

Effectiveness of Rural Livelihood Project (RLP) in Reducing Poverty: A Case Study in Bangladesh

*Ranajit Kumar Bairagi¹, ATM Jahiruddin²

Abstract

This study aimed at evaluating the effectiveness of Rural Livelihood Project (RLP) in terms of its impact on reducing poverty in Bangladesh. The study considered 110 members in 10 randomly selected women cooperative societies. It found that the RLP is effective in reducing poverty and raising the living standard of the participating family members. The effectiveness of the RLP has been measured in terms of its contribution in generating more income, inducing and supporting more consumption of nonfood and nutrition food items. The RLP has contributed positively to reduce family size by 4.7%, raise consciousness in improving housing materials by 92%, and diversifying occupations among the attending members. Consciousness has also increased in drinking water, sanitation, modern healthcare, women empowerment, maternal treatment, child education, and birth control.

Key Words: Poverty, Family size, Consciousness, Housing materials, Rural livelihood project

Introduction

A number of NGOs in Bangladesh are actively involved in reducing the poverty from Bangladesh. The report of the BBS shows downward trend in income poverty during the period 1999-2004. According to the DCI method used in the survey, the incidence of poverty at the national level decreased from 46.2% in 1999 to 40.9% in 2004. The incidence of hard-core poverty also shows a declining trend during the same period. Thus, the role of different projects of these NGOs has been proved to be significantly effective in reducing the poverty from Bangladesh. The Rural Livelihood Project (RLP) is involved in reducing poverty from Narail Sadar Upazila in Bangladesh through its micro credit program among village women. The present study is concerned with evaluating the effectiveness of this project in terms of its socio-economic impact.

Literature Review

According to Hobsbawm (1968: 398), "Poverty has always had several not entirely separable meanings and is always defined according to the conventions of the society in which it occurs". It is about income levels, food security, quality of life, assetlessness, human resource capacities, vulnerabilities and coping, gender inequalities, human security, initiative horizons etc. However, it usually refers to various forms of economic, social and psychological deprivation among the people who lack adequate ownership, control or access to resources for achieving a minimum level of living. It is a multidimensional problem involving income, consumption, nutrition, health, education, housing, crisis coping capacity, access to credit and other aspects of living. Sen (1981: 9) defined poverty as a socio-economic problem that needs to be conceptualized.

*Corresponding Author

¹Ranajit Kumar Bairagi, Associate professor, Business Administration Discipline, Khulna University, Khulna-9208, Bangladesh

²ATM Jahiruddin, Associate professor, Business Administration Discipline, Khulna University, Khulna-9208, Bangladesh

Absolute or Subsistence Concept of Poverty: Rein (1970: 48) defined absolute/subsistence poverty as "...lack of the income needed to acquire the minimum necessities of life." According to Rein (1970: 49) the minimum necessity is "...the amount needed to sustain life." Sen (1981) defined absolute poverty in terms of the biological approach: the ability of an individual or household to achieve a minimum daily nutritional requirement. Rowntree (1901: 46) first defined poverty in subsistence terms in his classic study of poverty in the city of York. In that study he defined 'primary poverty' as "earnings...insufficient to obtain the minimum necessities for the maintenance of merely physical efficiency". Thus, it can be concluded that absolute poverty is a situation in which a person's consumption fails to meet the minimum daily requirements necessary for the normal functioning of a body.

Relative or Inequality Concept of Poverty: Relative poverty is considered as a relative deprivation of income emerged from unequal distribution of resources (Alam, 1993). Townsend (1970: 2) postulates that, "poverty must be regarded as a general form of relative deprivation which is the effect of the misdistributions of resources." Gardener & Lewis (1996: 25) define poverty "...as a state in which people are denied access to the material, social and emotional necessities of life. ...Poverty is first and foremost a social relationship, the result of inequality, marginalization and disempowerment." Chambers (1983: 111) termed poverty as an interlinked and integrated concept, which involves 'cluster of disadvantages'. According to him, poor people are perceived to suffer many forms of deprivation which lead to "...not only lack of income and wealth, but also social inferiority, physical weakness, disability and sickness, vulnerability, physical and social isolation, powerlessness, and humiliation" (Chambers, 1997: 44). He termed all these as a 'deprivation trap' (Figure. 1)

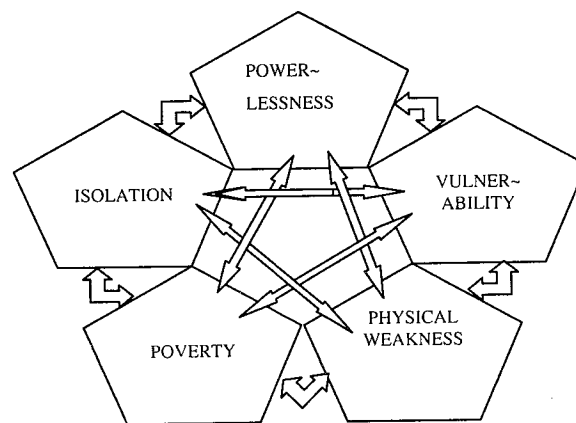


Figure 1: The Deprivation Trap
Source: Chambers, (1983: 112)

But in reality, poverty is measured based on low income or low consumption, which is one-dimensional.

Basic Needs Approach: Basic needs include, first, certain minimum requirements for a family such as adequate food, shelter, clothing, certain household equipment and furniture; and second, essential services for the community such as safe drinking water, sanitation, public transport, health, education and cultural facilities (International Labor Organization (ILO), 1977).

Drewonski and Scott (1966) provide a hierarchically arranged list of basic human needs: (1) basic physical needs: nutrition, shelter, and health; (2) basic cultural needs: education, leisure, recreation and security; and (3) higher needs: surplus income. According to Khan (1977) the basic needs bundle consists of food, clothing, shelter, health, education, drinking water and contraceptives. On the other hand, Srinivasan (1977: 10) argues that instead of estimating specific requirements independently, the quantification of basic needs should be in terms of a bundle of things together, because of the complementary and substitution possibilities of the basic need items. Rao (1977) points out that poverty has to be defined in respect of deficiency in the whole living situation, which includes energy requirements, balanced diet, and the other components of basic needs essential for human existence at a tolerable level.

Absolute versus Relative Poverty: Townsend (1970: 2) indicates that, "needs which are believed to be absolute or basic can be shown to be relative." In explaining the incidence of poverty, both absolute and relative approaches are significant, because they are not isolated concepts rather they are mutually related. Although there are practical difficulties, it is advisable to add both in the concept of poverty (Dorothy, 1972). Rodgers (1984) uses two different terms: cardinal and ordinal poverty. By the cardinal poverty he indicates a bundle of economic, social, and cultural goods, services and possibilities. By ordinal poverty he indicates a comparison between different members of society in respect of their access to what is considered good or useful in that particular society.

Measurement of the Incidence of Poverty in Bangladesh

The Government of Bangladesh measures poverty using three sets of poverty lines based on different definitions, namely the Direct Calorie Intake (DCI) method, the Food Energy Intake (FEI) method and the Cost of Basic Needs (CBN) method. These three methods are summarized as follows:

- The DCI method uses per capita daily calorie intake as the direct poverty threshold. DCI method is used to calculate the incidence of poverty where population or households falling below a threshold calorie intake (2,122 Kcal per person on a daily basis) is considered to be in *absolute poverty*. Similarly, a person having daily calorie intake less than 1,805 Kcal is considered to be in *hard-core poverty*.
- The FEI method defines the poverty line as the monthly expenditure required for a calorie intake equivalent to the food energy requirement set at 2,122 Kcal in rural areas and 2,112 Kcal in urban areas. FEI method computes poverty lines by finding the value of per capita consumption at which a household can be expected to fulfill its calorie requirement.
- The CBN method defines the poverty line as the sum of the food poverty line (per capita monthly expenditure required for purchasing food to meet the set calorie requirement) and the non-food poverty line (minimum non-food expenditure to meet basic needs). With CBN method, an absolute poverty line is defined as the value of consumption needed to satisfy minimum subsistence needs (food as well as non-food consumption).

Poverty Trends in Bangladesh

According to the FEI method, the rate of poverty reduction is well pronounced for the urban area but according to the DCI method, the decrease is comparatively lower in rural area than in urban area. However, the results of both methods show reduction of the incidence of poverty between 1999 and 2004. Incidence of hard-core poverty declined considerably in 2004 than that in 1999. The depth and severity of income poverty declined from 1999 to 2004 in areas other than the urban area. Another identifying characteristic of the poor is their large family size. There is a

very strong association between poverty incidence and household size. In the urban area, the highest poverty incidence is observed in case of 5-6 member households. The poverty is also negatively correlated to land ownership and the poverty incidence of the landless is more prominent in the urban area than that in rural area. It is the highest (71.39%) for the households whose main source of income was daily wage from agriculture and the lowest (19.87%) for the households with income from wages and salary. High incidence of poverty was also observed for the households with main source of income from non-agriculture daily wage (51.26%) and non-agriculture self-employed (40.41%). On the other hand, lower poverty incidence was observed for the households whose main source of income being pension (20.19%), house rent and other rent (21.27%).

In agricultural occupations, the poverty incidence declined in owner-farmers and owner-cum-tenant farmers in 2004 compared to that in 1999. In 1999, the percentage of owner-farmers for all, poor and non-poor households were 19%, 11.6% and 24.3% respectively, whereas in 2004 the corresponding figures are 12%, 9.4% and 13.9%. The percentage of tenant farmers increased in 2004 compared to 1999. In non-agricultural occupations, major changes have occurred in some occupations, namely, business, non-agricultural labor and artisan during the period 1999-2004. In 1999, the population with business, non-agricultural labor and artisan as occupations were 12.7%, 8% and 1.9% respectively. The corresponding figures for 2004 were 14.7%, 13.4% and 4.4% respectively.

Per capita income for all levels increased in 2004 compared to that in 1999. The increase is high in the urban areas, but comparatively low in the rural areas. At the national level per capita income was Taka 948 in 1999, which increased to Taka 1,114 in 2004. For poor households, per capita income at the national level increased from Taka 602 to Taka 631 and for non-poor households, per capita income also increased from Taka 1,228 to Taka 1,466. Per capita expenditure for all levels increased in 2004 compared to 1999. Here the compound growth rate is 1.26%.

Human poverty captures three most important dimensions of human deprivations, namely (i) deprivation in health, indicated by vulnerability to death at a relatively early age as quantified by the percentage of people expected to die before the age of 40 years, (ii) deprivation in knowledge, signified by the percentage of adults who are illiterate, and (iii) deprivation in certain economic provisioning, quantified in three variables e.g. percentage of people without access to safe water and sanitation, percentage of people without access to health services, and percentage of children under-five who are moderately or severely underweight.

Literacy rate of population 5 years and over in 2004 for both sexes stood at 44.4% as against 42.5% in 2001. The male literacy rate increased by 2 percentage points while female literacy rate increased by 2.1 percentage points. According to the 2001 Population Census, literacy rate of population 7 years and over for both sexes, males and females were 45.3%, 49.6% and 40.8% respectively, while the corresponding figures were 47%, 51.1% and 42.9% in 2004. During the same period literacy rate of population 15 years and over increased by 1.7%, 1.1% and 2.5% for sexes, males and females respectively.

The number of ailing patients at the national level declined from 18.4% in 1999 to 15.8% in 2004. For poor households, the number of patients stood at 15.3% in 2004 as against 17.4% in 1999. For non-poor households, the number of patients stood at 16.1% in 2004 compared to

19.3% in 1999. It may be mentioned that percentage of ailing patients for both poor and non-poor households in urban as well as rural areas decreased substantially in 2004 compared to 1999.

Education level has a negative correlation to poverty, that is, the more educated the head of the household, the lower poverty incidence is observed. Such correlation is stronger in urban areas than in rural areas, where size of land and poverty incidence are negatively correlated. Households owning less than 0.5 acres of agricultural land are defined as "functionally landless" and show the highest incidence of poverty.

When considering the occupation of the household head, the occupation group with the highest poverty incidence in rural areas is landless agricultural laborers, while farm owners show the lowest incidence. In urban areas, laborers are the group with the highest poverty incidence and professional / executive administrative officials and business owners have the lowest poverty incidence.

A gender dimension of poverty is found when measured using the lower poverty line: female-headed households show a higher poverty incidence than male-headed households in rural areas, while there is no difference in urban areas. If upper poverty lines are used, however, the poverty incidences of both female-headed and male-headed households show similar trends in both rural and urban areas.

As for the age of household heads, the poverty incidence increases as the age rises up to 39 years old and then it begins decreasing. Similarly, the poverty incidence rises as the number of household members increases with the peak of six persons, and then starts falling for households with seven or more members.

Health indicators show steady improvement, but there are disparities among income groups (e.g., under-five mortality rate of the lowest 20% income group is nearly twice as that of the richest 20% group).

Living conditions including electrification, ownership of TV and radio, sanitation facilities, and housing materials are generally poor across income groups, but low-income groups in particular suffer from poor conditions. Most of the area of the country is still without piped water facilities, and most of the population regardless of income level gets their water from tube-wells. The ground water is tended to be contaminated by Arsenic, posing a serious health risk to people.

Narail Sadar Upazila at a Glance

Narail Sadar Upazila is the largest Upazila of Narail district in respect of both area and population. This Upazila occupies an area of 381.76 Square Kilometers and consists of 1 pourashava, 13 unions, 181 mouzas and 249 villages. The Upazila has a population of 2,70,840 (as per Population Census 2001) of which 1,37,920 are males and 1,32,920 are females. It is bounded on the north by Lohagara Upazila of Narail District and Shalikha Upazila of Magura District, on the east by Lohagara Upazila of Narail District, on the south by Kalia Upazila of Narail District and Abhaynagar Upazila of Jessore district and on the west by Bagharpara Upazila and Jessore Sadar Upazila of Jessore district. It is located between 23°02' and 23°17' north latitudes and between 89°23' and 89°37' east longitudes. Comparative statements between different indicators of life standard of Narail Sadar Upazila are given in the Table-1 of Appendix. It is observed that indicators are representing a positive trend toward poverty

reduction and rise in the living standard. The per capita income has also increased significantly as shown in Table-2.

Rural Livelihood Project

One of the major government agencies involved in poverty alleviation / reduction in Narail Sadar Upazila is the Bangladesh Rural Development Board (BRDB). By 1996, BRDB had implemented 9 major poverty alleviation projects with financial support from the Government and donors. The ADB financed Rural Poor Cooperative Project (RPCP) was one of the major projects implemented by BRDB in the northwest and southwest region of Bangladesh covering 82 Upazilas of 13 districts. Based on the request of the government, a new project titled the RLP (Rural Livelihood Project) has been established in terms of the agreement signed in 1998 between the Peoples' Republic of Bangladesh and the ADB especially in the southeast, northeast and central part of the country covering 70 Upazilas in 10 districts. RLP is now being implemented in 152 Upazilas of 23 districts spread over 5 divisions, namely Rajshahi, Khulna, Chittagong, Sylhet and Dhaka Divisions. The overall objective of the RLP project is to support the government poverty reduction efforts through creation of sustainable farm and non-farm employment opportunities among the poor people of the community. The project area comprises of 152 Upazilas of which 70 Upazilas of 10 districts are from the southeast, northeast and central part of the country and the remaining 82 Upazilas of Rural Poor Co-operative Project covering 13 districts in the northwest and southwest part of Bangladesh. Rural poor (Bittahen) men and women who depend on manual labor for their livelihood and do not own more than 50 decimal of land (0.50 acres) are the target of RLP.

Objectives

The poverty concepts and findings of the above literature explored the avenues of conducting an empirical study on the effectiveness of Rural Livelihood Project (RLP) in reducing poverty in Bangladesh. The different constraints have confined this study to select the area of study in one region in Bangladesh and accordingly, the broader objective of the study has been articulated as: "To assess the effectiveness of Rural Livelihood Project (RLP) in reducing poverty Bangladesh" To achieve the above objective, the following specific objectives in the study need to be actualized:

- To assess the effectiveness of RLP in generating income for the poor.
- To assess the contribution of the RLP in developing awareness among the inhabitants in the study area (Narail Sadar Upazila) regarding Literacy, Primary Health Care, Nutrition, Family Planning, Sanitation, Safe Water, and Women Empowerment etc.
- To draw the inference of this project with respect to its effectiveness in other areas of Bangladesh and
- To make recommendations for policy implementations.

Methods

The study is carried out mainly in Narail Sadar Upazila (Administrative Territory) of Narail District in Bangladesh. Both primary and secondary data have been collected and used from the stakeholders of the project. Primary data have been collected from 9 unions out of 11 unions of Narail Sadar Upazila and Narail Poursava. Field survey has been the major source of primary data. A questionnaire was prepared in the light of the goals of the study. The questionnaire was filled up through direct interviewing. The questionnaires (in Bengali) consisted of the following queries:

- General information of a beneficiary

- Household and housing characteristics
- Demography
- Income from agriculture and non-agriculture
- Literacy and enrollment of children in primary education
- Land ownership
- Food and non-food expenditure
- Primary health care, family planning, sanitation, safe water, nutrition, women empowerment etc.

There are 114 Bittaheen Samabya Samitee (BSS i.e., Asset-less Co-operation Society) and 3,769 beneficiaries under the RLP in Narail Sadar Upazila and the project has been extended in 11 of 13 unions in the study area. Data have been collected from 10 Mohila Bittaheen Samabya Samitee (MBSS) selected by convenient random sampling. Total 110 out of 3,769 beneficiaries of Narail Sadar Upazila and Narail Poursava are interviewed.

The relevant secondary data have been extracted from the following sources:

- Bangladesh Rural Development Board, Narail Sadar
- Bangladesh Bureau of Statistics
- Economic Adviser's Wing, Finance Division, Ministry of Finance
- Related Journals and Books
- Personal Communication

In general, data have been collected from the respondents, usually the beneficiaries of the RLP. All the primary data have been edited, summarized and then analyzed through descriptive statistics. The derived results are comparatively interpreted.

Scope and Limitations

This study will explore empirical findings to assess the effectiveness of an economically viable development project in Bangladesh perspective. The findings and associated recommendations will help the concerned executives adjust the implementing policies to raise the soundness of their project.

The first limitation of the study is drawing conclusion based on the findings of a study conducted only on a single Administrative region out of around 500 such regions which may result in bias. The data were collected from one Upazila instead of all such Upazilas in Bangladesh. Only 110 out of 3,769 households are surveyed. Ten co-operative societies are selected randomly out of 114 societies. So there may have bias in drawing inferential conclusion. This study ignores the effect of inflation in measuring the performance in terms of monetary values.

Results and Analysis

Analysis on effectiveness of RLP in Narail Sadar Upazila has been summarized and compiled in terms of different dimensions and indicators of poverty. The table-3 delineates a concrete idea about the annual allocation, disbursement and recovery percentage of credits of RLP in Narail Sadar Upazila since its inception in this Upazila. The table delineates that the average number of annual members in the project during the period 1993-2006 is 1264 whereas average loan disbursement per member is taka 5,765. The yearly growth of members is 85 and the yearly growth of amount disbursed per person is taka 499 in the study area. The recovery percentage of credit is 95.15%. This rate is higher in comparison to that in other two neighbor Upazilas, Lohagara and Kalia. The recovery percentages of those two Upazilas are 90% and 88% respectively. In respect of recovery percentage of credit the project is a successful one in

comparison to that in other Upazilas of Narail district. The commitment of officers and employees of RLP at Narail Sadar Upazila and absence of political interference are attributed for the success of recovery rate in Narail Sadar Upazila.

A member of co-operative society has to buy at least a share of Taka 10 at the time of admission. Subsequently, at the time of taking each installment of credit in every year s/he needs to buy a share of Taka 10 plus 5% of his/her total credit amount. After termination of the project or when a member decides not to continue to involve himself/herself in the project, s/he will get the deposit back with 4% interest. These savings are the unique criteria of this project, which would make him/her self-reliant in the future. Share deposits and saving deposits of 10 randomly selected MBSS of Narail Sadar Upazila of Narail are shown in the table-4. Total deposit per member has been taka 4,178.83 indicating that the members in the societies have been savings oriented after being involved in the project.

Household Monthly Income and Expenditure: Monthly per household income and expenditure has been presented in Table-5. It is seen from the table that monthly income of the households increased from Taka 2,856.36 in June 2000 to Taka 4,673.64 in June 2006. The rate of increase is 63.62%. Similar result is shown in monthly expenditure. Here the rate of increase is 49.33%. It is observed that both income and expenditure have increased due to involvement in the project. The rural people had no regular means of income before involvement of the project. In case of saving, average savings in June 2006 is Taka 464.30 (maximum Taka 2,000 and minimum Taka 100), where nothing was saved in June 2000 and 15.45% of households are still unable to save.

Household Yearly Expenditure: Per household expenditure obtained from July 2000 and June 2006 survey have been presented in Table-6 and Table-7. It is observed from the table that during the period the expenditure increased for all poor households and implies that the standard of living of the poor has increased after their involvement in income generating activities facilitated by RLP.

The above yearly household expenditures pattern states that expenditure in health and clothing have increased by 1.73% and 1.23% respectively of corresponding income in 2006 and decreased in food by 2.96%. This increased expenditures in health and clothing implies that the living standard of concerned households has been increased.

The above table on expenditures of households in education delineates that the number of households with positive expenditure in education has increased during the period under consideration and all measures of central tendencies have also increased significantly. 12.33% of families increased their expenditure in education during period 2000-2006 and on average they have increased their expenditure in education by 61%.

Food and Non-Food Expenditure: Food and non-food expenditure incurred by the households has been presented in Table 8. It shows that food expenditure increased for all households. But in case of non-food items, the increase is higher than that of the food items. The average percentages of food and non-food expenditures were 58.89% and 41.11% in 2000 as against 52.10% and 47.90% in 2006 respectively of total expenditures on food and non-food items. This increase in nonfood expenditure indicates that after meeting the needs for basic foods their consciousness have increased regarding the needs for other nonfood items. The members of the

RLP societies have been able to consume more and more nonfood items and this consumption has positively contributed to raise their living standard.

Food Intake by Households: Food (vegetables, pulses, milk, fish, meat, egg, fruits etc.) consumptions by the households between 2000 and 2006 have been presented in Table 9. It is observed from the table that households take milk, fish, egg etc. more regularly in 2006 than 2000. Meat and fruits consumption has been increased in 2006. Most of the households eat vegetables and pulses regularly. This trend shows that the nutrition intake has increased with the increase of income and consciousness.

Households by Number of Members: Household by numbers have been Presented in Table 10. The percentage of household with 3, 4 and 5 members has increased in 2006 compared to 2000. On the other hand, households with 6 and above members decreased in 2006. There is no household with 8 and above members in 2006. The average household size decreased from 4.45 to 4.26 and the average decrease is 4.7%. Measures of kurtosis indicate that it changed from -0.43 in 2000 to 0.26 in 2006 implying that distribution of family members changed from platykurtic to leptokurtic. It also indicates that family size has been more concentrated to its mean implying the effect of the project in controlling population.

Distribution of Households by Materials of Main Housing Structure: The total number of houses has increased in 2006 compared to 2000. It was 249 in 2000 and has increased to 332 in 2006. Distribution of households by roof materials of main housing structure has been presented in Table 11. It is observed that household with CI Sheet as roof materials have increased in 2006 compared to that in 2000. It was 40.96% in 2000 and increased to 78.92% in 2006. This increase of roof materials is around 92%. The use of better housing materials bears a clear indication of increased living standard and it is attributed as an impact of RLP.

Household by Occupation: Distribution of households by occupation has been presented in Table 12. The percentage of agricultural occupations reduced in 2006 compared to 2000. Percentage of tenant farmer increased in 2006 compared to 2000. It was 18.18% in 2000 and increased to 30% in 2006. Traditional agricultural occupations were disappeared gradually. Poultry, cow rearing, goat rearing have come into play instead of traditional agricultural occupation. In non-agricultural occupation groups, major changes have been occurred in small business. In 2000, the percentage of household having small business was 30%, but in 2006, it has risen to 34.72%. It is noted that households have taken more than one occupation after getting credit from RLP.

Sources of Drinking Water: Sources of drinking water for all households have been presented in Table 13. It is observed from the table that in 2006 the use of safe drinking water has been increased. In 2006, 100% households are using tube-well and tap water for drinking and other purposes of cooking. Though in 2006, 100% households use tube-well water, but 4.55% of them do not know whether it is arsenic contaminated or not. In 2000, 92.73% used tube well water and rest of the households used other sources like pond, canal, river etc. It is observed from the table that 6.36% of households are using Arsenic contaminated tube well water.

Sanitation: The types of toilet used by the households have been presented in Table 14. It is seen from the table that sanitation situation has increased in 2006 compared to that in 2000. In 2006, slab latrine is used by the highest 89% household followed by sanitary (pucca) latrine

21%. In 2000, Katcha latrine was the highest 49% followed by slab latrine 38% and pucca sanitary latrine 13%. No households use open space. Remarkable progress has been achieved on this regard. Distribution of developed sanitary latrine has been leptokurtic (+2.82) in 2006 whereas it was playtikurtic (- 3.66) in 2000. From the respondents, it is known that 11.82% of households use soil, 34.55% use ash, and 53.64% use soap for washing hand after coming from toilet in 2006. But in 2000, 30% of households used soil, 22.73% used ash, 9.1% used soap and 47.27% used nothing for washing hands.

Methods of Treatments: Methods of treatments restored by the households for ailing patients have been presented in Table 15. It is observed from the table that, among the methods of treatment, government hospital (58.18%) is highest in 2006, followed by Quacks (36.36%). In 2000, it was 34.55% and 57.27% respectively. It is noticed from the table that, private doctors and homeopathic system of treatment are also reported by some patients. The percentages of such patients are 3.64% and 5.45% in 2006, which were 0.91% and 7.27% in 2000 respectively. On an average members' attitude has been positively changed by around 49% to developed treatment.

Empowerment of Women: It has been reported that women are now engaging in different income generating activities like poultry farming, sewing, block batik, small enterprises and even in agriculture. The derived facts regarding the direct women empowerment is given in Table 16. On an average women feel empowered in 80% of the cases where they need some sort of freedom and empowerment.

Other Impacts: RLP has contributed to raise the living standard of rural women at a considerable percentage. Women can participate freely in the domestic sphere without fear and harassment. Women are now more conscious about education, primary health tips, nutrition, sanitation, bad impact of dowry and child marriage etc. The derived facts are given in Table 17.

Findings

- There has been significant improvement of income (+ 63.62%) and expenditure of households (+ 49.33%) after involving themselves in RLP.
- Households spend comparatively more on health (+ 1.73%) and clothing (+ 1.23%) of income.
- Consumption of nonfood items has increased significantly.
- The nutrition intake has increased with the increase of income and consciousness.
- Family size has been decreased by 4.7% and leptokurtic distribution of family members implies positive impact of the project on population control.
- The increase (+ 92%) in the use of better housing materials has been attributed as an impact of RLP.
- The RLP members' occupation has been diversified.
- Consciousness regarding drinking water has been increased during the study period.
- Distribution of sanitary latrine has been developed from playtikurtic (- 3.66) to leptokurtic (+2.82).
- Members' attitude regarding developed treatment has been positively changed by around 49%.
- 80% of the women feel somewhat empowered.

- 87.65% of the women, on average, have been conscious regarding midwifery, primary healthcare, child education, birth control

Conclusion

RLP is striving to enhance the process of empowerment of assetless men and women especially assetless rural women through a number of stimulants such as organizing the poor into cooperative groups, continuous training on management and capacity building, motivational campaign, serving the poor with micro-credit, opening up avenues for their employment etc. It has been contributing to the vital need of the rural poor through generation of employment opportunities for them. It has been able to contribute modestly in reducing poverty in the project area. It has contributed in generating more incomes and inducing more expenditure by 63.62% and 49.33% respectively. It has also attributed in spending more on health and clothing by 1.73% and 1.23% respectively. Consumption of nonfood and nutrition food items has increased significantly among family members. Family size has been reduced by 4.7%, 92% more houses used better housing materials, and occupations have been diversified among the attending members in the project. Consciousness has taken place in drinking water, sanitation, modern healthcare, women empowerment, maternal treatment, child education, and birth control. The positive contribution of RLP on the above socio economic dimensions raises the living standard of the participating family members.

Thus the conclusion of this study is that the achievement of RLP is noteworthy and viable in terms of its required costs and efforts.

Recommendations

Overall, the RLP has proved to be an effective measure in poverty reduction among assetless rural people specially assetless women in Bangladesh. The following recommendations and proposals are put forwarded with a view to improving the likelihood of success of the project and for the policy formulation and development of other programs related to poverty reduction:

- Effective co-ordination, supervision and monitoring should be established among the implementing agency, so that the selected beneficiaries can select their proper enterprise suitable for her/him.
- Beneficences should be selected impartially and as per guideline of the project
- Co-operative societies should be made effective. Regular group meeting of the society should be arranged.
- Employment opportunities in the agricultural sector are almost saturated, so for the assetless, landless poor households, non-farm activities should be generated in order to improve their economic condition. Emphasis to be given to diversified sources of income for economic security.

Policy Implications

It is rationally expected that this study will be stimulating and helpful for policy makers, development authors, organizations and field-level staffs involved with poverty reduction and rural development. Information contained in this paper is likely to be useful for researchers and planners working in the vital sector of poverty reduction and development.

References

- Alam, J. (1993), "Poverty Alleviation Program in Bangladesh -The Experience of Non- government and Government Organizations", in Amin, M. N. (ed), *Government of Bangladesh in Poverty Alleviation*, BRDB (Bangladesh Rural Development Board), Dhaka, Bangladesh.

- Bangladesh Economic Review* (2005), Ministry of Finance, Government of the Peoples' Republic of Bangladesh. June, Dhaka, Bangladesh.
- Bangladesh PRSP Forum Economic Update* (2005), Recent Developments and Future Perspectives. World Bank, November, Dhaka, Bangladesh
- Bangladesh Orthonoitic Somiksha* (2006), *Bangladesh Economic Review* (Bangla Version). Ministry of Finance, Government of the Peoples' Republic of Bangladesh. June, Dhaka, Bangladesh.
- Chambers, R. (1983), *Rural Development: Putting the First Last*. Longman, London.
- Chambers, R. (1997), *Whose Reality Counts? Putting the First Last*, Intermediate Technology Publications, London
- Chossudovsky, M.. (1997). *The Globalization of Poverty: Impacts of IMF and World Bank Reforms*, Third World Network, Malaysia
- Dorothy, J., (1972), *Poverty Politics and Change*, Prentice Hall, Englewood Cliffs, N.J.
- Drewonski, J. and Scott, W. (1966), *The Level of Living Index*, UN Research Institute for Social Development Report N. 4,
- Gardener, K. & Lewis, D. (1996), *Anthropology, Development and the Post-Modern Challenge*. Pluto Press, London.
- Hobsbawn, E.J., (1968), *International Encyclopedia of the Social Science*, New York.
- Human Development Report* (2003), UNDP (United Nations Development Program), Oxford University Press, New York.
- Human Development Report* (2004), UNDP (United Nations Development Program), Oxford University Press, New York
- Human Development Report* (2005), UNDP (United Nations Development Program), Oxford University Press, New York
- Islam, S. Aminul. (2004), *Overcoming Poverty in Bangladesh: Search for a New Paradigm*, Bangladesh e-Journal of Sociology, Vol.1, No. 2, July.
- Meeting Basic Needs: Strategies for Eradicating Mass Poverty and Unemployment*, Conclusions of the World Employment Conference 1976, International Labor Organization, 1977, Geneva.
- Report of the Household Income and Expenditure Survey 2000*, BBS (Bangladesh Bureau of Statistics), 2003, Dhaka, Bangladesh.
- Report of the Poverty Monitoring Survey 2004*, BBS (Bangladesh Bureau of Statistics), 2004, Dhaka, Bangladesh.
- Rural Livelihood Project: Poverty Alleviation through Employment Generation*, 2003, BRDB (Bangladesh Rural Development Board), Dhaka, Bangladesh.
- Statistical Yearbook of Bangladesh 2004*, BBS (Bangladesh Bureau of Statistics), 2003, Dhaka, Bangladesh.
- World Development Report 1990: Poverty, World Development Indicators*, World Bank, 1990, Oxford University Press, Toronto

Appendices

Table 1: Comparative Statement between Different Indicators of Living Standard

Serial No.	Particulars	Year-wise Percentage (%)	
		1995	2005
1	Rate of Literacy	37	62
2	Health Service	48	60
3	Sanitation	20	68
4	Population Below Poverty Line	55	40
5	Population Growth Rate	1.91	1.47
6	Infant Mortality Rate	0.72	0.64
7	Maternal Mortality Rate	0.42	0.32

Source: Upazila Statistical Office, Narail Sadar, Narail

Table 2: Comparative Statement between Per Capita Income

Year	Per capita income (in US \$)
1995	240
2005	400

Source: Upazila Statistical Office, Narail Sadar, Narail

Table 3: Annual Allocation, Disbursement and Recovery Percentage of Credits of RLP in Narail Sadar Upazila:

Serial No.	Financial Year	No of Samitees (Society) Received Credit	Number of Members	Amount of Credit Disbursed	Amount of Credit Recovered	Recovery percentage
				(Taka in Lac)	(Taka in Lac)	(%)
1	1993-1994	11	97	2.67	2.67	100
2	1994-1995	34	467	12.25	12.25	100
3	1995-1996	71	919	30.64	30.55	99
4	1996-1997	101	1237	69.91	68.51	98
5	1997-1998	100	1786	104.36	93.92	90
6	1998-1999	73	1873	105.07	96.66	92
7	1999-2000	65	1482	85.90	78.19	91
8	2000-2001	47	1214	66.97	61.61	92
9	2001-2002	56	1342	77.92	73.24	94
10	2002-2003	59	1387	83.31	77.47	93
11	2003-2004	65	1504	112.00	106.40	95
12	2004-2005	74	1628	133.05	129.05	97
13	2005-2006	63	1491	154.84	148.64	96
Average (Per member in Taka)			1264	5.765		95.15%
Growth			85	499		

Source: RLP of Bangladesh Rural Development Board, Narail Sadar, Narail

Table 4: Share and Saving Deposits of 10 Randomly Selected MBSS of Narail Sadar Upazila

Serial No.	Name of the Samitee (Society)	Share Deposit	Saving Deposit	Total Deposit
		(Taka)	(Taka)	(Taka)
1	Muldair East MBSS Ltd.	4810	12796	17606
2	Ballartop MBSS Ltd.	9720	27977	37697
3	Tularampur North MBSS Ltd.	15900	50769	66669
4	Banshvita MBSS Ltd.	9650	44206	53856
5	Charikhada MBSS Ltd.	6030	11799	17829
6	Daljitpur MBSS Ltd.	7300	27137	34437
7	Shovarghop South MBSS Ltd.	9080	24834	33914
8	Shimulia MBSS Ltd.	14570	32190	46760
9	Vandaripara South MBSS Ltd.	8680	27146	35826
10	Bijoypur Middle MBSS Ltd.	22600	92477	115077
Total (110 members)		1,08,340	3,51,331	4,59,671
Average		984.91	3193.92	4178.83

Source: RLP of BRDB, Narail Sadar, Narail SW

Table 5: Average Monthly Income and Expenditure of Households

Value	Average Monthly Income (Taka)			Average Monthly Expenditure (Taka)		
	June 2000	June 2006	Increase +% Decrease -%	June 2000	June 2006	Increase +% Decrease -%
Maximum	5000	8000	60	5000	7000	40
Minimum	1200	2400	100	1300	2300	77
Average	2856	4674	64	2866	4280	49
Median	3000	4500	50	3000	4250	42
Mode	3000	3000	0	3000	3000	0

Source: Study's derivation from Primary Data

Table 6: Yearly Expenditures of Households in Food, Health and Clothing

Value	Expenditure in 2000 (In Taka)			Expenditure in 2006 (In Taka)		
	Food	Health	Clothing	Food	Health	Clothing
Maximum	33000	8000	8000	41000	10000	16000
Minimum	10000	1000	1500	18000	2000	3000
Average	20182	2994	4461	26878	4819	6665
Median	19000	2000	4000	25900	4500	6000
Mode	12000	3000	3000	25000	4000	5000

Source: Study's derivation from Primary Data

Table 7: Yearly Expenditure of Households in Education

Value	With Zero Expenditure (Taka)		Without Zero Expenditure (Taka)	
	Year 2000	Year 2006	Year 2000	Year 2006
Number of Households Spending in education	110	110	73	82
Maximum	5000	8000	5000	8000
Minimum	0	0	500	1000
Average	1237	2235	1864	2999
Median	1000	2000	1200	2000
Mode	0	2000	1000	2000

Source: Study's derivation from Primary Data

Table 8: Yearly Expenditure of Households in Food and Non-food

Value	Expenditure in Year 2000 (Taka)		Expenditure in Year 2006 (Taka)	
	Food	Non-food	Food	Non-food
Maximum	33000	32000	41000	44000
Minimum	10000	3000	18000	9600
Average	20182	14089	26878	24709
Median	19000	14000	25900	24800
Mode	12000	6000	25000	16000

Source: Study's derivation from Primary Data

Table 9: Households by Food Intake (Days per Week Basis)

Food intake	Number of households (Year 2000)							Number of households (Year 2006)						
	1	2	3	4	5	6	7	1	2	3	4	5	6	7
	days in week							days in week						
Vegetables	1	15	20	13	14	-	47	-	1	4	16	17	13	59
Pulses	1	16	21	12	14	-	46	-	1	3	17	18	14	57
Milk	17	18	15	3	1	-	5	10	15	15	11	11	9	20
Meat	25	2	-	-	-	-	-	44	19	3	-	-	-	-
Egg	50	27	5	5	1	-	1	13	35	25	23	8	4	1
Fish	3	19	33	23	16	1	7	-	2	7	21	37	25	18
Fruits	20	18	14	5	1	-	1	19	30	10	11	6	3	5

Source: Study's derivation from Primary Data

Table 10: Distribution of Households by Number of Members

Household size	In Year 2000	In Year 2006
2	10	5
3	20	24
4	33	42
5	19	21
6	17	12
7	8	6
8	2	0
9	1	0
	110	110

Source: Study's derivation from Primary Data

Table 11: Roof Materials of Main Housing Structure

Roof Materials	Year 2000	Year 2006
Brick/Cement	2	3
Cl Sheet	102	262
Straw	145	66
Total	249	332

Source: Study's derivation from Primary Data

Table 26: Distribution of Households by Occupation

Occupation	Number of Households in Year 2000	Number of Households in Year 2006
Agriculture	50	15
Poultry	0	14
Cow Farming	0	33
Goat Farming	0	6
Labor	4	0
Small Business	33	50
Van Puller	15	16
Others	8	10
Total	110	

Source: Study's derivation from Primary Data

Table 13: Distribution of Households by Sources of Drinking Water

Sources of Drinking Water	Year 2006	Year 2000
Tap	5	2
Tube well (Arsenic)	7	
Tube well (non-Arsenic)	93	102
Tube well (not known)	5	
Pond/Canal/River	0	6

Source: Study's derivation from Primary Data

Table 14: Distribution of Households by Type of Toilet Used

Type of Toilet	Year 2000	Year 2006
Sanitary (Pucca) (Concrete)	9	21
Slab Latrine	37	86
Katcha Latrine (Raw)	52	3
Others (Hanging)	1	0

Source: Study's derivation from Primary Data

Table 15: Distribution of Households by Methods of Treatment

Methods of Treatment	Year 2000	Year 2006	Absolute Positive Change
Govt. Hospital	38	64	26
Private Doctors	1	4	3
Quacks	63	40	23
Homeopathic	8	6	2

Source: Study's derivation from Primary Data

Table 16: The direct women empowerment

(i)	98.18% women are now participating in decision making in their household
(ii)	81.82% women have savings
(iii)	27.27% women keep money in their own hand
(iv)	97.27% women are at liberty to spend money to meet their daily requirements
(v)	97.27% husbands have taken decision after taking opinion from their wives

Source: Study's derivation from Primary Data

Table 17: The derived impact on women

(i)	80.91% women know about 6 dangerous diseases of children
(ii)	98.18% women immunize their children
(iii)	63.86% women have taken help from trained foster-mother
(iv)	83.64% women had taken advice from physician when they were pregnant
(v)	18.18% women got admitted in the hospital for delivery
(vi)	99.09% women have taken TT injection
(vii)	100% women lactated their children from breast
(viii)	100% women use oral saline for dehydration and know how to make it
(ix)	98.18% women have taken birth control measures. 69.09% have taken temporary methods and 29.09% have taken permanent methods.
(x)	100% women are conscious about the bad impact of dowry and child marriage
(xi)	100% women send their children to the primary school
(xii)	100% women do not discriminate their children in food intake and enrollment in the primary education
(xiii)	100% women can sign their names after getting training from RLP