. In Peter Townsend (ed). *The Concepts of Poverty*. London: Heinemann Educational Books.
- Ullah, AKMA., Routray, JK. 2003. NGOs and Development: Alleviation Rural Poverty in Bangladesh. Book Mark International. Dhaka.
- World Bank. 1996. Pursuing Common Goals: Strengthening relations between Government and Development NGOs. University Press Limited. Dhaka. Bangladesh.
- World Bank. 2002. World Bank Report, 2002. <http://www.worldbank.org/bd>
- World Bank Group. 2003. Issue Brief Poverty in Bangladesh: Building on progress. <http://www.worldbank.org/bd>.
- World Bank Group. 2007. Bangladesh Data Profile. World Development Indicator Database. <http://www.worldbank.org/bd>.

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An interview schedule for data collection on

Appendix- A

Comparative Study of Group Based Approach and Family Development
Approach of Dipshikha on Poverty Reduction.

Sample No:
Date:

Name of the Respondent : Father's/Husband's name:

Address		
Village		
Union		
Upazila	: Tarash	Bochaganjj
District	: Sirajganj	Dinajpur

Involvement with Dipshikha (Length of Membership): .Year
s

Years

L How old are you?

!.Please mention your level of education: Do not read and write Can sign only Passed class
I did not attend any formal educational institution but my level of education is
equivalent to class

I. Total Number of Family Members:

Appendix- A

Particulars	Pre-Dipshikha Period		Post Dipshikha period	
	Yes=1 No=2	Amount	Yes=1 No=2	Amount
3wn omestead				
tultivable end				
ease land				
otal				

Annual Family Income (Please mention your annual income as below):

Sl. lo.	Source of income	Amount (TK)	
		Pre-Dip period	Post-Dip period
1	Field crop cultivation		
2	Animal		
3	Poultry rearing		
4	Vegetable		
5	Fruit production		
6	Bamboo Production		
7	Small business		
r	Daily wage selling		
	Rickshaw/ Van		
,0	Selling water for Irrigation purpose		
11	Tailoring		
12	Service		
13	Fish culture		
14	Others(if any)		
	Total		

Appendix- A

Household Savings:

I

No

1. Do you have any personal savings at present? Yes I If Yes, Please answer the following

questions:

SI . to.	Sources of savings	Amount (TM)	Where money is saved (H/D/B/OP
1	Income from Dip Intervention		
2	Other sources		
	Total		
H« Home, D= Dipshikha, B= Bank, 0= Other NGO			

I. Group Cohesion

Irregular

I. Participation on group meeting: Regularly

I. Have you achieved any of the following by participating in Dipshikha Group?

	issues	Yes=1, No=2
■	Resolved local problem through arbitration	
2	Received legal aid from Dipshikha	
3	Participated in raising voice for demand of Govt, resources	
4	Protest dowry demand	
5	Resolved household crisis	
6	Action taken against human rights abuses	
7	Resolved divorce attempt	
8	Increase income	
9	Credit installment paid by other members	
10	Creation of employment	

III

I

!A Do you have any Family Development Plan? **Yes**

No

I. Did you implement any activities of Family Development Plan?

Yes=1 No=2	If Yes, Number of Activities				
	1	2	3	4	>4

). Credit/Loan

4. Did you take any credit last year? Yes No

I. If Yes, Please mention the sources and amount of your credit.

SL No.	Source of credit	Amount	Purpose of taking loan	Loan used		Loan used by
				What For	% of Amount used for the said purpose	
1	Banks					
2	Dipshikha					
3	Other NGOs					
4	Village money lender					
5	Neighbors and relatives					
6	Other (if any)					

C. Are you paying back regularly the credit installment?

Regular ☐ Irregular ☐ Default ☐

Appendix- A

.Please give your opinion about the condition of loan received

Condition for loan	Highly satisfactory	Satisfactory	Not satisfactory	Not at all
Weekly repayment				
Monthly/ Seasonal or repayment after income				
Dipshikha Provides materials				
Dipshikha provides cash				
Minimum 20% contribution should paid by the members for IGA				
repayment in office				

10. Information on Training

A. Have you/ Family member received any training from Dipshikha?

Yes No

1. Please state your/ your family member's participation in training

Sl. No	Topic of training/Subject matter	Participants S/SP/Son/D/O	Duration	Sponsor
1				
2				
3				
4				
5				
6				

Note: S= Self, SP= Spouse, So= Son, D= Daughter, O= Others

Appendix- A

tatements

Please mention the extent of your opinion towards the following the

13 1. IN 0.	Statements	Extent of opinion				
		SA	A	NO	D	SD
II	Dipshikha has made us more conscious about our right as a result now we are making movement to achieve civic privilege					
I ²	Dipshikha has an evil target behind assisting us. So, We should be aware before accepting their help					
3	1 am not interested to participate with Dipshikha as other NGOs are better than Dipshikha					
4	Dipshikha is making us more dependent.					
5	We are loosing our cultural heritage due to the Dipshikha activities.					
6	We have improve our daily life due to the knowledge of health and sanitation provided by Dipshikha					
7	Income generating activities of Dipshikha help us to improve our economical condition					
8	Dipshikha gives priority to development of family.					
9	Though Dipshikha workers visit us regularly but they do not support us all purposes					
10	Dipshikha provides different support to help us					

Me: SA= Strongly agree, A= Agree, No= No opinion, D= Disagree, SD= Strongly disagree

Appendix- A

Food Item	Purchased		Own sources			Total (TK)	
	Total Expenses (weekly)		Market Value				
	Pre-Dip period	Post Periods Dip	Pre-Dip period	Post period	Dip	Pre-Dip period	Post Dip period
1	2	3	4	5		2+4=6	3+5=7
(ice							
Wheat							
ish/Meat/Egg							
Nik							
)il							
Vegetables							
pices							
ugar							
otato							
Jthers							
total							

3. Expenditure on other items/year (Other than food)

Item	Total (TK)	
	Pre-Dip period	Post Dip period
Education		
Interest payment		
Investment		
Savings		
Transport		
Health		
Entertainment		
Dress and clothing		
Total		

Appendix- A

14. Asset Ownership:

Sl. No.	Type of Asset	Yes=1 No=2	Number/ Amount	Had Pre- DIP period	Bought in post DIP period	Present Value (TK)
1	Land					
2	Power tiller					
3	Shallow machine					
4	Plough					
5	Cattle					
6	Goat					
7	Poultry birds					
8	Trees					
9	Rickshaw /Van					
10	Sewing machine					
11	Tube well					
12	House					
13	Radio/ca ssette					
14	Television					
15	Other Furniture					
16	Jewelry					
17	Utensils					
	Total					

Appendix- A

15. Water and Sanitation A. Drinking Water

Sl. no.	Sources	Post Dip Period	Pre-Dip period	Provide by O/D/G/ON
1	Own Tube well			
2	Others Tube well			
3	Pond			
4	Mud hole			
5	River			
6	Arsenic tube well			

Note: 0= Own source, D= Dipshikha, G= Government, ON=

Other NGO

1. Sanitation

Sl. no.	Type of Latrine	Post Dip Period	Pre-Dip period	Provide by O/D/G/ON
1	Puce			
2	Ring/Slab			
3	Pit			
4	Open Air			
5	Other			

Note: 0= Own source, D= Dipshikha, G= Government, ON= Other NGO

16. Housing

Please mention your house condition

Period	Pre Dip period		Post Dip period	
	Yes=1 No= 2	Number	Yes=1 No= 2	Number
trawl roof with bamboo fencing				
trawl roof with mud wall				

Appendix- A

In roof with mud wall				
in roof with tin wall				
lin roof with brick wall				

17. Pleas provide the following Information A. On health Issues

* No.	Issues	Yes=1, No=2	Sources of Information D/R/TV/ON/G
1	Washing hand before eating		
2	Washing hand after defecation		
3	Children vaccination		
4	Preparation of saline		
5	Washing vegetables before cutting		
6	Using of Iodize salt		
7	Nutrition for child		
8	Nutrition for pregnant mother		
. On Social Issues			
1	Family Laws		
2	Laws against Dowry		
3	Laws against Early marriage		
4	Legal aid		
5	Schooling age		

Note: D= Dipshikha, R= Radio, TV= Television, ON= Other NGO, G= Government

IS. Empowerment related information (Women Respondent/ Wife of Male Respondent)

Appendix- A

Sl. No	Empowerment related indicators	Yes=1, No=2 Post Dip Period	Yes=1, No=2 Pre Dip Period
1	Ability to make small and larger purchase from market		
2	Participation in family decision making		
3	Enjoy freedom in the family		
4	Free from dominance by other family members		
5	Participation In political activities		
6	Increase mobility		
7	Involvement with IGA		
8	Others		

Signature:

|Name:.....)
nterviewer

Square Poverty Gap (GBA)

Appendix-6

GBA							
Pre Dipshikha Period				Post Dipshikha Period			
Per capita Income	Poverty Line	Poverty Gap	Square Poverty Gap	Per capita Income	Poverty Line	Poverty Gap	Square Poverty Gap
1,720.00	9197.76	0.81	0.66	2,000.00	9197.76	0.78	0.61
1,733.33	9197.76	0.81	0.66	2,800.00	9197.76	0.70	0.48
1,875.00	9197.76	0.80	0.63	3,133.33	9197.76	0.66	0.43
2,250.00	9197.76	0.76	0.57	3,416.67	9197.76	0.63	0.40
2,400.00	9197.76	0.74	0.55	3,833.33	9197.76	0.58	0.34
2,400.00	9197.76	0.74	0.55	4,060.00	9197.76	0.56	0.31
2,500.00	9197.76	0.73	0.53	4,100.00	9197.76	0.55	0.31
2,500.00	9197.76	0.73	0.53	4,425.00	9197.76	0.52	0.27
2,575.00	9197.76	0.72	0.52	4,500.00	9197.76	0.51	0.26
2,583.33	9197.76	0.72	0.52	4,540.00	9197.76	0.51	0.26
2,625.00	9197.76	0.71	0.51	4,666.67	9197.76	0.49	0.24
2,791.67	9197.76	0.70	0.49	4,750.00	9197.76	0.48	0.23
2,875.00	9197.76	0.69	0.47	<i>4,775.00</i>	9197.76	0.48	0.23
3,075.00	9197.76	0.67	0.44	4,920.00	9197.76	0.47	0.22
3,100.00	9197.76	0.66	0.44	5,033.33	9197.76	0.45	0.20
3,158.33	9197.76	0.66	0.43	5,050.00	9197.76	0.45	0.20
3,171.43	9197.76	0.66	0.43	5,200.00	9197.76	0.43	0.19
3,500.00	9197.76	0.62	0.38	5,310.00	9197.76	0.42	0.18
3,566.67	9197.76	0.61	0.37	<i>5,400.00</i>	9197.76	0.41	0.17
3,575.00	9197.76	0.61	0.37	5,625.00	<i>9197.76</i>	0.39	0.15
3,672.50	9197.76	0.60	0.36	6,000.00	9197.76	0.35	0.12
3,700.00	9197.76	0.60	0.36	6,100.00	9197.76	0.34	0.11
3,728.00	9197.76	0.59	0.35	6,120.00	9197.76	0.33	0.11
3,730.00	9197.76	0.59	0.35	<i>6,375.00</i>	9197.76	0.31	0.09
3,730.00	9197.76	0.59	0.35	6,425.00	9197.76	0.30	0.09
<i>3,745.00</i>	9197.76	0.59	0.35	<i>6,450.00</i>	9197.76	0.30	0.09
3,750.00	9197.76	0.59	0.35	6,500.00	9197.76	0.29	0.09
<i>3,757.14</i>	9197.76	0.59	0.35	6,514.29	9197.76	0.29	0.09

Appendix-B

29	3,775.00	9197.76	0.59	0.35	6,550.00	9197.76	0.29	0.08
30	3,848.57	9197.76	0.58	0.34	6,666.67	9197.76	0.28	0.08
31	3,875.00	9197.76	0.58	0.33	6,725.00	9197.76	0.27	0.07
32	3,960.00	9197.76	0.57	0.32	6,875.00	9197.76	0.25	0.06
33	4,000.00	9197.76	0.57	0.32	6,875.00	9197.76	0.25	0.06
34	4,000.00	9197.76	0.57	0.32	7,000.00	9197.76	0.24	0.06
35	4,080.00	9197.76	0.56	0.31	7,000.00	9197.76	0.24	0.06
36	4,200.00	9197.76	0.54	0.30	7,375.00	9197.76	0.20	0.04
37	4,333.33	9197.76	0.53	0.28	7,500.00	9197.76	0.18	0.03
38	4,465.00	9197.76	0.51	0.26	7,750.00	9197.76	0.16	0.02
39	4,500.00	9197.76	0.51	0.26	7,875.00	9197.76	0.14	0.02
40	4,625.00	9197.76	0.50	0.25	8,010.00	9197.76	0.13	0.02
41	4,700.00	9197.76	0.49	0.24	8,200.00	9197.76	0.11	0.01
42	4,735.29	9197.76	0.49	0.24	8,333.33	9197.76	0.09	0.01
43	4,875.00	9197.76	0.47	0.22	8,440.00	9197.76	0.08	0.01
44	4,975.00	9197.76	0.46	0.21	8,800.00	9197.76	0.04	0.00
45	5,250.00	9197.76	0.43	0.18	8,880.00	9197.76	0.03	0.00
46	5,300.00	9197.76	0.42	0.18	9,000.00	9197.76	0.02	0.00
47	5,300.00	9197.76	0.42	0.18	9,083.33	9197.76	0.01	0.00
48	5,320.00	9197.76	0.42	0.18	9,250.00	9197.76	(0.01)	0.00
49	5,387.50	9197.76	0.41	0.17	9,314.29	9197.76	(0.01)	0.00
50	5,706.67	9197.76	0.38	0.14	9,483.33	9197.76	(0.03)	0.00
51	5,726.00	9197.76	0.38	0.14	9,550.00	9197.76	(0.04)	0.00
52	5,850.00	9197.76	0.36	0.13	9,760.00	9197.76	(0.06)	0.00
53	5,900.00	9197.76	0.36	0.13	9,800.00	9197.76	(0.07)	0.00
54	6,000.00	9197.76	0.35	0.12	9,800.00	9197.76	(0.07)	0.00
55	6,000.00	9197.76	0.35	0.12	9,900.00	9197.76	(0.08)	0.01
56	6,150.00	9197.76	0.33	0.11	10,000.00	9197.76	(0.09)	0.01
57	6,150.00	9197.76	0.33	0.11	10,100.00	9197.76	(0.10)	0.01
58	6,166.67	9197.76	0.33	0.11	10,125.00	9197.76	(0.10)	0.01
59	6,200.00	9197.76	0.33	0.11	10,320.00	9197.76	(0.12)	0.01
60	6,250.00	9197.76	0.32	0.10	10,625.00	9197.76	(0.16)	0.02
61	6,333.33	9197.76	0.31	0.10	10,785.71	9197.76	(0.17)	0.03

Appendix-B

62	6,471.43	9197.76	0.30	0.09	11,050.00	9197.76	(0.20)	0.04
63	6,666.67	9197.76	0.28	0.08	11,294.12	9197.76	(0.23)	0.05
64	6,712.50	9197.76	0.27	0.07	11,300.00	9197.76	(0.23)	0.05
65	6,766.67	9197.76	0.26	0.07	11,500.00	9197.76	(0.25)	0.06
66	7,000.00	9197.76	0.24	0.06	11,511.43	9197.76	(0.25)	0.06
67	7,100.00	9197.76	0.23	0.05	12,314.29	9197.76	(0.34)	0.11
68	7,500.00	9197.76	0.18	0.03	12,375.00	9197.76	(0.35)	0.12
69	7,500.00	9197.76	0.18	0.03	12,500.00	9197.76	(0.36)	0.13
70	7,500.00	9197.76	0.18	0.03	12,700.00	9197.76	(0.38)	0.14
71	7,820.00	9197.76	0.15	0.02	12,920.00	9197.76	(0.40)	0.16
72	7,928.57	9197.76	0.14	0.02	13,200.00	9197.76	(0.44)	0.19
73	8,333.33	9197.76	0.09	0.01	13,916.67	9197.76	(0.51)	0.26
74	8,470.00	9197.76	0.08	0.01	14,257.14	9197.76	(0.55)	0.30
75	8,500.00	9197.76	0.08	0.01	14,500.00	9197.76	(0.58)	0.33
76	8,585.71	9197.76	0.07	0.00	14,775.00	9197.76	(0.61)	0.37
77	8,833.33	9197.76	0.04	0.00	14,830.00	9197.76	(0.61)	0.37
78	8,900.00	9197.76	0.03	0.00	15,600.00	9197.76	(0.70)	0.48
79	9,000.00	9197.76	0.02	0.00	15,625.00	9197.76	(0.70)	0.49
80	9,000.00	9197.76	0.02	0.00	16,280.00	9197.76	(0.77)	0.59
81	9,200.00	9197.76	(0.00)	0.00	16,400.00	9197.76	(0.78)	0.61
82	10,300.00	9197.76	(0.12)	0.01	17,125.00	9197.76	(0.86)	0.74
83	10,300.00	9197.76	(0.12)	0.01	17,600.00	9197.76	(0.91)	0.83
84	10,800.00	9197.76	(0.17)	0.03	17,875.00	9197.76	(0.94)	0.89
85	11,000.00	9197.76	(0.20)	0.04	18,000.00	9197.76	(0.96)	0.92
86	11,066.67	9197.76	(0.20)	0.04	18,166.67	9197.76	(0.98)	0.95
87	11,150.00	9197.76	(0.21)	0.05	18,250.00	9197.76	(0.98)	0.97
88	11,666.67	9197.76	(0.27)	0.07	18,300.00	9197.76	(0.99)	0.98
89	12,366.67	9197.76	(0.34)	0.12	19,250.00	9197.76	(1.09)	1.19
90	13,000.00	9197.76	(0.41)	0.17	19,500.00	9197.76	(1.12)	1.25
91	13,333.33	9197.76	(0.45)	0.20	20,050.00	9197.76	(1.18)	1.39
92	13,675.00	9197.76	(0.49)	0.24	22,500.00	9197.76	(1.45)	2.09
93	13,880.00	9197.76	(0.51)	0.26	24,750.00	9197.76	(1.69)	2.86
94	14,220.00	9197.76	(0.55)	0.30	25,000.00	9197.76	(1.72)	2.95

XIV

95	15,625.00	9197.76	(0.70)	0.49	26,300.00	9197.76	(1.86)	Appendix-B.46
96	15,966.67	9197.76	(0.74)	0.54	30,000.00	9197.76	(2.26)	5.12
97	16,050.00	9197.76	(0.74)	0.56	32,166.67	9197.76	(2.50)	6.24
98	16,650.00	9197.76	(0.81)	0.66	32,860.00	9197.76	(2.57)	6.62
99	18,160.00	9197.76	(0.97)	0.95	35,175.00	9197.76	(2.82)	7.98
100	20,000.00	9197.76	(1.17)	1.38	37,120.00	9197.76	(3.04)	9.22

Square Poverty Gap (FDA)

SI No.	FDA							
	Pre Dipshikha Period				Post Dipshikha Period			
	Per capita Income	Poverty Line	Poverty Gap	Squared Poverty Gap	Per capita Income	Poverty Line	Poverty Gap	Squared Poverty Gap
1	1,666.67	9197.76	0.82	0.67	2,583.33	9197.76	0.72	0.52
²	2,200.00	9197.76	0.76	0.58	3,920.00	9197.76	0.57	0.33
³	2,220.00	9197.76	0.76	0.58	4,050.00	9197.76	0.56	0.31
4	2,375.00	9197.76	0.74	0.55	4,078.57	9197.76	0.56	0.31
5	2,750.00	9197.76	0.70	0.49	4,483.33	9197.76	0.51	0.26
6	3,000.00	9197.76	0.67	0.45	4,500.00	9197.76	0.51	0.26
7	3,083.33	9197.76	0.66	0.44	4,500.00	9197.76	0.51	0.26
8	3,125.00	9197.76	0.66	0.44	4,550.00	9197.76	0.51	0.26
9	3,160.00	9197.76	0.66	0.43	4,566.67	9197.76	0.50	0.25
10	3,228.00	9197.76	0.65	0.42	4,583.33	9197.76	0.50	0.25
¹¹	3,250.00	9197.76	0.65	0.42	4,700.00	9197.76	0.49	0.24
¹²	3,285.71	9197.76	0.64	0.41	4,750.00	9197.76	0.48	0.23
¹³	3,300.00	9197.76	0.64	0.41	4,800.00	9197.76	0.48	0.23
14	3,333.33	9197.76	0.64	0.41	4,840.00	9197.76	0.47	0.22
¹⁵	3,350.00	9197.76	0.64	0.40	4,891.67	9197.76	0.47	0.22
¹⁶	3,416.67	9197.76	0.63	0.40	4,950.00	9197.76	0.46	0.21
¹⁷	3,437.50	9197.76	0.63	0.39	4,958.33	9197.76	0.46	0.21
18	3,500.00	9197.76	0.62	0.38	5,015.00	9197.76	0.45	0.21
19	3,500.00	9197.76	0.62	0.38	5,071.43	9197.76	0.45	0.20
20	3,500.00	9197.76	0.62	0.38	5,300.00	9197.76	0.42	0.18
²¹	3,528.57	9197.76	0.62	0.38	5,360.00	9197.76	0.42	0.17
22	3,583.33	9197.76	0.61	0.37	5,495.00	9197.76	0.40	0.16
23	3,592.86	9197.76	0.61	0.37	5,550.00	9197.76	0.40	0.16
24	3,600.00	9197.76	0.61	0.37	5,566.67	9197.76	0.39	0.16
²⁵	3,600.00	9197.76	0.61	0.37	5,733.33	9197.76	0.38	0.14
26	3,666.67	9197.76	0.60	0.36	5,833.33	9197.76	0.37	0.13
27	3,666.67	9197.76	0.60	0.36	5,983.33	9197.76	0.35	0.12
28	3,700.00	9197.76	0.60	0.36	6,000.00	9197.76	0.35	0.12

n								Appendix - C
	3,750.00	9197.76	0.59	0.35	6,112.50	9197.76	0.34	0.11
30	3,800.00	9197.76	0.59	0.34	6,200.00	9197.76	0.33	0.11
31	3,800.00	9197.76	0.59	0.34	6,250.00	9197.76	0.32	0.10
32	3,840.00	9197.76	0.58	0.34	6,400.00	9197.76	0.30	0.09
33	3,916.67	9197.76	0.57	0.33	6,500.00	9197.76	0.29	0.09
34	4,000.00	9197.76	0.57	0.32	6,550.00	9197.76	0.29	0.08
35	4,000.00	9197.76	0.57	0.32	6,700.00	9197.76	0.27	0.07
36	4,000.00	9197.76	0.57	0.32	6,720.00	9197.76	0.27	0.07
37	4,000.00	9197.76	0.57	0.32	6,875.00	9197.76	0.25	0.06
38	4,000.00	9197.76	0.57	0.32	7,000.00	9197.76	0.24	0.06
39	4,050.00	9197.76	0.56	0.31	7,050.00	9197.76	0.23	0.05
40	4,083.33	9197.76	0.56	0.31	7,060.00	9197.76	0.23	0.05
41	4,125.00	9197.76	0.55	0.30	7,137.50	9197.76	0.22	0.05
42	4,166.67	9197.76	0.55	0.30	7,166.67	9197.76	0.22	0.05
43	4,166.67	9197.76	0.55	0.30	7,625.00	9197.76	0.17	0.03
44	4,200.00	9197.76	0.54	0.30	7,660.00	9197.76	0.17	0.03
45	4,250.00	9197.76	0.54	0.29	7,665.00	9197.76	0.17	0.03
46	4,250.00	9197.76	0.54	0.29	7,676.00	9197.76	0.17	0.03
47	4,260.00	9197.76	0.54	0.29	7,700.00	9197.76	0.16	0.03
48	4,400.00	9197.76	0.52	0.27	7,829.50	9197.76	0.15	0.02
49	4,465.00	9197.76	0.51	0.26	8,030.00	9197.76	0.13	0.02
50	4,500.00	9197.76	0.51	0.26	8,244.00	9197.76	0.10	0.01
51	4,500.00	9197.76	0.51	0.26	8,250.00	9197.76	0.10	0.01
52	4,525.00	9197.76	0.51	0.26	8,765.00	9197.76	0.05	0.00
53	4,550.00	9197.76	0.51	0.26	8,975.00	9197.76	0.02	0.00
54	4,600.00	9197.76	0.50	0.25	9,100.00	9197.76	0.01	0.00
55	4,625.00	9197.76	0.50	0.25	9,273.33	9197.76	(0.01)	0.00
56	4,625.00	9197.76	0.50	0.25	9,500.00	9197.76	(0.03)	0.00
57	4,660.00	9197.76	0.49	0.24	9,666.67	9197.76	(0.05)	0.00
58	4,920.00	9197.76	0.47	0.22	9,700.00	9197.76	(0.05)	0.00
59	4,995.00	9197.76	0.46	0.21	9,800.00	9197.76	(0.07)	0.00
60	5,000.00	9197.76	0.46	0.21	10,100.00	9197.76	(0.10)	0.01
61	5,100.00	9197.76	0.45	0.20	10,333.33	9197.76	(0.12)	0.02

r&r	5,125.00	9197.76	0.44	0.20	10,500.00	9197.76	(0.14)	0.02
63	5,125.00	9197.76	0.44	0.20	10,500.00	9197.76	(0.14)	0.02
64	5,150.00	9197.76	0.44	0.19	10,525.00	9197.76	(0.14)	0.02
65	5,160.00	9197.76	0.44	0.19	10,700.00	9197.76	(0.16)	0.03
66	5,200.00	9197.76	0.43	0.19	10,740.00	9197.76	(0.17)	0.03
67	5,300.00	9197.76	0.42	0.18	10,800.00	9197.76	(0.17)	0.03
68	5,312.50	9197.76	0.42	0.18	11,000.00	9197.76	(0.20)	0.04
69	5,400.00	9197.76	0.41	0.17	11,166.67	9197.76	(0.21)	0.05
70	5,500.00	9197.76	0.40	0.16	11,185.71	9197.76	(0.22)	0.05
71	5,500.00	9197.76	0.40	0.16	11,292.14	9197.76	(0.23)	0.05
72	5,500.00	9197.76	0.40	0.16	11,665.00	9197.76	(0.27)	0.07
73	5,645.00	9197.76	0.39	0.15	1 2,082.00	9197.76	(0.31)	0.10
74	5,766.67	9197.76	0.37	0.14	12,166.67	9197.76	(0.32)	0.10
75	6,000.00	9197.76	0.35	0.12	12,250.00	9197.76	(0.33)	0.11
76	6,175.00	9197.76	0.33	0.11	12,400.00	9197.76	(0.35)	0.12
77	6,240.00	9197.76	0.32	0.10	12,950.00	9197.76	(0.41)	0.17
78	6,250.00	9197.76	0.32	0.10	13,000.00	9197.76	(0.41)	0.17
79	6,375.00	9197.76	0.31	0.09	13,160.00	9197.76	(0.43)	0.19
80	7,100.00	9197.76	0.23	0.05	13,200.00	9197.76	(0.44)	0.19
81	7,125.00	9197.76	0.23	0.05	13,787.50	9197.76	(0.50)	0.25
82	7,200.00	9197.76	0.22	0.05	13,916.67	9197.76	(0.51)	0.26
83	7,225.00	9197.76	0.21	0.05	14,250.00	9197.76	(0.55)	0.30
84	7,250.00	9197.76	0.21	0.04	14,500.00	9197.76	(0.58)	0.33
85	7,500.00	9197.76	0.18	0.03	15,000.00	9197.76	(0.63)	0.40
86	7,666.67	9197.76	0.17	0.03	15,040.00	9197.76	(0.64)	0.40
87	7,833.33	9197.76	0.15	0.02	15,500.00	9197.76	(0.69)	0.47
88	8,333.33	9197.76	0.09	0.01	15,720.00	9197.76	(0.71)	0.50
89	8,700.00	9197.76	0.05	0.00	16,290.00	9197.76	(0.77)	0.59
90	8,750.00	9197.76	0.05	0.00	1 6,300.00	9197.76	(0.77)	0.60
91	8,750.00	9197.76	0.05	0.00	1 6,340.00	9197.76	(0.78)	0.60
92	8,833.33	9197.76	0.04	0.00	18,500.00	9197.76	(1.01)	1.02
93	9,333.33	9197.76	(0.01)	0.00	19,250.00	9197.76	(1.09)	1.19
94	9,800.00	9197.76	(0.07)	0.00	20,875.00	9197.76	(1.27)	1.61

XVIII

F	9,866.67	9197.76	(0.07)	0.01	23,333.33	9197.76	Appendix C (1.54)	2.36
96	10,000.00	9197.76	(0.09)	0.01	25,666.67	9197.76	(1.79)	3.21
97	10,166.67	9197.76	(0.09)	0.01	26,833.33	9197.76	(1.92)	3.68
98	11,500.00	9197.76	(0.25)	0.06	29,500.00	9197.76	(2.21)	4.87
99	12,500.00	9197.76	(0.36)	0.13	34,769.33	9197.76	(2.78)	7.73
100	15,450.00	9197.76	(0.68)	0.46	38,250.00	9197.76	(3.16)	9.98

Paired Sample t - test (GBA)

Pair							t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence interval of the Difference				
					Lower	Upper			
Pair 1	Income Pre and post Dipshikha Period	21311.900	21141.32383	2114.1324	17117.003	25506.797	10.081	99	.000
Pair2	Food Exp. Pre and post Dipshikha Period	10476.860	9630.79513	963.07951	8565.9013	12387.819	10.878	99	.000
Pair3	Health, Education and other Exp. Pre and post Dipshikha Period	6619.8900	8713.74917	871.37492	4890.8931	8348.8869	7.597	99	.000
Pair4	land possessed Pre and post Dipshikha Period	.05574	.21820	.02182	.01245	.09904	2.555	99	.012
Pair5	Productive assets Pre and post Dipshikha Period	8871.2500	12282.08853	1228.2089	6434.2172	11308.283	7.223	99	.000
Pair6	Non-Productive assets Pre and post Dipshikha Period	6497.5000	11162.74525	1116.2745	4282.5692	8712.4308	5.821	99	.000
Pair7	Housing condition Pre and post Dipshikha Period	1.10000	1.69074	.16907	.76452	1.43548	6.506	99	.000
Pair8	Drinking water sources Pre and post Dipshikha Period	0.31000	.46482	.04648	.21777	.40223	6.669	99	.000
Pair9	Sanitation condition Pre and post Dipshikha Period	1.10000	1.40346	.14035	.82152	1.37848	7.838	99	.000
Pair 10	Health awareness Pre and post Dipshikha Period	4.52000	2.01750	.20175	4.11968	4.92032	22.404	99	.000
Pair 11	Social awareness Pre and post Dipshikha Period	2.78000	1.48786	.14879	2.48478	3.07522	18.685	99	.000
Pair 12	Women Empowerment Pre and post Dipshikha Period	2.36000	1.75534	.17553	2.01170	2.70830	13.445	99	.000

Paired Sample t - test (FDA)

Pair							t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence interval of the Difference				
					Lower	Upper			
Pair1	Income Pre and post Dipshikha Period	20248.360	20208.87656	2020.8877	16274.480	24294.240	10.037	99	.000
Pair2	Food Exp. Pre and post Dipshikha Period	8406.3700	7217.91125	721.79112	6974.1798	9838.5602	11.647	99	.000
Pair3	Health, Education and other Exp. Pre and post Dipshikha Period	6828.5600	11315.73858	1131.5739	4583.2720	9073.8480	6.035	99	.000
Pair4	land possessed Pre and post Dipshikha Period	.0504535	.2066438	.0206644	.0094509	.0914561	2.442	99	.016
Pair5	Productive assets Pre and post Dipshikha Period	7398.4700	10639.903753	1063.9904	5287.2823	9509.6577	6.954	99	.000
Pair6	Non-Productive assets Pre and post Dipshikha Period	4498.8000	7280.54919	728.05492	3054.1811	5943.4189	6.179	99	.000
Pair7	Housing condition Pre and post Dipshikha Period	1.14000	2.17432	.21743	.70857	1.57143	5.243	99	.000
Pair8	Drinking water sources Pre and post Dipshikha Period	.50000	.52223	.05222	.39638	.60362	9.574	99	.000
Pair9	Sanitation condition Pre and post Dipshikha Period	1.30000	1.34465	.13446	1.03319	1.56681	9.668	99	.000
Pair1 0	Health awareness Pre and post Dipshikha Period	4.71000	1.88720	.18872	4.33554	5.08446	24.958	99	.000
Pair1 1	Social awareness Pre and post Dipshikha Period	2.24000	1.30361	.13036	1.98134	2.49866	17.183	99	.000
Pair 12	Women Empowerment Pre and post Dipshikha Period	2.12000	1.81063	.18106	1.76073	2.47927	11.709	99	.000

Correlation matrix Showing Inter-Correlations among the Variables under GBA.

	V ₁	V ₂	V ₃	V ₄	V ₅	V ₆	V ₇	V ₈	V ₉	V ₁₀	V ₁₁	V ₁₂	V ₁₃	V ₁₄	V ₁₅
V ₁	1														
V ₂	.194	1													
V ₃	-.049	-.256*	1												
V ₄	.119	-.247*	.280**	1											
V ₅	.173	-.100	.329**	.385**	1										
V ₆	.189	-.232*	.358**	.450**	.606**	1									
V ₇	.024	-.142	.223*	.240*	.174	.410**	1								
V ₈	-.053	.110	.078	.110	.157	.226*	.357**	1							
V ₉	.100	-.074	-.060	.059	.070	.256*	.313**	.135	1						
V ₁₀	-.004	-.118	.192	.221*	.208*	.318**	.558**	.364**	.327**	1					
V ₁₁	-.050	-.072	.164	.180	.202*	.309**	.541**	.366**	.308**	.886**	1				
V ₁₂	-.128	-.118	.075	.033	.025	.087	.045	.051	.046	.283**	.196	1			
V ₁₃	.091	.030	.070	-.036	.032	.115	.202*	-.035	.053	.199*	.175	.176	1		
V ₁₄	.062	-.045	.094	.091	.071	-.018	.022	.015	.101	.355**	.292**	.329**	.266**	1	
V ₁₅	.162	-.226*	.216*	.310**	.243*	.510**	.430**	.296**	.253*	.545**	.516**	.200*	.174	.300**	1

V₁ = Involvement with Dipshikha V₂

= Age

V₃ = Education Level

V₄ = Family size V₅ =

Farm Size

Correlation rviatf ix Showing Inter-Correlations among the Variables under GBA.

Ks[−] Present Annual Income

V_n - Savings of the Family V_g =

Group Cohesion V_9 = Credit

Availability V_{xo} =Utilization of

Credit V_n = Credit Repayment

V_{l2} = Acceptance of Loan Received Condition XXII

r_a = Training Exposure

V_{l4} = Attitude towards Dipshikha

V_{l5} = Performance of FDA

* = Correlation significant at 0.05 Level

** = Correlation Significant at 0.01 Level

Correlation Matrix Showing Inter-Correlations among the Variables under Study

		V ₂			V ₅			V ₇	y ₉	V ₁₀	V ₁₁	V ₁₂	V ₁₃	V ₁₄	V ₁₅
V ₁	1														
V ₂	.013	1													
V ₃	-.090	-.354**	1												
V ₄	-.013	-.092	-.115	1											
V ₅	-.092	-.004	.195	.132	1										
V ₆	-.060	-.105	.187	.215*	.506**	1									
V ₇	.110	-.081	.118	.149	.183	.430**	1								
V ₈	-.023	-.177	.135	.281**	.335**	.557**	.335**	1							
V ₉	-.108	-.111	.149	-.056	.209*	.357**	.141	.424**	1						
V ₁₀	.190	-.142	.085	.184	.158	.228*	.076	.362**	.000	1					
V ₁₁	.122	-.167	.025	.217*	.144	.203*	.162	.474**	-.026	.761**	1				
V ₁₂	-.127	-.194	.175	.260**	.382**	.355**	.048	.440**	.137	.183	.248*	1			
V ₁₃	-.036	-.184	.172	.118	.093	.314**	.275**	.448**	.128	.284**	.273**	.181	1		
V ₁₄	-.230*	-.070	.009	.090	.394**	.390**	.103	.569**	.287**	.232*	.323**	.389**	.337**	1	
V ₁₅	.282**	-.125	.084	.014	.303**	.393**	.410**	.578**	.372**	.251*	.240*	.333**	.263**	.259**	1

V₁ = Involvement with Dipshikha V₂ =

Age

V₃ = Education Level V

V₄ = Family size V₅ =

Farm Size

V₆ = Present Annual Income

V₇ = Savings of the Family

V₈ = Implementation of Family Development Plan

V₉ = Credit Availability

V₁₀ = Utilization of Credit

V₁₁ = Credit Repayment

V₁₂ = Acceptance of Loan Received Condition

V₁₃ = Training Exposure V₁₄ = Attitude

towards Dipshikha V₁₅ = Performance

of FDA

* = Correlation significant at 0.05 Level ** =

Correlation Significant at 0.01 Level

Short profile of Dipshikha

Name of the Organization: DIPSHIKHA "Non-Formal Education, Training and Research Society for Village Development".

Dipshikha was initiated in 1978 by a group of social workers, teachers and youths in the village of Rudrapur, Thana Birol, District Dinajpur. It was registered with the Social Welfare Department in 1984 and Foreign Donation Ordinance in 1985. Gradually, Dipshikha is expanding its activities and at present Dipshikha is working in 16 Upazilas of 4 Districts in the northern part of Bangladesh such as 9 Upazilas of Dinajpur District, 4 Upazilas of Nator District, 2 Upazilas of Sirajganj District and 1 Upazila of Gaibanda District.

Dipshikha is a learning organization so that it can provide the best services to its beneficiaries. It is now managerially and strategically well-equipped for implementation of any development projects.

Philosophy of the Organization

Every human being has own potentials. There are enough talent and power hidden inside human being given by the Almighty Creator. The basic thing is to explore and discover the talent and power and let them be utilized for own development and sustainability.

- Sincerity, unity, faithfulness, creation of awareness increases of knowledge and promotion of skills - these are the basic values of human resource development. In the development activities, there is no alternative to human resource development.
- Inter personal co-operation (relationship) and self-reliance are essential in the development process.
- Human resource development and personnel development are obvious in development process.
- Basic to development processes are education, practical work, formation, institution building, encouragement, awareness, networking, etc.
- Service to the poor, the destitute, the oppressed and the needy is the foundation of the philosophy of Dipshikha.

Vision of Dipshikha

Dipshikha envisions "A poverty free, just and peaceful society"

Dipshikha Mission Statement

Dipshikha - a spark, commits itself to poverty alleviation, establishment of equal opportunities, I peace and justice by ensuring formational education, appropriate agriculture, hygiene, sanitation, skills promotion and supports for income generation adjustable as time requires for the development of the poor, marginalized and deprived of the rural, semi-urban and urban j communities in descending priority. Dipshikha with a team of dedicated, skilled and competent workers cherishes and practices the principles of human dignity, ethical values, participation, [team-work, mutual respect and inter-religious harmony with clearly defined policies.

Essentially Dipshikha believes in firing the spark towards capacity building for self-help and self-reliance of its collaborating groups, communities and people.

Objectives of the Organization

- Bring unity among the poor, illiterate, underprivileged and oppressed people for socioeconomic emancipation through social mobilization and awareness creation.
- Development of leadership and human resources through education, training, workshop, I seminar and experience sharing.
- Encourage the group members to take up income generating activities to increase their income.
- Provide training for skills development and creation of employment.
- Eradication of illiteracy from among the group members and their future generating through literacy program.
- Establishment of institution to create unity and leadership among the poor and illiterate people.
- Encouragement of the people to grow savings habit for capital formation.
- Motivation among the people to take up health and family planning measures for better health and to control explosion of the population boom in Bangladesh.
- Supply of tube-wells and latrine sets for development of health and hygiene. Provide counseling for changing of food habit and nutritional food preparation.
- Maintenance and protection of environment by encouraging tree plantation.
- Arranging of village festivals, experience sharing gathering, sports and game and recreational activities, etc. through local and regional cultural events.
- Establishment of Village Community Centers (Pre-School) in the village to develop communication and co-operation among the villagers.
- Taking up emergency activities during natural disasters.
- Construction of road, culvert, bridge etc. to develop the communication system in the project area.
- Taking up activities compatible with the national plan and the plan of NGOs.
- Utilization of the moveable and immovable properties and assets of the organization for its self-reliance.
- Taking up publications like reports, booklets, leaflets, magazines etc. to share Dipshikha's experience with others.

Sphere of Operation:

1. Agricultural Extension and Farmers Training
2. Group/Family Savings and Income Generation Activities
3. Village Education and Cultural Awareness
4. Health and Family Planning
5. Human and Skill Development Training
6. Women Capacity Building
7. Human Rights and Good Governance
8. Emergency Relief and Rehabilitation Activities
9. Monitoring, Evaluation. Research and Reporting

Dipshikha Integrated Development Approach

In the context of the socio-economic condition of Bangladesh, we found that the Integrated Development Approach is most effective method of development. In this approach, the entire situation of the people are considered, because, it was proved that the problems of the rural people are many fold, as well as they are inter-linked and inter-locked. So, we try to integrate multifarious problems with the limited resources and means of the people for possible solution. In this regard, the development programs in special sector could only response like a glass of water in the desert.

Considering the above mention situation, the ***Integrated Development Approach (IDA)*** is convincingly adopted in Dipshikha to counter and remove rural problems. Dipshikha's IDA concept, its main components and objectives are reflected in its projects. Generally, Dipshikha takes up projects considering the integrated problems of the rural poor people as per the Integrated Development Approach.

Dipshikha is working with the disadvantaged rural poor to bring positive change of their lives through Integrated Development Approach (IDA) since its inception. From the experiences and deeper reflection in the field of rural development. Dipshikha has developed a new concept to make the IDA more intensive and scientific to improve the living conditions of the rural people. The concept is ***Integrated Family Development Approach (IFDA)***. Here a family is considered to be the center of all development efforts. All the members of the family are brought as stakeholders of the IFD approach. According whatever inputs and resources are invested must respond to the needs and development of the family members an important social unit of the society. Dipshikha takes up projects according to the IFDA.

The main concept of Dipshikha development activities

Dipshikha believes in and emphasizes on the self-respect and absolute human dignity. It further believes in the total development of the persons i.e. human, social, cultural, economical, spiritual and political. To achieve self-reliance of individuals through group is the ultimate goal. Therefore, Dipshikha endeavors and encourages the poor to identify their problems and potentials to be resourceful. Once, they become resourceful, they will become self-generating, sustainable and ultimately self-reliant.

Human being alone is like an island. Only a saint can develop his potentials alone by meditation, self-restraint and austerity. But people need scopes to interact, express and share their feelings, joys, pains and sorrows and needs with others. These interacting scopes in turn can help to interact among the people of same interest, status and values. Interaction of individuals of different status creates divisions of superior and inferior, powerful and powerless, leader and the led, dominant and the dominated. Such kinds of relationships seldom favour development of the poor. Instead, it hinders and creates obstacles towards development of the poor. Interaction between the unequal creates scopes and avenues for the powerful to exploit and extract resources owned and created by the powerless. Awareness, unity, organization and empowerment with positive aspect towards development are the basic pillars for the poor to bring liberation and emancipation for themselves.

To avoid such situation, Dipshikha follows the development of equal and similar interest groups by motivating poor families to form into female and male groups separately. Once, these individuals are formed into groups, they gain unity and strength among themselves. They build confidence and start appreciating their own self-worth. They become capable to counter and defend injustices imposed on them by the vested interested groups. Then because of continuous interactions and reflections among themselves and auto-evaluation in regular meetings, gathering and training courses, self-transformation and determination for positive changes take place. They gradually become more and more self-generating and resourceful. In terms of working capital, they create it by weekly savings. They come forward to take up Income Generating Activities to raise their incomes. Economic improvement brings them social status, recognition, desire for political power and finally self esteem for self-actualization. Only economic surplus brings leisure time for creativity and future dreams. Dipshikha works to assist the poor so that the poor start the process towards self-realization, leading towards self-reliance. Then above the groups, the Group Development Committees (GDC) are formed. GDCs consists of 11 members coming from various groups that exist in particular village. GDC is like an APEX in a village to coordinate, plan and encourage development among the groups. GDC is expected to work to achieve self-reliance in the whole village. Presently, Women Forum and Women Council are being promoted for greater unity and solidarity among the women groups. Also Unit system where 6-10 villages are clustered to take up development activities are being encouraged and promoted for them.

Finally, Dipshikha believes in the spiritually and materially balanced development of the poor. At the same time, Dipshikha works for the promotion of inter-religious harmony among the various religious communities that live side by side and interspersed in the villages.

Organizational Structure/Management Aspect of Dipshikha

Dipshikha has a General Committee (GC) and an Executive Committee (EC). The GC body is for making policy and the EC elected from the GC is the executing body. Major portion members of the General Committee are elected from the groups of Dipshikha. The Executive Director is responsible for overall implementation of the policies and activities of Dipshikha approved by the committees with the support of concerned staff.

ORGANOGRAM OF DIPSHIKHA

