

BIDS **RESEARCH** **2012-2013**

**Major Findings and Policy Implications
of Completed Studies**



Bangladesh Institute of Development Studies

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Implications of Completed Studies**



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Foreword

This publication, *BIDS Research 2012-2013: Major Findings and Policy Implications of Completed Studies* of the Bangladesh Institute of Development Studies (BIDS) provides the highlights of major results and policy implications of the research studies that the Institute completed during the period July 2012 to December 2013. It covers a total of 30 research studies, of which one study was funded by the BIDS Research Endowment Fund (REF), while the remaining 29 studies were sponsored by government departments/agencies and national and international institutions. It may be noted that the Board of Trustees of the BIDS in one of its recent meetings suggested that BIDS should publish such highlights for sharing its research results with a wider audience.

The completed studies focus on a number of major themes, such as *Macroeconomic Policy and Employment; Agriculture and Food Security; Education, Health and Social Development; Energy and Power Sector Issues; Safety Nets and Social Protection; Governance Issues; Industry and Services Sector Issues; Physical Infrastructure Development; Natural Resource Economics; and Climate Change Impacts*. This shows the multi-dimensionality of BIDS research agenda and the wide spectrum of research activities that BIDS undertakes in order to meet its mandate.

BIDS intends to publish this document regularly as a part of its commitment to establishing transparency and accountability to its stakeholders including researchers and policy makers who are working towards promoting evidence based policies in Bangladesh. I would like to express my deep appreciation to all my colleagues in BIDS who have cooperated and contributed to the preparation and publication of this annual research publication. I would also like to express my deep gratitude to the Hon'ble Minister of Planning and Chairman of BIDS Board of Trustees and its distinguished members who advised BIDS to publish such a volume.

February 2014

Mustafa K. Mujeri
Director General

Introduction

The Bangladesh Institute of Development Studies (BIDS) is an autonomous public multi-disciplinary organisation with the mandate to conduct policy oriented research on development issues facing Bangladesh and other developing countries. Its mission is to facilitate learning in development solutions by conducting credible research, fostering policy dialogue, disseminating policy options, and developing coalitions to promote informed policy making.

In its mission of building research capacity and conducting in-depth and policy relevant research, BIDS undertakes a wide spectrum of activities covering the Institute's mandate of enriching the country's policy environment, creating awareness on improving the policy responses, enhancing policy analysis and dissemination capacities, and influencing policies.

The *BIDS Research 2012-2013: Major Findings and Policy Implications of Completed Studies* provides the summary information on major findings and policy implications of the research studies that the Institute completed during the period July 2012 to December 2013. The research agenda of the period covered priority issues in different aspects of the Bangladesh economy which have been grouped under various thematic areas, such as *Macroeconomic Policy and Employment; Agriculture and Food Security; Education, Health and Social Development; Energy and Power Sector Issues; Safety Nets and Social Protection, Governance Issues; Industry and Services Sector Issues; Physical Infrastructure Development; Natural Resource Economics; and Climate Change Impacts.*

In addition to studies sponsored by the government ministries and agencies as well as other national and international organisations, the agenda included studies undertaken under the BIDS Research Endowment Fund (REF) which reflected priority policy oriented research of the Institute identified through interactions with the policy makers, civil society and other partners.

In the coming years, BIDS will further strengthen its present efforts of concretising its long term vision for being part of a process that will enable the Institute to play a more pro-active role in shaping the country's future development agenda not just for the government but for everyone concerned with the theory and practice of development in general and of Bangladesh in particular. Our aim is to ensure that BIDS research continues to serve the cause of sustainable and inclusive development in Bangladesh and elsewhere in the developing world.

Completed Research Studies

Broad Theme: *Macroeconomic Policy and Employment*

Support to Parliamentary Standing Committees on Oversight of Budget Implementation

Study Team:

Monzur Hossain
Mustafa K. Mujeri
Zaid Bakht,
Zulfiqar Ali

Sponsor: UNDP

Budget: Tk. 20, 15,500/-

Time Frame: May 2013-July 2013

In order to provide support to four Parliamentary Standing Committees (PSCs) on the oversight of budget implementation, the research team produced research reports on budget analysis and conducted seminars to disseminate those reports to the Members of Parliament (MPs). The goal of the research reports was to explain topics on budget for respective ministries and the national economy in an easy and user-friendly manner, so that the MPs may utilise them during the budget session of the Parliament and also in monitoring the implementation of the budget.

The budget-related interventions were provided to the following Parliamentary Standing Committees:

- PSC on Assurance with focus on the Ministry of Local Government Rural Development and Cooperatives
- PSC on Ministry of Law, Justice and Parliamentary Affairs
- PSC on Ministry of Women and Children Affairs
- PSC on Ministry of Environment and Forests

Four working sessions were organised for the four Committees and the reports were handed over to the Committee members so that they can use the reports during budget discussion.

Impact of Inflation on Different Household Groups in Bangladesh

Study Team:

Monzur Hossain
Mustafa K. Mujeri
Tahreen Tahrima Chowdhury

Sponsor: BIDS Research Endowment Fund

Budget: Tk. 10, 00,000/-

Time Frame: January 2012-January 2013

The rising rate of inflation in recent years has raised significant concern regarding its adverse effect on the economy, especially relating to its negative welfare consequences on different household groups including the poor. The study identifies major socioeconomic groups who are most affected by the adverse impacts of inflation and recommends policy measures to protect these vulnerable groups from the hardship.

The focus of the study has been on identifying the household level impacts of inflation. Some non-parametric techniques including construction of CPIs for different household groups as well as estimation of Net Benefit Ratio (NBR) are the main techniques employed in this study to assess the impact of rising prices on different household groups. For analysis, price data collected by the BBS on a regular basis from different parts of the country have been used including other data such as weights and composition of households income and expenditure from the Household Income and Expenditure Survey 2010 conducted by BBS.

Policy Implications

In the backdrop of rising inflation, it is important for the policy makers to know which poor groups of people are more affected by rising inflation and what measures can be adopted to redress their disadvantages at least partly. The persistence of inflation and inflation expectations over a sustained period

underscore the need for a fresh look at the underlying monetary policy framework of the Bangladesh Bank. In particular, the apparent difficulty in curbing inflation expectations by adjusting key policy rates raises questions as to the nature of inflation, the efficacy of the monetary transmission mechanisms as well as the necessity of further monetary and non-monetary policy initiatives.

Trade Pattern and Trade Policy in Bangladesh

Study Team:

Monzur Hossain

Narayan Chandra Nath

Sponsor: International Food Policy Research Institute (IFPRI) and USAID

Budget: Tk. 14, 14,500/-

Time Frame: October 2011-March 2013

Analyses of trade pattern and trade policies are important to pinpoint the areas of deficiencies of current trade and work out necessary corrective measures for desirable changes in the trade pattern and trade development. The study analyses evolving market and trade opportunities in the region and the world that can enhance development in Bangladesh, highlights the state of exports and imports of Bangladesh with their changes and suggests the direction towards which policy challenges and changes can emerge for facilitation of trade in Bangladesh. With a view to assessing the current state of trade in Bangladesh some conventional trade related indices like RCA, ERP and Herfindahl-Hirschman concentration ratio have been estimated.

Policy Implications

The analysis provides inputs to understand the changing pattern of trade regimes in the country and helps identify the opportunities and policies that would create a more facilitating trade regime for Bangladesh.

Background Paper on Bangladesh for the WDR 2013 on Jobs

Study Team:

Binayak Sen

Sponsor: Japan International Cooperation Agency (JICA)

Budget: Tk. 27, 76,835/-

Time Frame: May 2012-January 2013

Recent world developments have put jobs at the centre of the policy debate. The World Bank's World Development Report (WDR) 2013 aims to improve our understanding of the connection between jobs and important dimensions of economic and social development. The WDR emphasizes the differences in the nature of jobs which can affect their potentials to influence three transformations in the process of development: (i) raise living standards, (ii) increase aggregate productivity, and (iii) enhance social cohesion.

The present study has been undertaken as a background paper for the WDR 2013 on Jobs. In the case of Bangladesh, the study argues that the role of jobs has been fundamental for understanding the above-mentioned three developmental transformations. However, that story of interface between growth and employment drivers has not been narrated as yet in analytical terms.

The study argues that employment and wages have played a fundamental role in poverty and inequality changes in the Bangladesh society. The changes in employment and labour market that have been observed in the case of Bangladesh link back to five crucial "doorstep conditions" underlying the structural transformations that have (arguably) taken place in Bangladesh over the past three decades: (a) progressive promise of high-population density conditions leading to technology adoption in agriculture; (b) the ability to learning-by-doing (or seeing) in the

context of changing global market opportunities leading to accelerated manufactured exports growth and international migration; (c) a supportive socially transformative role of family planning, spread of basic education, women's empowerment, and in recent years, through increased allocations to social protection; (d) innovative institutional arrangements for addressing the "credit constraint", and (e) ability to sustain a rapid pace of urbanisation as a source of agglomeration economies and of beneficial influence on the productivity of rural non-farm sectors through spatial linkage effects.

It is the combination of these conditions that may have led to shifts of surplus labour out of agriculture, causing virtuous cycle of growth and poverty reduction--out of the "below-poverty level equilibrium trap." The study puts forward the hypothesis that the link between jobs and development is underpinned by the "ascent of the poor" and the process is driven by the upward mobility of relatively unskilled labour out of agriculture through rural non-farm sector growth, access to labour intensive manufacturing, international migration and urbanisation.

Structure and Growth of Rural Non-Farm Sector in Bangladesh: Implications for Household Income and Employment

Study Team:

Rushidan Islam Rahman

Sponsor: International Food Policy Research Institute (IFPRI) and USAID

Budget: Tk. 14, 31,500/-

Time Frame: October 2011-March 2013

Growth of non-farm sectors in the rural areas can help reduce the cost of liberalisation, out-migration and can improve regional equality. Therefore, research on growth of income and

employment through expansion of rural non-farm (RNF) sector should be a priority. A large number of studies on RNF have focused on various research questions. Most of these are based on sample surveys which focus on selected areas/sectors and are not representative of the national picture. Changes in the share of RNF in total income and employment of households representing the national picture should be the starting point of research on RNF.

A slow growth of employment and wage rate in agriculture, high poverty incidence among casual workers and slow growth of regular employment in formal sectors led to the realisation that non-farm self-employment can offer an alternative strategy for income and employment growth as well as for poverty reduction.

The study examines the role of RNF activities from the point of view of employment and income generation for poor households. The analysis encompasses both self-employment and wage based employment under various forms of contract. An analysis of the prospects that such employment expands with the benefits flowing to low-income households requires detailed investigation of rate of return from these activities and wage rates.

The study undertakes a review of existing research and uses quantitative data obtained by national sample surveys including the unit record data of the HIES. The quantitative data will be supplemented by case study materials.

Broad Theme: Agriculture and Food Security

Estimation of the Parameters Needed for Integrated and Effective PFDS Planning in Bangladesh

Study Team:

Mohammad Yunus
 Quazi Shahabuddin
 Mustafa K. Mujeri
 M. Asaduzzaman
 Nazneen Ahmed
 Monzur Hossain
 Siban Shahana
 Morshed Alam

Sponsor: Ministry of Food

Budget: Tk. 107, 58,250/-

Time Frame: December 2011 – May 2012

An unresolved paradox in the Bangladesh food economy is the mismatch between estimated demand for and the supply of food grains based on official statistics. In this context, the study aims to streamline the supply and demand side estimates and analyse the country's food gap and assist the government in determining the PFDS size and desirable stock of food grains for operating an integrated and effective PFDS.

Major Findings

The study shows that the country has been in deficit in rice in recent years which varies between 2.05 MMT in 2008 and 0.13 MMT in 2010. These estimates roughly correspond to the historical facts of imports of rice from the rest of the world. Since 2012, domestic production of rice appears to have become adequate to meet the consumption requirement and a thin surplus is likely to increase to 2.5 MMT in 2016 if current production trend in rice continues. Since the private sector holds about 2-3 MMT of rice

during the lean months of the years, the "surplus" may remain with the private sector agents as "idle stock" and the country will not likely to be in a position to export rice to the rest of the world soon.

In contrast, the country is in deficit of wheat by 2 MMT per year. It may be noted that the private sector and the government together imported 2.4 MMT, 3.4 MMT and 3.8 MMT of wheat during FY2009, FY2010 and FY2011 respectively. This is consistent with the deficit of wheat derived in the gap analysis. Since rice is predominant in production of food grains, the country has been continuously in deficit of wheat in the past years and will remain so in the near future unless technological improvement boosts production in the wake of growing consumption, especially by the urban consumers.

The study gives PFDS distribution, stock and procurement needs for the next three years, 2012-13, 2013-14 and 2014-15 based on a multi-equation disaggregated model for food sector using monthly data for the 1990-90 to 2009-10 periods. The model results are supplemented by projections using relevant information, especially for those variables which are treated exogenously in the model.

The combined results provide estimates for distribution needs by major channels (in some cases such as OMS by months) at 2.08 MMT, 2.22 MMT and 2.34 MMT of food grains for FY2013, FY2014 and FY2015 respectively. In order to implement these distribution targets, public stocks needs would be 1.92 MMT, 1.96 MMT and 2.01 MMT respectively.

Public Stock Policies for Improved PFDS in Bangladesh

Study Team:

Quazi Shahabuddin
 Mohammad Yunus
 Sibana Shahana

Sponsor: International Food Policy Research Institute (IFPRI) and USAID

Budget: Tk. 15, 23,750/-

Time Frame: October 2011-March 2013

Historically, public intervention in the food grain market in Bangladesh has been quite pervasive. The PFDS maintains stocks in order to: (a) provide emergency relief during periods of natural disasters, (b) alleviate chronic food insecurity through targeted food distribution to poor households, and (c) take steps, when needed, to stabilise the market price of food, especially rice. The costs of procuring, storing, managing and distributing large stock of food grains are high. So it is important that the government does not hold more food than it needs for an adequate national food reserve.

In the study, the methodology of exploring alternative stock options based on costs and benefits of PFDS essentially adopt an approach premised on the fact that assessing costs and the size and distribution of PFDS benefits requires an accounting system that values grain at market prices.

Policy Implications

The study provides the following major policy implications:

- A comprehensive and rigorous analysis of costs and benefits of alternative stock options determines what feasible options PFDS has to meet its objectives in a cost effective manner. Public stock management policies also involve, among others, analysis of stock movement, stock rotation and storage as well as transit losses and how to minimise these losses.
 - One important indicator of efficient stock management is the good balance between actual stock of food grains and a carefully estimated budgetary target of stock at a specific point of time. However, the target itself may require revision because of unforeseen events such as natural disasters.
 - The direct costs of increased distribution are shown in government accounts. However, the costs to consumers of quality deterioration of PFDS food grains are not accounted for. Closer attention should be paid to the quality of food grains in storage and the link between the size of the stock and the amount of distribution needed to rotate stocks.
 - The role and effectiveness of food-based safety net programmes need re-evaluation, keeping in view such considerations as whether greater use of cash-based transfers is warranted and whether targeting effectiveness and flexible use of stocks can be improved. Early Warning Information System, both within the country and regionally/globally, to anticipate and prepare for possible future food price hikes and volatility needs to be strengthened.
 - The potential trade-offs between different uses of public stocks for regular distribution, emergency distribution and price stabilisation need to be further analysed. Also, since PFDS is costly, the possibilities for balancing distribution through priced and non-priced channels should be further explored.
-

Analysis of Rice Value Chains for Improving Food Security in Bangladesh

Study Team:

Mustafa K. Mujeri
Nazneen Ahmed
Iqbal Hossain

Sponsor: International Food Policy Research Institute (IFPRI) and USAID

Budget: Tk. 19, 06,125/-

Time Frame: October 2011-March 2013

Food security is achieved when all people, at all times, have physical and economic access to sufficient, safe and nutritious food to meet their dietary needs and food preferences for an active and healthy life. As rice is the main staple, food security in Bangladesh very much depends on its adequate availability and accessibility throughout the year. Value chain management (VCM) improves competitive advantage of rice industry and thereby food security. VCM is the management of all activities in production, distribution and marketing systems, improving process and relationships to support efficient development and flow of rice from producers to consumers. There are three pillars of VCM: improved efficiency, competitive advantage and business to business marketing.

The study links VCM and food security and analyses whether VCM can improve competitive advantage of Bangladesh rice industry. If so, how it can be achieved in practice. It contributes to food security policy because of link between competitive rice value chains and improved food security.

A multiple case study approach has been employed to study variation in rice value chains. Typical value chains are studied to capture diversity of value chain relationships and range of product, financial and information flows within and across value chains. Data

have been collected from two sources: primary and secondary. Primary data are collected from field observation and semi-structured interviews with value chain participants. Both inductive analysis and marketing margin analysis have been used.

Policy Implications

The study brings out the importance of value chain management as a tool of improving the competitiveness of the rice market and ensuring a more equitable sharing of value across the chain participants. From the food security point of view, this positive development can contribute to sustainability of the rice production system in Bangladesh. From such a perspective, the current policy of the government with respect to the rice sector seems to have a “narrow production focus” rather than an integrated “value chain focus” which is not conducive to improving the competitiveness and efficiency of the rice market.

For reducing the distortions in the rice market, it is important to analyse the relationships among the different participants in the rice value chain and their relative strengths and weaknesses for adopting better policies. Such an integrated and whole chain approach will enhance the effectiveness of the entire chain that will create a more value driven rice industry in Bangladesh.

The emphasis on joint value creation through value chain management can produce higher value as well as its more equitable sharing that benefits all chain members, especially the farmers. This will provide better incentives for the farmers to grow better quality rice having higher values that will not only raise the income levels of the farmers but also the competitiveness of the rice sector in Bangladesh. The rice supply and the rice market will be more stable contributing to better food security.

While the private sector participants dominate the rice sector so that the private sector will play the dominant role in the value chain transformation process, the government will have to take effective measures to facilitate the entire process. The initial efforts need to deal with creating awareness among the chain participants regarding the benefits that will accrue to all participants through effective value chain management.

The government will have to adopt measures to encourage the participants to develop both horizontal and vertical collaborations covering the entire chain. The adoption of competition policy and guidelines for the rice sector will contribute to more equal sharing of value. For enhancing and sustaining the benefits of supply chain management, rice productivity needs to be continuously increased through adoption of improved technology and other measures. The failure to provide fair prices to the farmers, low innovations and productivity, and market imperfections are the outcomes of unfair dependency relationships across the chain members and lack of their collective collaboration. The implementation of a value chain focus for the rice sector will improve the conditions of the chain participants as well as deliver rice having better quality and higher value to the rice consumers.

Productivity and Efficiency of Rice Mills in Bangladesh: Economic, Social and Food Security Implications

Study Team:

M Asaduzzaman

Nazneen Ahmed

Moogdho Mim Mahzab

Sponsor: International Food Policy Research Institute (IFPRI) and USAID

Budget: Tk. 27, 25,500/-

Time Frame: October 2011-March 2013

Since the 1970s, the output of rice has increased from about 12 million to over 34

million metric tons. This means that the demand for processing rough rice i.e., paddy has increased significantly over time. Paddy may be dehusked and bran may be removed in several ways. The *dhenki* used to be the traditional milling tool in Bangladesh but has been replaced with more mechanised means over time. The mechanised means now come in the form of a variety of machines operated by diesel or electrically driven motors along with various separating tools for rice and husk and bran at different stages of operation. The productivity, technical efficiency and scale economies of these technologies are vastly different with major implications for the country.

Policy Implications

The analysis highlights several major findings and conclusions which are as follows:

- Significant structural changes are taking place in rice milling in the country. The traditional *dheki* milling system has increasingly been replaced by modern and mechanised mills, some of which are fully automatic.
- About 60 per cent of the rice mills are licensed by the local government authority. Only a few auto mills are operating under the Company Law. Most of the other mills operate without any formal license.
- Out of the 38 surveyed auto mills, 25 are established after 2005, indicating that the auto mills technology is a more recent phenomenon.
- The rice mills mostly process parboiled rice which ranges from 75 per cent to 97 per cent of the total rice processed by different mills.
- Auto rice mills use different types of machineries, some of which are costly. The rubber sheller, the hall mark of auto

rice mills, on average cost five times more than the steel sheller (used in Engelberg plants or chatals). As such, the auto mills have to incur an initial investment which is nearly 13 times higher than similar investments in semi auto mills and 127 times of that of an average Engelberg mill (chatal).

- Although the initial investment for an auto mill is much higher than similar investments in other rice milling technologies, the gross revenue is also higher in these mills. As the auto mills are less dependent on weather for drying and other operations, their operations are less risky and the related process is less prone to stoppage. On the other hand, as the drying space (or land) needed in semi auto or traditional mills involve opportunity cost of land, inclusion of its opportunity cost narrows the gaps between the investments in traditional and auto mills.
 - As the auto mills are less dependent on natural weather for drying and other operations of the mill, their operations are less risky. They can operate even during the rainy season. In addition to the sophisticated machines used in auto mills, the fact that they can operate round the year, result in higher productivity in auto mills compared with the productivity in traditional mills. In a running week, an auto mill can mill 6,394 maunds (256 metric tons) of rice. In comparison, a semi auto mill can mill up to 1,516 maunds of rice, which is less than one-fourth of the capacity in auto mills.
 - The employment structure of auto mills differs significantly from traditional mills. The number of permanent staff in automatic mills is nearly twice that in chatals and 60 per cent more than in semi-auto mills. The difference is also reflected in the capital-labour ratio (value of capital/cost of labour). The ratio is 4.4 for auto rice mills, which is 3 times that in semi-auto mills and more than 17 times that for chatals.
 - About 38 per cent of the labour force in rice mills is women. They are employed mostly in drying and cleaning part of the process. But they are also, though limited, involved in the milling and polishing part of the process which are generally thought to be men's jobs.
 - Regarding the stock behaviour of the mills, mixed results are reported. It is found that the hullers still account for the bulk (estimated at around 60 per cent) of the total processed rice in the country. But as these are itinerant ones, they do not store any paddy or rice. Of the rest, automatic rice mills account for about 20 per cent of the total processed rice while chatals account for 78 per cent. In this respect, the auto mills probably have some oligopolistic power. Also, when the levels of stock are considered, auto mills account for an estimated 18 per cent of paddy and 30 per cent of total rice stocks (at the beginning of the reference year), while the chatals account for 80 per cent and 67 per cent of the stocks of paddy and rice respectively. This indicates very limited price leadership behavior, if any, by the auto mills. But the average stock of chatals is only one-tenth and one-twentieth for paddy and rice respectively compared with the auto mills. This indicates that while in aggregate the auto rice mills have only limited monopolistic power, at any given point in time their average stocks are relatively high probably giving them a price leadership role. But given that the processing capacity of a chatal is only one-twelfth of that of an auto mill, auto mills need to keep adequate stocks of paddy for ensuring the smooth running of the mills.
-

It may also be noted that the rice stocks are only around a quarter of the paddy stocks for these mills. Thus, although there seems to exist some scope for the auto mills to behave in a monopolistic manner, the chances appear to be much less in reality.

- Econometric analysis used in analysing the characteristics and productivity of different types of mills provides the following major results: (i) the volume of paddy milled is a major factor in the case of value addition. In this respect, the auto mills have an advantage over semi auto mills and traditional mills; (ii) for all categories of mills, labour has positive relationship with overall output. Capital also has a positive relationship except in the case of semi auto mills; (iii) while average productivity is higher in auto rice mills, the relative efficiency shows that traditional chatahs and semi auto mills are doing better than the auto mills. Given the cost structure of the auto mills, not all auto mills can run the production process efficiently from the very beginning. It usually takes a good amount of time for them to increase the average score of efficiency. On the other hand, semi auto and traditional mills, which are less capital intensive, can optimise the production process within a short time even with limited resources. Semi auto and traditional mills are doing better than auto mills in terms of average efficiency score.
- In terms of food security, the increase in the number of auto rice mills probably ensures a better supply of rice throughout the year covering different parts of the country. However, the shift from traditional milling system to auto mills implies increased demand for formal loans, permanent workers and large-sized land requirement.
- Another concern related to food security is the use of colour sorter machine by the auto mills to weed out discolored kernels and polisher used to make rice whiter. As the white rice thus produced has less nutritional value, one implication of increase in the number of auto mills is to promote the use of less nutritional types of rice.

The following policy implications may be drawn from the study results:

- The changing structure of rice milling technologies needs to be matched with food security concerns emerging out of these changes. For example, the use of color sorters and polishers could be discouraged by appropriate policies (e.g. imposing higher duties on import of such machineries) along with encouraging the auto mills to produce rice with better nutritional value. This will also improve the efficiency of the auto mills by promoting higher value for money in their operation.
 - The high level of investment (along with higher processing capacity) by the owners of auto mills together with the necessity of keeping high average stocks of paddy tend to give these mill owners some leverage to exercise market power and gain price leadership. On the other hand, given that the auto mills neither account for an overwhelming proportion of processed rice nor of the total stocks, these together may tend to limit their capacity to deliberately influence much the market price of rice. As such, the policies should focus more on removing the mismatch between the supply and demand for paddy at different points of time and in different locations, reducing transportation costs and discouraging unnecessary use of polishing and colour sorting machines which increase the cost
-

of rice processing and thus the price of supplied rice in the market.

- Prudent government initiatives are required to ensure that the auto rice mills are able to maintain regular flows of paddy to utilise their capacity without exercising their potential capacity and market power to influence market prices. In this respect, timely procurement of rice by the government under the PFDS can play an important role. Moreover, open market sale of rice by the government and raising awareness among the people regarding the lower nutritional value of white polished rice could be used to promote food and nutrition security. Similarly, to discourage the production and consumption of polished rice, the government may consider procuring only non-polished rice or may give a premium price to such varieties.

Farmers' Supply Response to Price and Non-Price Factors in Bangladesh

Study Team:

Mohammad Yunus
Quazi Shahabuddin

Sponsor: International Food Policy Research Institute (IFPRI) and USAID

Budget: Tk. 13, 80,000/-

Time Frame: October 2011-March 2013

Bangladesh has undertaken trade liberalisation including agricultural liberalisation since 1986 in the hope that reforms emphasising price incentives will encourage producers to respond positively. At the same time, the reforms have introduced greater uncertainty into the domestic market, given increased price volatility in the global market. Besides, Bangladesh agriculture remains exposed to the vagaries of nature. As the nature of market and non-market factors adds to risk and uncertainty in farm decisions,

the study aims at modeling the production and supply response in Bangladesh agriculture by including both the standard arguments and risks.

The analysis begins with the examination of the time series properties of the variables used and their order of integration using Augmented Dickey-Fuller (ADF), Phillips-Perron (PP) and Kwiatkowski-Phillips-Schmidt-Shin (KPSS) unit root tests. The study looks at own price effect, yield effect, real exchange rate effect, risk effect and institutional effect.

Policy Implications

If farmers are price responsive, i.e., if the price elasticity is greater than one, then it can be used to design effective agricultural policy. Thus the findings of the present study would aid policy makers and concerned authorities to take necessary steps that would lead to agricultural sustainability in the country.

Delinking of Local and International Prices: Exploring Competition in the Bangladesh Rice Market

Study Team:

Minhaj Mahmud
Naimul Wadood

Sponsor: South Asia Network of Economic Research Institutes (SANEI)

Budget: US \$ 10,000

Time Frame: January 2011 – February 2012

This study takes a broader perspective on the issue of price divergence between national and international markets in recent years by looking into local rice markets, its segments, various agents, their incentives as well as their interactions. The study also investigates the relationship between local and international prices by employing standard econometric methodology.

The study used primary data collected through using comprehensive enterprise level questionnaires at different segments of markets as well as key-informant interviews from major supply points and major urban destinations. The survey focused on overall supply chain by studying the growers, millers, aratdars, wholesalers and retailers. The survey instrument focused on various firm and market specific information, particularly details of pricing decisions and bargaining issues.

Summary of Findings

The rice markets contain a large network of intermediaries from the beginning point of the farmers to the end point of the consumers. These intermediaries differ in terms of their respective sizes, roles, objectives, skill and expertise, technical support, constraints, and strategies. The intermediaries interact and often bargain with each other, who are striving for securing self-interests. Almost all the contracts within the market are informal, in the form of verbal or mobile phone conversations or hand-written notes. Here, "trust" and "reputation" are important on which the firm invests over time to operate in this market over the years. On the other hand, default risk is seen quite high, which is cited as one major cause of exit of firms from the market. Even though the entry cost is not prohibitively high, the issue of default risk, trust and reputation, skill and expertise and correct knowledge of the business partners are very essential to survive and hence these can be considered as steep entry barriers.

The rice market has become heavily interconnected except for the case of the farmers who may have limited number of contacts and limited options other than selling produce at the price offered by a miller. It has been observed that large and medium-sized enterprises enjoy greater economies of scale in their operations compared with the smaller

ones. Within the rice market value chain, there are two points where major bargaining takes place: one is between the farmers and the bepari or faria (often as agents of the millers) over the price and quantity of paddy, and the other is between the rice market wholesalers or commission agents (as agent of the millers) and the end-point wholesale or retail wholesalers over the price, quantity and quality combination of rice. The presence of rice miller, in both of these bargaining processes, is observed, who by taking advantage of storage capacity is able to postpone sale at least for some period. This implies that millers or miller-cum-wholesalers have potentials to enjoy large leverage over the entire rice market value chain and thus potentially engaging in opportunistic behaviour within the market. Price determination process within the rice market value chain depends on relative bargaining power of the concerned parties. Large and medium enterprises enjoy the advantage of setting prices in the market, and the rest small ones follow them.

In terms of price trends of local and international varieties of rice, both nominal and real prices show upward and downward movements during 1997 to 2007 period with persistently upward trend in the last periods of investigation. In the case of international varieties, similar trends are observed suggesting integration in an open economy context. Long term relationship (cointegration) is also observed between prices of local varieties with several international varieties of rice, especially between most domestic varieties and India 25% variety, which is consistent as major rice imports were from India during the period of study. However, as private imports of rice are very small in recent years, the present price divergences could only be explained through local market dynamics and agent behaviour.

It is obvious that agents in the market pursue different objectives and face different constraints in their operations. Hence, it is appropriate to examine different segments of the rice market separately to reach conclusions regarding market competitiveness. The first segment which involves primary growers can be considered competitive to a large extent although the benefits of competition do not reach the small and marginal farmers as these farmers often suffer from credit and cash constraints and lack sufficient storage capacities making them vulnerable to the opportunistic behaviour of powerful intermediaries. The rice millers and wholesalers, on the other hand, need large financial resources and business connections to survive and hence entry into this market (segment) is difficult. Also, default risks of financial transactions or delays in payments often serve as an entry deterrent for potential entrants.

Price bargaining usually depends on relative economic power and/or business connections of two agents whereby the more informed and connected agent can gain from the bargaining process. With regard to price movements of wholesale firms, within the price quotations of large farms are often considered as the indicative price and small and medium sized firms often follow the price. This resembles the standard oligopolistic price-leadership phenomenon, where one dominant firm sets the price and the other firms (often smaller ones) act as followers. This shows that competition in the wholesale market is to a large extent restricted. In the case of retail firms, these mostly act as channel for prices which are set in the rice wholesale market. These findings have implications for policy since the differential behaviour of different segment of the markets affect the consumers especially through creating burdens of the opportunistic behaviours of different agents.

Barriers to Development of the Fisheries Sub-sector

Study Team:

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Nesar Ahmed

Sponsor: International Food Policy Research Institute and USAID

Budget: Tk. 11, 47,125/-

Time Frame: October 2011-March 2013

This study attempts to answer the following questions in the context of Bangladesh fisheries:

1. What are the specific policy barriers in fisheries that are hindering the growth of the sector?
2. What are the management and operational difficulties that the fishermen are facing in the sector?
3. What are the transaction cost barriers for commercial producers, smallholders, rural poor and women in the fisheries product markets?
4. What could be the desired roles and responsibilities of the government and other stakeholders to achieve sustainable development in the fisheries sector?

Both primary and secondary level data have been used in this study. The primary information was collected from a beel environment as well as from a river system. A re-visit was made to a river site studied by one of the authors in 2002. Both quantitative and qualitative data were generated using semi-structured interviews and focus group discussions. Information collected from the key informants was also used.

Capture Fisheries

Capture fisheries in Bangladesh is threatened due to a variety of factors including habitat loss as a result of agricultural intensification, urbanisation, environmental degradation,

pollution, and overexploitation of resources. Barriers to the development of capture fisheries in Bangladesh can be classified as external and internal factors. In our judgment, both these barriers are constraining growth of the capture fisheries but external factors are the most significant. The most important external factor is the issue of governance, regulation and management of the capture fisheries sector. Destruction of immature fish (ova, larvae, breeding fish) and use of illegal fishing gears are the most important internal factors. Both of these relate to the external factor of poor resource governance (institutions).

In Bangladesh, industries hardly have any provision for handling effluents other than dumping them in the nearest available sources of water. Many industries are located very close to the fisheries resource systems. There are 144 industrial units in Chittagong that pollute the water of the River Karnafuli and the estuaries of the Bay of Bengal. Similar pollution occurs in Kushiyara River due to discharge from a pulp mill, in the Tulshiganga River due to discharges from a distillery and so on. The water of the Surma River is also heavily polluted by two industrial units, a pulp mill and a fertiliser factory. As a result, migration of hilsha fish through this river has been substantially reduced and the fish caught from this river smells foul. Another important source of environmental degradation of fishery resources is the increasing use of chemicals like insecticides and pesticides applied to boost rice production. Retting of jute also affects fishes in open waters.

Epizootic Ulcerative Disease (Syndrome) of fish was found in February 1988. It took an epidemic form and increased the mortality of fish at the time. The major impact of Flood Control, Drainage and Irrigation (FCD/I) projects is the breaking the link between the beels and the rivers through the canals.

Implementation of these water management projects also reduces the size of the flood lands as well as the length and intensity of the flood.

Several studies have found that a significant amount of rent exists in inland fisheries in Bangladesh. Evidence regarding biological overfishing is somewhat inadequate and inconclusive. Increased application of fishing effort is often cited as a probable cause of biological overfishing. This observation often leads to the belief that fishery resources are being depleted. But much depends on the population dynamics of fish. It is generally believed that reduction in fish stock is more due to environmental factors than overexploitation of the resource. Most inland fisheries are multi-species, multi-gear in nature, so standard assessment models and concepts of overfishing are inappropriate and can only be superfluously applied. Inland fisheries in Bangladesh are heavily fished and there is probably little room for any substantial increases in catch. Destruction of immature fish (ova, larvae, breeding fish) and use of illegal gears have been affecting fish stock significantly in the capture fisheries sector.

An Institutional Analysis and Development (IAD) Framework was used to explain the problems of management of inland capture fisheries in Bangladesh. In this framework, appropriators working on a resource system face two types of problems: appropriation problems and provision problems. In appropriation problems the production relationship between yield and the level of inputs is assumed to be given and the problem is how to allocate the yield. Provision problems "concern the effects of various ways of assigning responsibility for building, restoring, or maintaining the resource system over time."

The management of the capture fisheries in Bangladesh has gone through a long process

of interventions by the state, private agents, donors, various interest groups representing the fishers and others. The crux of the management problem is seen as establishing fishing rights of the fishers over about 12,000 water bodies (jal mahal) owned by the state. The water bodies are classified as closed and open. The Jalmahal Management Policy of 2009 sets the rules for the transfer of rights. Several attempts to biological management of the water bodies were made by interventions from donors, NGOs and also the Government. The FFP (Fourth Fisheries Project) and CBFM (community based fisheries management) are obvious examples of this attempt. These are now not followed as leasing periods with the fishers managing water bodies under CBFM or FFP are not extended.

Two case studies on two fishing grounds were used to provide empirical support made in this report. The two water bodies suffered most from external factors. In both fishing grounds, siltation of the water body is a big problem. This affected the Tangaon River more where fish catch declined as fishing days got squeezed due to the drop in water levels. Beel catch varies from year to year and is determined by the extent of flooding. Poor governance also threatens the success of the institutions responsible for managing these water bodies. While formal rights over the water body are now not renewed by the state, the fishers' groups are managing these water bodies with the institutions of the past. These institutions are under threat from external agents.

The lessees were more or less able to address appropriation problems in Bangladesh fisheries but they did not address provision problems much. The two donor supported projects made good progress in addressing the provision problems. They ensured a closed season. They constructed several sanctuaries and established firm rules in the water body. The fishers in Tangaon got

some government funds for re-excavating the main sanctuary as it got too much silted up. Despite the problems associated with the external factors, these measures helped the fishers to make fishing in these water bodies still a profitable activity. Both the organisations of the fishers had good financial health and the fishers were willing to negotiate with the state for formal right over the water bodies. Absence of these rights has developed a sense of uncertainty. For example, non-fishers have started to enter and dominate fishers' organisation in the Tangaon River.

The case studies show that external factors are important constraints to growth in the fisheries sector. These also show that successful establishment of rights of fishers over water bodies is possible and effective institutions can be developed as an alternative to the leasing system. These institutions can not only address appropriation problems but also provision problems. Government support is needed for retaining these successes and replicating them to other fishing grounds. Current management policy rightly focuses on giving fishing grounds to the fishers but it must be understood that this is only the first step. The second step is helping the fishers develop appropriate institutions. Successful cases exist and are presented in the report to show how the government can facilitate these co-management processes.

Culture Fisheries

Aquaculture is commonly regarded as part of the cultural heritage in the Mymensingh region. Mymensingh is the "hub of freshwater aquaculture" in Bangladesh because of the "blue revolution." Mymensingh is ranked first among the districts for pond fish production in Bangladesh, producing 218,952 tons per annum, 18 per cent of total aquaculture production in Bangladesh. Mymensingh has been identified as the most important and promising area for freshwater aquaculture

because of suitable bio-physical resources and climatic conditions. The tremendous development of aquaculture in Mymensingh over the last four decades has also been supported by a number of government and non-government organisations and donor agencies. It is estimated that aquaculture in Mymensingh has been expanding rapidly at a rate of 11 per cent per annum. There are currently 140,000 fish farmers involved in aquaculture with an area of 28,889 ha, covering a total of 145,428 fish ponds with an average pond size of 0.20 ha.

Polyculture has long been the traditional practice of the fish farmers in the Mymensingh area. Currently, most farmers (60 percent) are involved in polyculture, while only 40 per cent of the farmers are practicing monoculture. About 40 per cent of farmers are involved in extensive farming, while 35 per cent and 25 per cent practice improved-extensive and semi-intensive farming respectively. Fish productivity increases with the level of culture intensity. The average annual fish yield is estimated to be 7.58 tons/ha. Mymensingh is one of the most important places for pangas farming in Bangladesh. Pangas is the most dominant species in Mymensingh accounting for 54 per cent of the total aquaculture production. Traditionally, Indian major carps, such as catla, mrigel and rohu, have long been cultured in the Mymensingh area, accounting for 26 per cent of the total aquaculture production. Exotic carps, such as common carp, grass carp and silver carp, have also been cultured and these contribute 8 per cent to aquaculture production. Climbing perch and tilapia have recently been cultured in the Mymensingh area and account for 6 per cent and 3 per cent of the total aquaculture production, respectively.

There is a tremendous opportunity for further aquaculture development in the Mymensingh area. However, a number of constraints are reported for its development, including

technical, social, economic and environmental issues. In spite of these constraints, aquaculture development in the Mymensingh area in combination with production technology, favourable socioeconomic condition and culture environment have already proven more successful in terms of increasing productivity, improving profitability and maintaining sustainability.

Overall, the development of aquaculture in the Mymensingh area appears to have a positive effect on food supply, income, livelihood opportunities, social benefits and women's empowerment. However, a number of significant challenges, particularly social and environmental issues, are needed to be overcome to translate its benefits effectively to the thousands of rural poor. It is also necessary to provide technical assistance with institutional and policy support for sustainable aquaculture. A range of public-private partnerships, investments and initiatives are needed to realise the existing potentials.

Barriers to Development of Livestock Sub-sector in Bangladesh

Study Team:

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Sponsor: International Food Policy Research Institute (IFPRI) and USAID

Budget: Tk. 11, 47,125/-

Time Frame: October 2011-March 2013

The livestock sector is important in Bangladesh especially from the perspectives of crop cultivation, food and nutrition security, poverty reduction, and employment generation. Poultry and dairy farming has specific advantages over crops, fisheries and forestry, as they require less land and are least influenced by seasonality. This study is about exploring the barriers to the development of livestock sector and

suggesting policy recommendations to overcome the barriers so that sustainable development can be achieved in the sector which has significant growth potential. Moreover, it is the main source of animal protein for the people and provides employment to a large number of the poor people and contributes to poverty reduction.

Regarding changes in the production base, it is observed that livestock population (of all three main categories) declined for both the medium (2.50 - <7.50 acres) and large farms (7.50 acres and above) between 1996 and 2008. However, the dynamics is quite different for the marginal and small farms (<2.50 acres). Their stock not only increased but also displayed impressive growth (36.0 per cent for cattle and buffaloes, 28.4 per cent for goats and sheep, and 14.4 per cent for poultry over the same period). Moreover, for all three categories of livestock population, small and marginal farms continue to remain the dominant group in respect of rearing and producing the livestock population. While formulating any policy for livestock development in the country, this reality needs to be taken explicitly into consideration.

Challenges Facing the Sector

Several challenges facing the sector exist which need priority action to realise its potentials. These include, among others, the following:

- Wide yield gaps between the traditional and intensive and semi-intensive livestock farming;
- Lack of availability of high-breed animals including knowledge and technological know-how of maintaining the high-breed varieties;
- Animal diseases are also among the most important constraints to livestock development. In fact, animal disease

alone constitutes half of the causes of death of all livestock population;

- Policy and institutional reforms of the Department of Livestock (DLS) and its functional arms are of critical importance to induce changes necessary to meet the challenges emerging from globalisation, trade liberalisation and WTO regulations;
- Quality assurance is a critical factor constraining future development of livestock;
- Lack of organised market for selling livestock products at fair prices is an important problem, particularly for the smallholders in Bangladesh;
- Inadequate coverage of animal health services;
- Lack of space and physical security of animal resources; and
- Low investment in livestock research and its poor management are matters of major concern.

Policy Recommendations

The exploitation of the potentials for livestock development in general and the growth of livestock products in particular should take into consideration the existing characteristics of livestock production in the country. These include: (i) the growth of livestock population has been rapid for chicken and slow for cattle and buffaloes; (ii) marketing structures are quite complex and markets are full of imperfections; (iii) the bulk of livestock products is supplied by smallholder farmers; (iv) since the farmers raise cattle and buffaloes primarily for draft power, productivity of these animals is fairly low; (v) productivity of animal farming is also low because of lack of knowledge, proper care and management; and (vi) chicken and ducks, raised in small flocks by rural households under the scavenging system, are the major suppliers of meat and eggs.

Although smallholder farmers produce more than 80 per cent of meat and eggs, productivity per bird is low compared with semi-intensive and commercial systems. Homestead rearing of livestock is, however, on the rise in recent times and they are also relatively more cost-effective than even the commercial farming due to involvement of women and children in caring of homestead livestock. In view of the above factors, the scope for developing the livestock sector and for expanding the productivity of livestock animals and birds need to concentrate more on the following elements: increasing the productivity of smallholder farmers; expanding commercial production; providing extension, treatment and other necessary services to the poor farmers; and ensuring better marketing facilities, especially for the smallholders and poor farmers. For the purpose, the following actions may be taken into consideration for the development of the sector:

- Ensuring sustainable management of animal genetic resources emphasizing the localised nature of livestock production as well;
- Improving diagnostic capacity and veterinary clinical and extension services, and ensuring easy access to these services especially by the smallholders and poor farmers;
- Ensuring feed and fodder at affordable prices to the small holders and poor farmers;
- Providing training to the farmers regarding improved animal farming;
- Managing the processing and value chain of livestock products efficiently and ensuring better market linkages, especially for the smallholders and poor farmers;
- Providing long-term credit at affordable rates to the smallholders and poor farmers; and

- Investing in research and development in the sector and improving the institutional capacities of agencies related to the sector.

Broad Theme: *Education, Health and Social Development*

Public Service Delivery Systems in Bangladesh: Governance Issues in the Health Sector

Study Team:

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Sponsor: The Asia Foundation

Budget: Tk. 47, 15,000/-

Time Frame: April 2012–February 2013

In Bangladesh, primary health care services have been pursued mainly through supply-side interventions. However, despite the presence of a well-established service delivery infrastructure and various measures taken so far, the utilisation of services is still poor. Evidence suggests that poor governance in the health sector is negatively influencing service delivery mechanism, which, in turn, results in low utilisation of public facilities. The study provides information towards improving the capacity in the areas of policy development, legislation, oversight and representation in order to improve the efficiency in public health care services, particularly at the district level and below.

In an attempt to address the research questions, the study methodology obtained inputs from three major groups: policy makers at the apex bodies and programme

managers/decision makers in the health sector; service providers; and recipients of services/patients (both in-and-out) attending public facilities for health care.

Policy Implications

Health care provision involves a complex series of transactions between health service providers and consumers. Good governance and management of these transactions are essential to ensure that the right services are delivered to the right people at the right time and at the lowest possible price. It follows, therefore, that poor governance negatively impacts service delivery. Essentially, it is the poor and vulnerable members of society who are particularly prone to the largest burden of cost and poor service delivery.

The study brings out that the public health facilities suffer from staff absenteeism, widespread prevalence of unofficial payments and inadequate supply of MSR. In order to be effective, health care delivery systems have to be more accountable, responsive and able to reach the very poor, and these are the areas where the relevant stakeholders including the public representatives at both local and national levels need to play more active roles in strengthening monitoring and supervision efforts including strict oversight role. In order to improve the efficiency with which they can actively participate in the areas of policy development and representation, efforts should be made in enforcing existing laws or in formulating pragmatic rules and policies directed towards more and better service delivery in the health sector.

Control of Childhood Diarrhea in Bangladesh: The Missing Role of Health Education

Study Team:

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Sponsor: 3ie/GDN

Budget: Tk. 0.8 million

Time Frame: September 2012-June 2013

In controlling diarrhea the role of safe water and sanitation is widely recognised. Hence, for control of diarrheal diseases, the improvement of water supply and excreta disposal facilities often attract much interest and the governments of the poor countries frequently undertake water and sanitation improvement programmes for bringing an improvement in the diarrheal risk. Skepticism in the validity of this conventional wisdom, however, started surfacing in recent years. Studies show that the evidence base in this regard, particularly for sanitation, is rather weak and that for water is ambiguous.

Moreover, studies revealed that the relevance of water as a tool to fight diarrhea perhaps has changed over time in Bangladesh. Even the isolated use of improved sanitation has failed to show much impact on childhood diarrhea, the combined access to improved water and sanitation showed a strong negative effect on diarrhea incidence.

To investigate the issue further, the present study was conducted using BDHS data of two rounds i.e. BDHS 1996/97 and 2007 and MICS data of 2006. Using both rounds of BDHS data, this study too could say very little about the impact of water intervention on diarrheal risk in the country while it found sanitation in recent years started rendering a desired impact on diarrhea. However, the

most important finding of the study, using MICS data, has been that the hygienic practices of the people measured in terms of 'distance of water' reflecting water availability in the household, 'disposal of child stool' and 'hand wash practice after defecation,' all showed a statistically highly significant negative effect on diarrhea incidence. Thus, planners and policy makers should take note of these factors while rethinking about the appropriate policies for reduction of diarrheal diseases which are still major causes of child death in Bangladesh.

Impact Evaluation of Strengthening the National Menstrual Regulation (MR) Programme in Bangladesh

Study Team:

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Sponsor: Policy and Operations Evaluation Department (IOB), Ministry of Foreign Affairs, Netherlands

Budget: Tk. 49, 92,150/-

Time Frame: May 2012-February 2013

One of the important goals of Health, Nutrition and Population Sector Programme (HNPSP) of the Government of Bangladesh is to improve the health and family welfare status of the most vulnerable groups—women, children and the poor. In Bangladesh, unsafe abortion is one of the leading causes of maternal death. The report of the Directorate General of Health Services (DGHS) 2007 estimates about four million unwanted pregnancies annually in Bangladesh, of which 25 per cent are estimated to be attributed for terminations. The Maternal Mortality Survey 2001 indicates that illegal terminations due to unsafe

practices account for 15 per cent of maternal deaths. In view of the above, a special project, "Strengthening of National Menstrual Regulation Programme for Reduction of Maternal Mortality and Morbidity in Bangladesh" was launched in 2008. The project addresses four closely inter-linked components:

- Component 1: Scaling-up delivery of quality MR services
- Component 2: Generating rights-based demand from underserved women for quality MR services
- Component 3: Improving the knowledge/evidence base
- Component 4: Strengthening the policy response.

This impact study assessed whether and to what extent the implementing agencies (i.e. MSCS/FPAB) have achieved their desired objectives and goals of the MR project.

Policy Implications

The evaluation shows the project's contribution towards increasing the access to services for unwanted pregnancy and the prevention of unsafe abortion, especially for poor and underserved women in rural, urban and hard-to-reach areas of Bangladesh. The study also identifies critical barriers in accessing MR services to assist programme managers and policy makers in designing appropriate policies for improving maternal health.

Effectiveness of Training and Academic Programmes of BIBM

Study Team:

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Sponsor: Bangladesh Institute of Bank Management (BIBM)

Budget: Tk. 2.8 million

Time Frame: January 2013-August 2013

The Bangladesh Institute of Bank Management (BIBM) was established in 1974 with the primary focus on providing training to the bank officials in Bangladesh in order to strengthen and update their skill. BIBM has extended primary activities with passage of time which include providing training to mid-level and senior officials, undertaking research activities and organising seminars along with running MBM and EMBM programmes. This study includes the evaluation of the suitability of BIBM's training programme in augmenting professional quality, usefulness and contribution of BIBM's post graduate degrees (MBM/EMBM), teaching quality, research and consultancy activities.

The evaluation was carried out using both primary and secondary data. Secondary data was provided by BIBM which include review of training modules/contents since BIBM's inception, review of contents of MBM programmes, review of capacity of BIBM faculties and their various engagements and log-frame of trainees. BIDS conducted two perception surveys: one with the trainees of BIBM from 2000 onward and another with the students of MBM and EMBM. The study also includes the FGDs and KIIs with the Director General and the faculty of BIBM, and the senior officials (Deputy Governor, Managing Director, CEO) of different banks. As a methodology, the Kirkpatrick Model of training evaluation has been employed to assess the

effectiveness of training programmes provided by BIBM. A mix of both qualitative and quantitative techniques was employed in assessing the effectiveness of the training programmes as well as MBM/EMBM programmes.

BIBM Training Programmes

BIBM organises about 30 training programmes each year on average with repetition of a few courses and average duration of 5-10 days. On average, 30-40 trainees attend in a training course. Annual average number of participants was below 2,000 up to the year 2000. Though the number has increased to as high as over 4,000 after the year 2000, participation of bankers outside Dhaka is negligible. Moreover, banks are not willing to send an officer more than once to BIBM training courses (only 800 participants attended two trainings, and a very few three trainings during 2003-2012). Demand for the training programmes has been growing over time; highest number of participants was from PCBs, and FCBs participation has been increasing since 2008 onward. Considering the outreach programme and ToT, coverage of outreach programmes is limited and TOT does not seem to be an effective programme.

Perception survey involving the trainees of BIBM came up with some interesting findings. About 75 per cent of the respondents observed that training programmes were innovative and effective. Programme design and programme contents were rated high, but teaching style and delivery, teaching methodology and the material used were ranked lower showing that there was much scope for improvement in these areas. About 74 per cent respondents observed that the training programme was able to achieve objectives in terms of understanding of concept. More than 80 per cent respondents found training programmes relevant to their

profession. Programme contents have high relevance for training, but in terms of practical applications, they have medium relevance. Before-After assessment shows that BIBM training programmes have incremental positive and significant impact on bankers' career and a perceptible changes has occurred in their (bankers) professional activities. Regression results also corroborate this.

It is recommended that BIBM needs to amend the design of training programmes as follows: introducing pre-screening of participants from several nominees, courses during evening times and weekly holidays, introducing cluster training programme with the same batch of participant for a cluster of training, expansion of outreach programme, district level training, training programmes with more performance orientation in terms of practical applications, more case studies, practical lessons, appointing more qualified trainers, having more interactions with trainers and lead coordinators, and sending training calendar a year in advance to the concerned departments.

MBM and EMBM Programmes

MBM and EMBM programmes have emerged as flagship programmes of BIBM and are playing important role in meeting the emerging need for a new genre of management professional. Perception survey involving the students of MBM/EMBM came up with some interesting findings. Share of female participants is low despite the banking sector being a large provider of female employment. The overall rate of success is around 80 per cent and 70 per cent in MBM and EMBM programmes respectively, implying that the share of drop out and/or withdrawals is relatively high, showing that there is ample scope of improving the effectiveness of the programmes through improving teaching and analytical skills and attracting participant

having high level of initiatives and energy. The BIBM management has not been very effective in promoting a brand image of MBM among prospective beneficiaries. Academic programmes of BIBM have been able to attract mostly "third best" graduates showing its inability to create much enthusiasm among the talented graduates. An overwhelming majority expressed their high opinion and deep satisfaction regarding curriculum design, course content, better job performance and professional development. About 97 per cent of the respondents reported that successful completion of MBM/EMBM programme had positive impact on career development. About 70 per cent respondents reported increased probability of getting jobs, 69 per cent referred to increased job efficiency and 72 per cent identified professional development because of undergoing MBM programme.

MBM and EMBM programmes also need some modification involving the improvement of learning environment, teaching quality, teaching inputs, dissemination of the usefulness and prospects of the programme, focus on scholastic achievements and extra-curricular activities on selection of potential graduates, a regular and periodic review of evaluation process, coverage of specialised inputs in banking and finance in curricula, and wider incorporation of varied teaching methods.

Research, Consultancy and Publication

Research agenda of BIBM was rather weak in the past but received renewed emphasis in recent years. At least one research every year either individually or in group is expected to create a flourishing research culture of BIBM. The research agenda and other operational priorities of BIBM should be built on the first-hand knowledge of, and deeper insights into, the banking and financial sector management issues.

The current promotion criteria of BIBM faculty should give emphasis on research and quality of research of the faculty members. The research fund (both for individual studies and in the aggregate) is rather small and needs to be progressively increased. While the present consultancy services mainly centre on recruitment tests, the focus should graduate more toward providing value added services to the banking sector. The publication activities of BIBM need significant strengthening both in terms of quality and quantity. Efforts are needed for ensuring timely publication of the regular outputs and quality of the journals should also be enhanced to cater to the needs of professional managers, bankers and researchers.

Impact Assessment of Nuton Jibon Project

Study Team:

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Sponsor: Social Development Foundation and World Bank

Budget: Tk. 2.9 million

Time Frame: July 2013-September 2013

The present study is conducted to evaluate the impact of Nuton Jibon project, a programme for livelihood development of the poor and hardcore poor households, which was initiated in 2007 and previously known as Social Investment Program Project (SIPP). The broad objective of this project is to lift the rural poor, hardcore poor and vulnerable people out of poverty through a participatory approach, popularly known as Community Driven Development (CDD), in 16 north-western districts. The Phase-II of the project, also called SIPP-II, became effective since December 2010 and is expected to be closed in 2016.

The project broadly aims at improving livelihood, quality of life and resilience to climate vulnerability, natural hazards and other shocks of the rural poor, especially the left out poor and vulnerable households. The specific objectives are: (i) empowering the poor and strengthening local governance by developing sustainable, participatory and accountable rural community institutions; (ii) reducing vulnerability of the poor to risks, in particular those associated with natural hazards and climate variability, (iii) increasing employment opportunities by enhancing skills, supporting the start up or expansion of income generating activities and strengthening access to markets and financial institutions; and (iv) supporting small-scale demand-driven community investment sub-projects that are prioritised, implemented and managed by the rural poor. The aim of this impact assessment study is to assess how much the project objectives are fulfilled.

The impact assessment study was conducted during July-September 2013. A total of 1,636 randomly selected households (1,134 programme households and 502 control households) were interviewed across six districts of Nuton Jibon project: Barguna, Bagerhat, Gaibandha, Kurigram, Jamalpur and Mymensingh. A mix of both quantitative and qualitative analysis has been applied to assess the impact.

It is observed that the project has made decent progress in achieving its development objectives; some of the performance indicators have been already achieved, while others are in the right track. Using the national poverty line (BBS, 2010), it has been observed that 27 per cent of the “hardcore poor” and 31 per cent of the “poor” who were classified as poor are now above the poverty lines more likely due to project interventions. About 35 per cent of the households have been able to increase their incomes by 40 - 50

per cent which is very close to the project target i.e. 50 per cent at the end of the project as mentioned in the Project Development Objectives (PDOs). About 83 per cent of village institutions are functioning in a transparent, inclusive and accountable manner against the project target of 75 per cent at the end of the project that means the PDOs are fulfilled. Major sources of income of the households are livestock and poultry, business, agriculture, and salary/wages, which accounts for about 90 per cent. Incomes from businesses and livestock and poultry are significantly higher in project areas than control areas, and this higher income is attributed to project interventions. This is confirmed by both mean difference tests and multivariate regressions. Income inequality is higher in control areas than project areas. The results show that both membership and length of participation have positive and significant impact on household food and non-food consumption expenditures. Project beneficiaries are now more capable of buying protein/nutrient food. It has been observed that about 56 per cent of vulnerable households from SIPP-I and 40 per cent from SIPP-II have graduated to hard core poor and have been able to start savings and undertake small scale IGAs.

The community financing programmes of 'Nuton Jibon' project are an integral part of its holistic development approach. The project has four community financing programmes—"Shabolombi," "Avvontorin," skill development loan and youth employment loan. "Shabolombi" is the main loan component. About 80 per cent of the number of total Shabolombi loans and 76 per cent of the number of total Avvontorin loan are found to be used for income generating activities. About 97 per cent of the respondents reported that they did not encounter any problems in taking the loan. This is a significant feature of the community financing programmes of

"Nuton Jibon" as these two most important loans are mostly used for productive purposes. Close monitoring by the fellow group members who are most likely to be her neighbours might have resulted in higher productive use of loan. The rate of return from livestock and poultry and small businesses was estimated to be more than 50 and 60 per cent respectively, which is very much comparable to the national statistics.

Almost 100 per cent of target households save money against about 64 per cent for control households, of which about 90 per cent of the households in the project areas save in the Nuton Jibon project. It is observed that the amount saved last year (about Tk. 730 on average per household) is higher in project areas than in control areas. The borrowers take loan and invest, their income increases, and they become capable in handling larger loan and investment in larger project. This is an indication of some kind of graduation from smaller-loan- handling capacity to larger-loan-handling capacity.

The use of other two loans, namely skill development loan and youth employment loan, is also found to be well targeted. About 90 per cent of skill development loans are used for various training purposes, such as sewing/tailoring, driving, motor mechanic etc. About 10 per cent loans diverted to other purposes. About 56 per cent of the youth respondents entered into regular employment process with a start- up capital ranging between taka 5,000 and taka 7,000. This estimate would have even been higher, had the team be able to interview the youth who left the village for wage employment.

Most of the infrastructural works are earth works, building culverts, setting up tube wells and repairing school building. About 50 per cent of the respondents mentioned that earthwork and culvert construction improves

roads/transportation system in their localities. Perception and works done are found to be highly correlated with Participatory Vulnerability Analysis (PVA). This is an important progress towards infrastructure related PDO. More than 50 per cent HHs are now taking advantages of infrastructure built by the project as against the project target 80 per cent at the end of the project as mentioned in the PDO.

Members of the NJG are found to be more empowered than the non-participants, especially women. The results suggest that 89 per cent of women have role in decision making upon joining NJGs against only 48 per cent at baseline. Women are not only taking loans, they are also the decision makers even on issues related to investment such as livestock and poultry. Results also indicate that women of NJG are more connected to markets than the non-participants primarily because of their greater involvement in market. Econometric analysis also corroborates these findings. A large number of participant women reported that now their husbands and relatives valued their opinions, suggestions, decisions and comments more than before. They have now some "say" in family matters such as buying and selling properties, schooling decisions of children, medical treatment, etc.

About 18 per cent of the households with NJG members took initiative to motivate the villagers to meet to resolve any problem and the similar percentage of households provided voluntary labour for the development of the village. This indicates the success of development of leadership and group based solution to individual problems. The corresponding figures for control are only 3 and 2 per cent respectively. It has found that Nuton Jibon Groups (NJGs) are engaged more in community/social works than the non-members. Gram Samity has earned the

reputation of "problem solver" as 40 per cent of treatment households have reported that they would go to Gram Samity first for any kind of help. This also reflects the extent of trust Gram Samity has acquired by its members.

While village institutions are familiar to majority of the respondents, second generation institutions are found to be less familiar as they have been introduced only recently (Jamalpur and Gaibandha). Regarding transparency and accountability of the institutions, more than 90 per cent of the respondents gave positive response. From sustainability perspective, it is important to introduce gradually the second generation institutions in all the project districts and build their capacity.

More than 50 per cent households are now taking advantages of infrastructure built by the project, (80 per cent by the end of the project). About 60 per cent of the respondents now use sanitary latrine, while only about 28 per cent of the poor and hardcore poor had used sanitary latrine in 2010 (according to the Baseline 2010).

Almost 100 per cent of the respondents in the project area took medical treatment for diseases against 92 per cent in control areas. While project members consult a doctor about 7 days after the disease onset, it takes 15 days for control area respondents to see a doctor. This indicates that project members are more concerned about health and diseases and they are more capable of taking formal treatment than those of control groups.

Broad Theme: *Energy and Power Sector Issues*

Energy Subsidies and Profile of Groups Vulnerable to Reforms in Bangladesh

Study Team:

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Sponsor: International Institute for Sustainable Development (IISD)

Budget: Tk. 5, 23,520/-

Time Frame: December 2012 – June 2013

The study provides estimates of fossil-fuel subsidies for the financial years 2009-10, 2010-11 and 2011-12; undertakes a mapping exercise to identify key stakeholders (population groups and production sectors) likely to be impacted by subsidy reforms for each fuel type and electricity; and based on the analysis, identifies vulnerable groups for further analysis in future. The study provides the initial inputs for developing a framework for assessing the economic impacts of fossil-fuel subsidies and their reform at both macro and micro levels in order to identify options for supporting low-income households and vulnerable groups.

In Bangladesh, all petroleum products, including electricity, are sold under an administered price regime which is controlled by the government. As such, energy subsidies in Bangladesh mostly result from setting retail prices for fuel and electricity at lower than their “true market prices.”

The estimates of overall energy subsidies (including both on-budget and off budget subsidies) for different energy products show that total energy subsidies increased sharply to Tk. 73.28 billion during 2010-11 from Tk. 9.8 billion in FY 2009-10 and further to Tk. 148.85 billion in 2011-12, which is explained

by rapid increase in the quantity of consumption and import prices of energy products.

Being exploratory in nature, the analysis is limited to identifying the profiles of occupational groups and production sectors which are likely to be more vulnerable to subsidy reforms in the energy sector. The energy consumption of both poor and lower-middle agricultural households is overwhelmingly biased toward kerosene (58 per cent for poor and 42 per cent for lower middle income groups) and electricity (36 per cent and for the poor and 40 per cent for lower middle income group of total energy expenditure). Energy consumption of rich and upper-middle non-agricultural households is concentrated more in electricity (53 per cent for upper middle and 47 per cent for the rich) and natural gas (26 per cent for the upper middle and 30 per cent for the rich). The study also provides the energy intensity of top fifteen commodities/activities in terms of share of electricity and petroleum products in total input costs derived from the input-output table. The study concludes with some policy recommendations for subsidy reform in Bangladesh.

Productivity and Efficiency of Solar House Panels in Bangladesh: Economic, Social and Food Security Implications

Study Team:

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A K A M Azad

Sponsor: World Bank

Budget: Tk. 122, 79,020/-

Time Frame: September 2011-December 2012.

The general lack of access to electricity imposes limits on the prospects of growth and

increased welfare. The question is: if the rate of growth in generation of electricity is slow, and the pace of rural electrification and its quality is lackluster, what may be the way out. Herein lies the importance of the solar home system (SHS). The study assesses the impact of the solar home system spanning from the benefits of extended lighting to reduced indoor air pollution and gauge the size of the potential market for solar home and efficiency of service delivery mechanism of the partner organisations (POs) of IDCOL.

As no baseline data are available for the adoption of the SHS in Bangladesh, the three contending non-experimental methods available for its impact evaluation include instrumental variables (IV), regression discontinuity design (RDD) and propensity score matching (PSM) methods. It may be noted that programme placement, the choice of villages, is endogenous in that the treated villages must be off the grid in order for the POs to sell a particular system and receive refinancing and subsidy from the IDCOL. However, once a PO or a number of them are located in a particular location, all the households are eligible to purchase a SHS if they wish so.

In addition, some of the households may not purchase the packages on offer at the current pricing structure. It may be assumed that some of the households would never purchase SHS at any positive price level. But this is a very strong assumption. It is highly likely that more and more of the hitherto unwilling households would purchase SHS as the offer price for a package decreases. This proposition can be tested by appealing to the Willingness to Pay Principle (WTP). Thus, the size of the market in a village would be the cumulative total of users and aspirants at different price levels. However, SHS is a distant inferior substitute of grid electricity. Thus, the potential locations of SHS are those localities (be they are regions or villages) that

are unlikely to be electrified in the near future. The size of the market would be the number of such localities times the cumulative number of users at different price levels.

Policy Implications

Subject to the performance of the SHS based on the various criteria, its further potentials need to be known with some kind of certainty. A market survey to assess the future potentials needs to take into account not simply the theoretical limits, but also practical factors such as growth in income of households, the need for higher levels of energy that may be demanded over time and also the expansion of the normal rural electrification system in the country. Such an assessment will guide to investment needs and associated supplementary activities.

Broad Theme: Safety Nets and Social Protection

Vulnerable Group Development (VGD) Programme in Bangladesh

Study Team:

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Badrun Nessa Ahmed

Sponsor: Ministry of Women and Children Affairs (MWCA)

Budget: Tk. 15, 00,000/-

Time Frame: April 2011 – June 2011

The present research has been carried out based on a survey of 420 VGD beneficiaries and 196 non-beneficiaries. The survey was conducted in 7 divisions of the country. From each division, the sample locations consisted of one district, two upazilas and four unions. The main purpose of the study is to assess the impact of the programme on VGD beneficiaries in reducing poverty and in enhancing income and livelihood patterns of

programme beneficiaries. A total of 420 beneficiaries were selected from the 28 sample unions (15 beneficiaries from each union). The control group for the present survey was selected in such a way that the non-beneficiaries belong to similar socio-economic category as that of the programme beneficiaries, but having no involvement with any safety net programme. From each selected union, 7 control households were selected which gave a total of 196 non-beneficiaries from the 28 sample unions.

Key Findings

With the exception of some minor variations, the age distribution of both the VGD beneficiaries and non-beneficiaries is similar. About 98 per cent of both the beneficiaries and non-beneficiaries fall under the prescribed age range of 18-49 years. The mean age of sample beneficiaries was 37.46 years, compared to 35.49 for the non-beneficiaries.

About three-fourths (67.4 per cent) of VGD households are headed by males, while only 32.6 per cent households are female-headed. Similarly, 69.9 per cent of non-beneficiary households are male-headed and the rest 30.1 per cent are headed by females. However, even though about three-fourths of the VGD beneficiaries come from male-headed households, it has been observed during field visits that majority of these male heads are engaged as casual or daily labour and they are equally vulnerable to food insecurity, hunger and malnutrition. The present study has examined the impact of the VGD programme on the beneficiaries. Three independent indicators are used to see the impact of the programme on beneficiary households –how far the programme has been successful in: (a) increasing household incomes, (b) enhancing food security, and (c) creating asset /purchasing of selected items. The data

pertain to 420 beneficiaries (project) and 196 non-beneficiary (control) households.

Monthly income is considered to be an important indicator of poverty. The average monthly income of the beneficiary households was 3 per cent higher compared to non-beneficiary households (Tk. 4,053 vs 2,954). About a tenth (10.48 per cent) of beneficiary households live on a monthly income, which does not exceed Tk. 2,000. On the other hand, more than a quarter (29.08 per cent) of the non-beneficiary households subsists on a monthly income not exceeding Tk. 2,000. The per capita monthly income was Tk. 1,029 for beneficiary households compared to Tk. 771 for non-beneficiary households. Our findings suggest that a significant majority of beneficiary households have been able to increase household income compared to their counterparts in the control group. Again, more than one-third (36.91 per cent) of beneficiary households earns more than Tk. 4,000 per month as against 15 per cent of non-beneficiary households who fall in this income group. This implies that in terms of income poverty, beneficiary households are much better off compared to non-beneficiary households.

The food security situation of VGD households was examined in terms of yearly food deficit status and daily meal frequency. The findings show that poverty and food insecurity is extremely widespread in the study areas. We have found that 7.14 per cent of the beneficiary households are in chronic deficit having year round food deficit, while another 12.62 per cent are in frequent deficit (more than 6 months a year). Taken together, these two groups account for one-fifth (19.76 per cent) of the beneficiary households who are in the worst condition in terms of food security. Among the control group, about a half (55 per cent) of the households fall in the category of having food deficit for most of the time (more than six months) in a year. Again, by the self-

evaluation criteria, 24.05 per cent of beneficiary households fall into the self-sufficient in food category as against only 4.08 per cent of the non-beneficiary households who fall in the “self-sufficient” category.

Based on our findings, we can say that in terms of monthly income, year round food security and housing conditions, the beneficiary households are much better off compared to their non-beneficiary counterparts. Though a significant proportion of beneficiary households still have low incomes, live in poor housing conditions and suffer from food inadequacy for a significant part of the year, compared to their non-beneficiary counterparts, their vulnerability has been reduced to a large extent and their poverty situation has improved significantly.

The main strength of the VGD programme is that it could reach the target group of the hard core poor women and it has been effective in enabling the beneficiaries to improve their socio-economic conditions. In addition to the monthly food grain support, the intervention has also delivered IGA training in several topics (cow/poultry rearing, vegetable gardening, sewing, etc) and social/awareness training in topics covering health, nutrition and “life skills.” Sources of livelihoods have expanded because of involvement of women in new and diversified IGAs.

Most of the beneficiaries reported that food security of the household has improved significantly after getting benefits from the VGD programme. Conditions with respect to other basic needs like health care, clothing, housing, social security etc., have also improved after getting benefits from the VGD programme. It was also found that the programme also helped the beneficiaries to acquire some assets, which hold potential for further income. Thus, the VGD programme provides the hard core poor women with

economic security not only for the present but also for the future.

The VGD programme aims at increasing the earning potential and social empowerment of the most disadvantaged rural women. During a 24 months cycle, wheat is provided (30 kg./month) to give women a temporary break from the struggle to find food and to allow them to participate in training programmes, and attend courses focused on market based income generating activities, provision of savings and credit, and functional education (health, nutrition, literacy, etc). These activities have been successful in improving food security of the households headed by widowed, divorced, separated/abandoned women and women with disabled husbands.

The main success of VGD programme lies in the fact that the beneficiaries have been able to improve their socio-economic condition with positive impact on income, food consumption and access to safe housing. In addition, there have been positive changes in the quality of life of the members compared to the situation before joining the programme as reflected through better access to clothing, health care and school enrollment. After joining the programme, there have been positive changes in income earning opportunities, land ownership, utilisation of sanitary toilets, non-land asset ownership, saving habits, school enrollment for children and empowerment of women.

Economic empowerment leads to social empowerment since social insecurity is often seen as resulting from economic deprivation. Awareness building has been one of the impacts of the programme. Lifestyle has shown positive changes in that the use of sanitary toilets and hygienic practices with regard to cooking have significantly increased, presumably as an effect of awareness program. Some of the beneficiaries now possess radio, watch and other modern goods. People are empowered now and are

aware of the surrounding environment more than before. However, inadequate coverage/limited number of beneficiaries is the major problem of VGD programme and as such efforts should be made by the government to increase the number of beneficiaries through allocating more resources.

Three-fifths (57.69 per cent) of the VGD cardholders are of the opinion that selection was fair enough for all the cardholders, while about two-fifths (38.22 per cent) maintain that selection was fair for some of the cardholders only. By contrast, less than a fifth (17.02 per cent) of non-beneficiaries maintain that selection was fair for all of the cardholders, while a vast majority (70 per cent) of the non-beneficiaries are of the opinion that only some of the cardholders belong to eligible group. This discrepancy between responses given by beneficiaries and non-beneficiaries may be explained by the fact that since the non-beneficiaries are excluded from the programme benefits, they are more likely to be unhappy about the selection process.

Respondents were asked to give their opinion about the reasons for giving VGD cards to non-eligible persons. The main reasons given by respondents include: nepotism (mentioned by 38 per cent of VGD beneficiaries and 37 per cent of non-beneficiaries), bias of selection committee (mentioned by 23 per cent and 21 per cent respectively), pressure of local elite/influential persons (21 per cent and 24 per cent respectively), and for voting purpose (11 per cent and 12 per cent respectively).

Concluding Remarks

Inadequate coverage of beneficiary is a serious weakness of the VGD programme. It was observed that many eligible poor women who meet all the eligible criteria for VGD card have been left out of the safety net programme mainly because of the limited number of beneficiaries covered by the

programme and inadequate funding situation. Findings of the present study (including FGD) reveal that in terms of almost all the poverty indicators, the non-beneficiaries are as poor as the beneficiaries are. A large majority of our respondents (both beneficiaries and non-beneficiaries) maintain that the number of beneficiaries should be at least double than that of the present size.

Recommendations

On the basis of quantitative and qualitative data, the following recommendations can be made:

- The formation of selection committee is sometimes politically biased, which results in mis-targeting of beneficiaries.
 - It has been observed that the selection committee has to face tremendous political pressure in preparing the list of potential beneficiaries, especially so in areas where the local government representatives i.e. chairman/members are supporters of opposition political party.
 - The chances of being included in the preliminary list primarily depend on the impression of the local level politicians/representatives, and in the process, the poorest of the poor and the most deserving may be excluded. For effective implementation of the programme, it is important to strictly follow the selection criteria and lessen political pressure.
 - There have been complaints of bribery in the process of selection of VGD beneficiaries. During the field survey the enumerators have come across with people who had to pay money for being included in the beneficiary list. To manage this money for bribing, frequently they had to take loan from various sources. However, not everyone has been successful in getting a VGD card even after paying money as demanded, as
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reported by the FGD participants. However, the extent of bribing varies by regions. The FGD findings and our field observation show that bribery is more common in Barisal division, followed by Rajshahi and Khulna division.

- An innovative process, the so-called “lottery system”, was introduced in VGD card distribution in some of the unions. Interestingly, this process worked extremely well and was appreciated by almost everybody, though there were some minor complains of mis-targeting
- FGD findings and field observation also show that some economically better-off households having diversified sources of income have been given VGD cards, while some of the actually deserving and eligible poor households have been left out.
- There is lack of proper monitoring by MWCA\DWA in the implementation process, mainly because of shortage of manpower. This needs to be addressed urgently for smooth functioning and proper monitoring. There should be mechanism of monitoring the food grain/VGD benefit distribution process periodically.
- Delivery of the grains should be made in packets of 30 kilograms for each beneficiary so that there is no scope to tamper with the amount of wheat/atta to be distributed.

Impact Evaluation of Maternity Allowance Programme in Bangladesh

Study Team:

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Sharifa Begum

Sponsor: Ministry of Women and Children Affairs

Budget: 10, 00,000/-

Time Frame: January 2012 – November 2012

The main purpose of the evaluation is to assess the effects of the programme interventions and examine the impact of the programme on the beneficiaries. The research has been carried out based on a survey of 420 beneficiaries of the Maternity Allowance Programme and 196 non-beneficiaries. The survey was conducted in seven divisions of the country. From each division, the sample locations consisted of one district, two upazilas and four unions.

A total of 420 beneficiaries were selected from the 28 sample unions (15 beneficiaries from each union). The control group for the survey was selected in such a way that the non-beneficiaries belong to similar socio-economic category as that of the programme beneficiaries, but having no involvement with the allowance programme. From each selected union, seven control households were selected which gave a total of 196 non-beneficiaries from 28 sample unions.

Key Findings

Household income is an important indicator of poverty. The findings suggest that a significant majority of beneficiary households have been able to increase household income after participation in the programme. The monthly income of beneficiary households was found to be 30 per cent higher compared with the non-beneficiary households (Tk. 3,971 vs Tk. 3,060). This implies that in terms of income poverty, beneficiary households are much

better off compared with the non-beneficiary households.

The income of the beneficiary households has increased by 46 per cent after participation in the programme (from Tk. 2,713 to Tk. 3,971). The overall poverty situation seems to have improved significantly after joining the programme. It appears that more than one-third (36 per cent) of the beneficiary households used to earn a monthly income not exceeding Tk. 2,000 before joining the programme, the corresponding figure at the time of the survey was only 3.1 per cent. On the other hand, only 2.4 per cent of the beneficiary households had monthly income exceeding Tk. 5,000 before joining the programme, but the proportion has gone up to 15 per cent after participation. The impact of the programme in enhancing household income is clearly reflected through the changes in household income before and after participation which contributed to improvement in nutritional situation of beneficiary households.

In terms of monthly income, year round food security and housing conditions, the beneficiary households are better off compared with their non-beneficiary counterparts. Though a significant proportion of beneficiary households still have low incomes, live in poor housing conditions and suffer from food inadequacy for several months in a year, compared to their non-beneficiary counterparts, their vulnerability has been reduced to a large extent and there has been reasonable improvement in their poverty situation.

Respondents were also asked whether they knew about their monthly entitlement under the allowance programme. More than three-fourths of the beneficiary women informed that they were aware of their monthly allowance (i.e. Tk. 350 per month). A similar proportion of the respondents (88.1 per cent) also

maintained that they also got their actual entitlement as allowance money. However, around 12 per cent of the beneficiaries complained that occasionally a small deduction was made from their monthly allowance (ranging between Tk. 10 and Tk. 20), but not on a regular basis.

Beneficiary women were asked about their control over the allowance money. An overwhelming majority of them (69.6 per cent) informed that they could always spend the money according to their need, about a fourth (27.4 per cent) could do so occasionally, while 3.1 per cent of the beneficiaries could never spend the money according to their desire. Of the women who could not spend the money according to their own choice, a vast majority of them (80.47 per cent) said that their husbands used to take away the money for spending, 14.84 per cent of the women reported that their husbands dictated how and where to spend the money, and the remaining 5 per cent reported that the money was spent on other essential household items.

According to majority of the FGD participants, the selection process was fair, although a small minority of the FGD participants thought that it was unfair, mainly because some of the very poor women had been excluded from the programme. In general, the consensus was that poor women had been selected to participate in the programme even though there were a lot of other women who were equally poor but were not covered under the programme because of shortage of cards. The programme has also been effective in increasing the knowledge and practice regarding RH and child care related issues. The findings reveal that the maternity allowance programme has positive impact on use of ANC/PNC, food consumption during pregnancy, accompanied by better health and hygienic practices.

However, inadequate coverage of beneficiaries is a serious weakness of the maternity allowance programme. It was observed that many eligible poor women who meet all the eligible criteria have been left out mainly because of the limited number of beneficiaries covered by the programme and inadequate funding situation. For improving the health of the poor pregnant women, a combination of the following measures is necessary:

1. Need based adequate nutrition for pregnant and lactating women and their children;
2. Educating women and prepare them for a healthy pregnancy and safe delivery;
3. Arranging long-term training for the health providers including TBA/Dai to ensure quality services for safe motherhood;
4. Community mobilisation i.e. rising of community awareness regarding special needs during pregnancy, and providing women with adequate food and nutrition.

For health and well-being of pregnant and lactation of women, the following are important:

- Prenatal medical care – immunization of pregnant mothers and proper treatment of infections during pregnancy and puerperium should reach all mothers;
- Prenatal non-medical care, maintenance of maternal health including nutrition during pregnancy and lactation should be ensured;
- Medical care at birth for safe delivery and general hygiene including the use of sterilized instruments to cut the umbilical cord.

Assessing the Performance of FFW, TR and VGF Programmes

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Sponsor: Disaster Management and Relief Division (DMRD), Ministry of Food and Disaster Management

Budget: Tk. 92, 33,580/-

Time Frame: May 2012–January 2013

Bangladesh has done remarkably well in improving its social indicators in many respects. Over the years, the government has undertaken various development activities to mitigate the sufferings of the destitute people. The ultimate aim of these programmes is to enhance food security, increase income and productive capacity and support increased household welfare. With a view to ensuring food security and social safety nets for the poor, various safety net programmes are being implemented by the Disaster Management and Relief Division. Among the safety net programmes, FFW and TR are the most important programmes whose prime objective is to construct and maintain rural infrastructure through creating employment opportunities for the poorest in lean period of the year. These programmes also aim to reduce poverty and vulnerability of the people which is one of the electoral mandates of the present government.

The focus of the present study is to provide an assessment of the performances of three safety net programmes being implemented by the Ministry of Food and Disaster Management (DRM)—Food for Works (FFW), Test Relief (TR) and Vulnerable Group

Feeding (VGF). These programmes are implemented with twin objectives—to provide wage employment and food security and to create durable community, social and economic infrastructure.

Various safety net programmes are expected to bring tangible and direct benefits to the vulnerable groups through cash or in-kind transfers. However, their effectiveness to reduce poverty and deprivation is adversely affected because of inefficiency and corruption associated with selection of beneficiaries and disbursement of benefits. The issue of leakage is important in this respect.

The sample of the evaluation has been multistage, stratified and based on random clustering. It is intended to give representation of the seven divisions, and sample upazilas within the divisions, for rural sites. As the FFW and VGF have exclusive focus on rural areas, the sample for FFW and VGF is limited to rural areas only. But the TR programme also covers municipal areas in addition to rural sites, so the sample for TR covers both urban and rural areas. The study used both qualitative and quantitative information.

Policy Implications

There is a dearth of good quality programme evaluations that can provide focused policy suggestions for improving programme design and implementation arrangements to enhance efficiency and effectiveness of these programmes. The efficiency of the safety net programmes must improve, especially given the backdrop of declining commitments of resources by donors. In particular, it is necessary to reduce system leakage and improve targeting in order to realise greater benefits from the existing social safety net programmes. In other words, the design and impact of individual programmes need to be carefully considered before scaling them up or even retaining them. The present evaluation provides both strengths and weaknesses of

the performance of FFW, TR and VGF programmes in terms of their overall objectives, design, types of beneficiaries, and problems/difficulties in their implementation, and suggests policy measures for improving the efficacy of these programmes.

An Evaluation of the Old Age Allowance Programme of the Government of Bangladesh

Study Team:

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Sponsor: Department of Social Services (DSS), Ministry of Social Welfare

Budget: Tk. 6, 05,000/-

Time Frame: April 2012 – April 2013

In recent decades, Bangladesh has experienced a drastic decline in fertility, substantial reduction in population growth rate and a significant improvement in mortality. These demographic dynamics leading to the population age structural changes have been causing an increase in the older population both in terms of share and absolute figure. This demographic phenomenon known as population ageing has profound policy implication, particularly in developing countries where the system of elderly support such as pensions or social services have remained yet un or underdeveloped. In these countries, population ageing places the issue of old age poverty and vulnerability at the forefront of developmental agenda and the obvious policy imperatives that face these countries are to establish and strengthen the old age social protection. The Government of Bangladesh in 1998 introduced an allowance programme for the country's poor older people with the aim to transfer cash assistance to them so that the old-age vulnerabilities and insecurities are reduced, if not remove totally. This

programme has undergone several modifications and expansions since introduction and currently 24.75 lakh poor older people benefit from it.

The study conducts a comprehensive evaluation of the Old Age Allowance Programme with three broad objectives viz., assess the programme coverage achieved so far and understand the inclusion-exclusion errors in beneficiary selection; review the programme operation/implementation in order to understand the efficiency and appropriateness of programme administration; and understand the impact of the programme on the lives of older people and their families.

The study used primary information from a representative sample survey of both beneficiaries and non-beneficiaries covering both rural and urban areas. In addition, interviews were conducted among key personnel along with collecting qualitative information from both beneficiaries and non-beneficiaries through Focus Group Discussions.

Policy Implications

The study generated ample relevance in policy-making, particularly relating to the country's old age allowance programme. The findings shed light on the extent of additional expansion that the programme would need to bring all eligible elderly under the programme and resource requirement for the programme. By reviewing the programme implementation, the study is able to identify laps and gaps in the programme implementation/administration and suggest needed modifications or redesigning of the programme to make it more effective and elderly friendly. Also, the investigation on the impacts of the programme provides the policy makers with the need and adequacy of such help to the poor older people and gives an opportunity to assess the benefit of it at the receiver level.

Broad Theme: Governance Issues

Baseline Study on Upazila Governance in Bangladesh

Study Team:

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Sponsor: UNDP

Time Frame: October 2012-March 2013

The key component of this study is to conduct a survey to collect information on the baseline indicators on governance, development plans and budget of Upazilas as well as citizen's perception towards governance and functions of Upazila Parishads. Two-stage random sampling procedures were applied. First, the required number of Upazilas (42) was selected from 21 districts by randomly choosing 3 districts from each of the 7 administrative divisions. At the upazila level, at first, information was elicited from Upazila Chairman, Vice Chairs, UNO and Line Department officials. Second, a nationally representative sample of citizens from each Upazila was determined. A total of 1,680 respondents and 40 citizens from each of the selected 42 Upazilas were interviewed through Systematic Random Sampling (SRS) method.

Qualitative surveys such as FGDs and KIIs were conducted to complement the findings of quantitative analysis. Views of three types of respondents were collated so that a complete picture of governance and development outcomes at the Upazila level can be highlighted. A total of 21 FGDs were conducted in selected 21 districts with UZP chairman, vice chairs, UP chairpersons and UNOs. Two types of key informant interviews were also conducted with the line department officials and informed citizens reside at villages. A total of 118 government officials were interviewed to understand their perception towards functioning of UZP and

about 179 village people (school teachers, UP members, local political leaders, businessmen, etc.) were interviewed to assess their awareness and perception towards UZP activities.

From the survey at the upazila level, it has been revealed that a total of 11 secondary legislative instruments are available, namely seven rules, one charter of duty, two guidelines and one policy regarding hat/bazaar/jalmahal izara. Out of 14 (according to Article 63(2) of the Act, 2009) rules, only seven have been finalised. It is important to finalise other rules as soon as possible for better functioning of the Upazila system. It is also found that Upazila manual, budget and annual development planning guidelines are available in almost all Upazilas. However, FGD and KII findings indicate that majority of the Upazila officials and elected representatives do not have any knowledge about the contents (rules/regulations) of these instruments.

RTI Act compliance has been poor in sample Upazilas as only a few Upazilas maintain compliances properly. A specific officer for RTI compliance has not been designated yet in many of the sample Upazilas, and the information about the designated person and other provisions of RTI is difficult to obtain from UZP, as these are not posted at UZP notice board and Upazila websites in many cases.

Working of Committees

The picture with regard to standing committees appears quiet unsatisfactory. The committees (standing) were formed in only 35 per cent of project Upazilas and 75 per cent of control Upazilas as of June 30, 2012. Control Upazilas were well ahead of project Upazilas in terms of forming committees, but not in terms of holding meetings as per rule. It is also found that Committees were formed with

6 members (on average) in all sample Upazilas, which is consistent with the Act that gives a guideline to form committees with 5-7 members.

Although committees are supposed to meet at least once in every two months, that is, at least 6 times in a year (According to the Act) during the survey, it has been revealed that some of the committees met only twice and most of the committees met only once in the last one year (2011-12), particularly in project Upazilas, while meeting was not held in most of the cases in control Upazilas in the last one year, although these committees were formed much earlier. This indicates that (standing) committees are not functioning properly. It has been reported during the survey that on average one to two decisions were made in the meetings; however, most of those decisions were not implemented finally. It is observed that communications and physical infrastructure development committee has been more active than other committees in terms of number of decisions and their implementation. This is expected as under ADP majority projects are related to roads and infrastructure.

FGD findings reveal the fact that (standing) committees do not have any role to play as the line departments are run by the decisions of other departmental committees headed by UNO and central government's instructions. The recommendations made by committees (standing) are not even placed in UZP meetings for approval. For this reason, elected representatives largely remain ignorant of decisions of functionaries, and thus they feel aggrieved.

The survey findings indicate that meetings of UZP held regularly in almost all Upazilas and minutes after the meetings were also prepared. However, it was not clear how long it takes to finalise the minutes or whether the minutes are circulated to all. Moreover, it was

not evident that working papers before the meeting are prepared properly. It has been observed that the UNO mainly calls the meeting, while, in some cases, particularly in absence of UNO, Upazila chairman does this although he is not supposed to do it. In 50 per cent cases, a prior notice of the meeting is served a week before the meeting as per rule, while in rest of the cases the notice was found to be served 2-3 days or 8-10 days before the meeting. It has been reported that every participant can freely express his/her opinion in the meetings; however, FGD findings show that women participants in some cases cannot express their opinion. Local MP, as an advisor to UZP, attends the meetings irregularly. However, it has been reported verbally and also revealed from FGDs and KII findings that local MP in many cases influences the decision making process of UZPs, which makes elected representatives of UZP unhappy. The influencing role of MP appears to be an obstacle to strengthening the system in the long run, as reported by elected representatives of UZPs.

Budgeting and Planning

Despite guidelines and instructions from the LGD to prepare annual budget, survey findings show that only about 57 per cent of project Upazilas and 39 per cent of control Upazilas have prepared annual budget of respective Upazilas as of June 30, 2012. Of them, majority of sample Upazilas have prepared their first budget in 2010-11. It is observed that among the Upazilas that have prepared budget, they did not follow all the standard procedures of budget preparation. Only 15 per cent of the Upazilas were found that had arranged open budget discussions although this is an important step toward budget preparation. Various reasons were mentioned for not being able to prepare the budget, for example, transfer of UNO, sickness of UZP Chairman, lack of resource and appropriate personnel, etc.

During the survey, respondents mentioned that MDGs have not been given priority in the preparation of Upazila budget. This is an area where UZGP could intervene. It is recommended that a specific budget wing or official is required at Upazila Parishad to prepare budget and development plan. More training and skill development programmes should be undertaken to increase skills of the persons responsible for budget preparation. Analysing budgets of Upazilas, it has been identified that majority of the project Upazilas and 55 per cent of control Upazilas have prepared surplus budget, while about 36 per cent of project Upazilas did not show balance (surplus or deficit) of the budget, suggesting that they are incomplete. Only one control Upazila had prepared deficit budget, while majority of project and control Upazilas showed surplus in revenue. This surplus budget triggers to the fact that UZPs are less capable of spending all revenue and development earnings.

Analysing revenue income and expenditure heads of Upazilas, it has been observed that the main earning comes from lease of hat/bazaar/pond/jalmahal, which constitutes about 41 per cent of total revenue income in 2010-11 and 46 per cent in 2011-12. The ratio is even higher among control Upazilas than project Upazilas. The next big source of revenue income in 2010-11 and 2011-12 was income from house/office rent (26 per cent). These two sources are reported by all Upazilas. The other sources of income include land development tax (2 per cent), tax from business entities (3 per cent) and tender schedule sell. About 5-6 Upazilas have reported 1 per cent of land transfer tax as about 40 per cent of their revenue receipts. On the other hand, major revenue expenditure heads are honorarium of Upazila chairman and vice chairs and salary of Upazila staffs (12.5 per cent vs 24 per cent of total expenditure in 2011), provident fund (20 per cent vs 4 per cent), office and building repair

(14.5 per cent vs 8.3 per cent), and vehicle maintenance, repair and fuel cost (9.68 per cent vs 1.21 per cent).

Revenue income has been found to be 48 per cent of development expenditures (ADP) in 2010-11 and 46 per cent in 2011-12. Thus, revenue-ADP ratio remained almost the same in 2010-11 and 2011-12, indicating that there is no important upward change in revenue generation in sample Upazilas.

Majority of project and control Upazilas' main source of development fund is development grants (ADP) from the central government (about 90 per cent in project and 70 per cent (plus previous year's balance—which may constitute about 90 per cent or more) in control Upazilas). Other sources constitute very little of the fund. Examining development expenditures of the Upazilas, we observe that major expenditure head is the infrastructure (both physical and socio-economic heads), followed by agriculture and irrigation, education, health, and disaster and relief. Majority of the sample Upazilas did not show any expenditure on poverty reduction head (social safety net and institutional support) except a few. As Upazilas are spending on health, education, women and children development and poverty reduction, they are indirectly addressing MDGs to some extent; however, more focus should be given on it.

The analysis of budget suggests that there appear inconsistencies in budget heads as well as it lacks overall development perspectives of upazila. Poverty reduction and MDGs did not get due focus in the budgets, rather infrastructure overwhelmingly dominates development expenditures.

Almost all Upazilas claimed that they have guideline on annual plan. However, no complete and elaborated annual development plan guideline is so far available for UZP. About 43 per cent of project and 48 per cent of

control Upazilas claimed to have prepared an annual development plan. In fact, the plan is not a comprehensive development plan of the Upazila, per se but is a stocktaking of annual demand notes of different UPs. However, officials from almost all surveyed Upazilas mentioned that no training was provided on the planning guidelines, and that's why it is difficult for them to prepare a comprehensive annual development plan. A large number of Upazilas, both in project and control areas, do not have comprehensive guidelines on Five Year Plan, Annual Plan and planning book.

Citizen's Perception

About 60 per cent of the respondents were found to visit UZP in different occasions and on average they visited UZP 3 times in 3 months. Most of them visit Upazila in the morning time. The respondents visit UZP and Upazila town mainly for health (40 per cent) and land (20 per cent vs 25 per cent) purposes. Other purposes of visit included local conflict (about 10 per cent), fisheries and livestock (5 per cent), education (5 per cent) and family planning (5 per cent) purposes. A good number of people visit upazila town for banking services (about 12-15 per cent).

Findings show that around 70 per cent of respondents are aware of day-to-day administrative role of the chairman, while more than 75 per cent of respondents think that preventing crime and resolution of local conflicts are important duties of the chairman. About 50 per cent respondents mentioned that monitoring activities of vice chairmen is one of the duties of UZ chairperson. Most of the respondents are not aware of other duties of the chairman and vice chairs as stipulated in the Upazila Manual. About one-fourth of the respondents do not know what are the activities of Chairman and Vice-chairmen, so they are unable to evaluate their activities. Citizen's perception towards the role of UZP in local development is somewhat ambiguous.

The main role of UZP, according to citizen, is development of roads/infrastructure, followed by provide services such as health and education, agriculture and irrigation, electricity, etc.

Respondents were asked to evaluate the quality of services of line departments at the Upazila level in a 5-point scale. Most of the respondents graded the quality of services provided by line departments at the upazila level as very poor (bad). There is no difference in terms of grading in both project and control Upazilas. The quality of communication and infrastructure and agriculture and irrigation services was rated as bad in both areas. The services of law and order, primary and mass education, secondary and madrasa education and health and family welfare departments were graded as relatively better than other departments. It is found that awareness about upazila activities varies across types of activities. For example, while majority of the respondents are aware of activities related to public service delivery, they are not quite aware of some mandated activities like preparation of annual budget and various development plans.

Respondents' were asked to evaluate the activities of their respective Upazila's Chairman, vice chairman and woman vice chair and Upazila Nirbahi Officer. On a 5-point scale, the average rank is estimated to be 3 for all the three, indicating that their performance is at the average level. Community leaders (KII) also rated their satisfaction on elected chairmen and vice chairs as average. The ranking does not vary across project and control upazilas. However, about 50 per cent of the respondents did not participate in evaluation of activities of UZ chair, Vice chairs and UNO. It has been revealed that to bring more accountability and transparency in Upazila Parishad activities and strengthen democracy, some awareness building measures for citizens about the

Upazila's activities could be undertaken under the UZG Programme.

Regarding MPs role, only 18 per cent of the respondents gave their opinion, while majority of the respondents either did not know or made no comments about the role of local MP—the reason perhaps is that the issue is politically sensitive. Only the development activity of MP that is visible to citizens is the construction or repair of roads (78 per cent mentioned of it). Other activities, as mentioned by a small proportion of respondents include develop education institutions, coordination of projects, provide relief, etc. While about 45 per cent of the respondents did not make any assessment on the role of MP, 25 per cent of the respondents mentioned that they are not satisfied and the same proportion said that they are less satisfied. Only a few (3 per cent) said that they are highly satisfied with MPs role in development activities at the Upazila level.

Almost all of the respondents are not aware of Upazila budget and budget session of Upazila. They are also not aware of Upazila by-laws. About 20 per cent of the respondents mentioned that the working relationship between UNO and UZP chairman is good, while about 70 per cent of the respondents are not aware of it. Similarly, only about 10 per cent of the respondents mentioned that coordination between Upazila and Union Parishad is good, while about 20 per cent of the respondents think that it is so so. However, more than 60 per cent do not have any knowledge about the situation. Regarding RTI compliance, Citizen Charter and anti-corruption strategies of UZP, most of the citizens were found to be unaware of them.

Citizen's perception about the expected role of UZP in local development was sought. The main role, according to the survey, is the development of roads/infrastructure (40.6 per cent vs. 44 per cent), followed by health and

education (11 per cent vs. 13.4 per cent), agriculture and irrigation (8.5 per cent vs. 5.6 per cent), and electricity (7.4 per cent vs. 6.5 per cent). Another notable role mentioned by the respondents was to organise opinion sharing meeting (6.5 per cent vs. 8 per cent). Respondents also expect these types of services from UZP in the future.

In order to strengthen the UZP, the most stated opinion from citizen was to contain corruption and bribery (26 per cent) in order to strengthen UZP. Other important suggestions include more administrative power to UZP, more budgetary allocation for UZP and participatory decision making through consultation with the people. Moreover, electing honest and capable people in UZP is another way of strengthening UZP.

After 4 years of election in UZP, the Parishad has not been functioning as expected. Election in reserved seats has not been held yet. Parishad meetings are held regularly, though UZ chairs often complain that local MP influences major decisions. Standing committees meet sporadically without having strong control on decision making processes of respective line departments. These are the areas of concern for making UZP a vibrant and democratic LG unit.

Activating Committees (standing) properly is central to linking local level governance with local level development outcomes. An effective Committee (standing) can ensure accountability and transparency in public service delivery of line departments, which in other way is expected to enhance pro-poor and MDG targeted development outcomes of Upazilas.

As departments are still running by the decisions of their own committees, it is therefore important to delineate relationship between standing Committees and other departmental committees. Disbanding of

departmental committees or bringing them under direct supervision of (standing) committees could be one way to make the (standing) committees effective.

Making a five year development plan properly will have significant bearing on rejuvenating developmental activities at the Upazila level. In the future course of time, local level five year plans and annual budgets based on such Plan can be integrated with national five year plan and national budget, which will make local government decentralisation process more meaningful as well as lead to more inclusive development.

To make the Parishad meetings more purposeful and to reduce undue influence in decision making process from different quarters, under the Upazila Act 1998, Article 28, a mechanism for greater mandatory institutional interaction can be devised between local governments (Upazila Parishad) and CBOs/ NGOs available locally, with their role as observer, to ensure the transparency in local projects selection, increased efforts to revenue mobilisation, support local level needs, and improve monitoring.

Another potential area of intervention in improving local governance is to ensure e-governance at the Upazila level, as mandated in Upazila Act 2011 (Amendment). Updated Upazila's websites and use of ICTs in Upazila activities could open up the avenue of ensuring e-governance. Ensuring e-governance will allow transparency and voice to the citizens as well as make the administration more accountable with lower costs of transaction.

Policy Recommendations

Some specific policy and operational recommendations to strengthen Upazila system (short-to-medium-to long term) are made below:

- Upazilas must be transformed in line with Article 59 of our constitution by ensuring the rule of people's representatives at all administrative units. All the functionaries at the Upazila level should be brought under the direct supervision of Upazila Parishad.
- The government has so far finalised 6 rules on functioning of Upazilas out of 14 (According to Article 63(2) of the Act, 2009 (amended). This slow pace of finalising other rules greatly hampers better functioning of Upazila Parishad. Therefore, it is recommended to finalise the rest of the rules as soon as possible for the sake of better functioning of Upazila Parishad.
- MPs' developmental role is unconstitutional. Thus, their role should not go beyond the current advisory role to UZP.
- Development role of Upazila should focus more on MDGs, rather than only on infrastructure development.
- Efforts should be made for effective transfer of departments by disbanding parallel bodies such as departmental committees, or bring those departmental committees under the direct supervision of (standing) committees.
- Expenditures and revenues of line departments should be integrated to Upazila budget.
- Capacity building should continue in different areas. It is necessary to build capacity of elected representatives by making them aware of laws, rules and guidelines, etc. For day to day functioning, it is necessary to provide representatives with hands-on training to hold meetings, write minutes and working papers. Moreover, capacity building for technical work, such as budget preparation, plan preparation, e-governance, will be necessary.
- Capacity building of M&E and MIS section of LGD is important in order to maintain an effective and sustainable monitoring and evaluation system of local government. Necessary technical and skillful personnel must be appointed there to revitalise the system.
- A national framework for local government capacity development can be developed, which will be instrumental for local government development.
- Local government offices at the divisional and district level should be equipped with a sustainable system of monitoring and backstopping local governments.
- As a long term objectives, policies should be undertaken in such a way that UZP can be made autonomous without the control of respective ministry/ministries.

Impact Evaluation of the Department of Cooperatives

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Sponsor: Rural Development and Cooperatives Division, Ministry of LGRD and Cooperatives

Budget: Tk. 67, 99,950/-

Time Frame: July 2011 – June 2012

Bangladesh has a long history of cooperative movement in the country. Cooperative movement has an important role to play in mobilising people, particularly the poor and

the women, and helping them to be engaged in productive activities collectively in order to help them to overcome poverty. The Department of Cooperatives (DoC) has been the principal government organisation responsible for facilitating economic growth and poverty reduction effort of the government. The DoC is committed to poverty reduction and socio economic development of Bangladesh through strategic management of human, agricultural, natural, technical, financial and other resources for the sustainable development of cooperatives as a business-oriented unit.

Given the fact that the cooperative movement has an important role and the Department of Cooperatives has been facilitating cooperative movement for several decades, it is important to have a comprehensive evaluation of the activities of the DoC in respect of poverty reduction and development of the country. It is also important to review the organisational and management structure of DOC in order to suggest ways to improve the capacity of the Department to meet the needs of time and address increasing challenges in these areas.

The study employed a range of methodological instruments including desk reviews, household surveys based on structured questionnaire, community focus group discussions (FGDs), semi-structured interviews (SSIs), review of organisational performances and case studies.

Major Results

Leadership development: accountability and transparency

It has been pointed out that for the success of any given cooperative society good leadership plays a primary role. While some of the cooperatives demanded that the leadership selection process should be democratic, others are functioning well under committees formed through selection. Therefore, we may

conclude that if the leadership denomination procedure is fair and transparent and the general members of a cooperative are happy with it, then it becomes the main force for achieving dexterity and success in the functions of that cooperative.

Ownership and belongingness: why cooperative

The main reason for peoples' attraction towards cooperative instead of NGOs is that this is a body they can identify with. A feeling of ownership and belongingness works in the case of cooperative. While the NGOs are seen as "outside body supported by foreign funding," a cooperative is a group consisting friends family members and neighbours. The capital of the cooperative consists of one's own savings. Unlike the NGO officials, cooperative members are humane and they seldom humiliate other members or force them to sell property for loan recovery. For these reasons many beneficiaries remain in a cooperative society even though they themselves or their family members are involved with different NGOs.

Social network

Cooperative societies also provide platform for collective action, provide social network and support during times of need and create a space for participation which reinforces the member's social standing.

Local elite and cooperative

One of the hypotheses of this study was that if the cooperative societies are affiliated with local government bodies, then they would run more smoothly and transparently as they will be accountable to the public representative. However, most of the cooperatives are of the opinion that this would not be a practicable idea. According to the respondents, local elite and political leaders already try to influence and control the cooperative societies,

especially those which have large turnovers and assets. They say that keeping a good relation with the local government is important but that should be from arm's length. Direct involvement or influence from the public representatives would hamper independence and growth of cooperative societies and would go against the interest of general beneficiaries.

Involvement in the cooperative society: rigidity or flexibility

The main strength and driving force for cooperative societies is their members. It has been found, in many cases, that cooperative societies are rigid about taking new members. They only provide membership to male descendants of old members. According to them, this is a major way of restricting membership among like-minded people and ensuring that people with dishonest purposes do not get into the society. Though this process might have some positive impacts, it also has its drawbacks. It restricts the growth and possibilities of diversification of activities. It also creates a vacuum in leadership development. Restrictive membership might work in short or medium term but in the long run the society might have to suffer for it. Cooperative societies that are more flexible about taking new members have greater potential of growth. In that case there would be a need for very capable governing body and delegation of tasks among a number of smaller executive bodies.

Mode of operation of DOC

DOC mainly functions as a regulatory body that provides registration, monitoring and auditing facilities to the cooperative societies. However, there is a huge demand among the beneficiaries for financial and other supports from the government and/or DOC office. To meet these expectations and keep the newly formed cooperative societies enthusiastic

about their activities, it is imperative that DOC takes up some projects as well. These projects (like the one being implemented among the Garo community) should be created and run by the DOC itself. Handling of the accounts related to the projects and disbursement and repayment of loans can be done utilising the Cooperative Bank which has remained virtually non-functional for many years now. In this case, DOC will have to change its mode of operation from a legislative body to an implementation authority.

Change of perspective: community ownership and sustainability

It has been observed that in many cases people come together to form a cooperative society because they expect some endowment or special benefits will be provided by the government to the cooperatives. If the basic spirit of cooperative movement needs to be upheld and if the DOC continues to be only a legislative and monitoring body, then this perspective of the cooperatives has to be changed. There should be special awareness building sessions, arranged at local level for the newly formed cooperatives, to make the beneficiaries understand that it is about collective movement and community ownership. The basic motivation to form a cooperative should be aimed at forming a like-minded group who will build a common pool capital and improve their own socio-economic condition through productive use of it. The idea that a cooperative is owned by the community not by the government and people should come together to form it to help themselves should be promoted through campaigning and training.

New generation of cooperative

A new trend of forming "multipurpose cooperative" has been observed. These

cooperatives are more flexible about membership and diversified in their activities. Some of these have independent demand driven training modules for their beneficiaries (i.e. Baridhara women's cooperative). Many of these are running successfully. These success stories or models should be replicated elsewhere and reforms should be made in the cooperative act to allow the growth of these new generation cooperatives.

Policy Implications

The past and current performance of the DOC points to the pressing need to change the contours of the DOC mandates in order to revitalise the DOC and to bring about an atmosphere where enthusiasm and earnestness of the DOC employees in the rural development and poverty alleviation programmes would be visible. Historically, the DOC is known to take development to the doorsteps of rural Bangladesh and contributes to economic growth and poverty alleviation. There is little room to undermine the potential role of the DOC in complying with its mandates. Apparently, there is a crucial need to guard against the populist rhetoric that NGOs are faring better.

Usually, subjective indicators tend to move together. The DOC has a clear mandate of rural development through cooperatives, and reaching one goal reinforces another. It calls for bringing all rural development programmes under one umbrella and close monitoring. For efficient communication, the DOC headquarters and divisional, district and upazila offices should be fully computerised with internet connectivity.

Currently, priorities are set through the annual strategic planning process. Setting new targets and improvement priorities on the basis of past experiences requires more careful consideration of the organisational weaknesses and strengths. The DOC can accurately establish the competency portfolio

at its disposal and the training need, thus directing its resources in a more efficient manner. The existing training platform may aim at achieving the specific objective: qualifying and re-qualifying the workforce in order to better answer to the needs in the context of renewed rural development programmes in synergy with poverty alleviation programmes. This requires establishment of more training institutes with more effective and new courses to meet the emerging market demand.

Assessment is a way of documenting effectiveness. A systematic, ongoing cycle of setting goals, measuring attainment of those goals, and using the results to make informed decisions are crucial to continuous improvement. Assessment data provides information that is necessary to inform good decision making about what the DOC should do in the future to enhance its effectiveness as an institution. Good assessment can promote quality enhancement at all levels of the DOC by providing it with the necessary evidence to guide effective decision making in many areas, including programmatic changes, support service adjustments, policy or procedure revisions, work climate improvements and structural re-organisations. This requires putting in place and activating a separate full-blown MIS unit headed by an MIS manager with adequate and capable staff.

The so-called three-tier cooperative system, which constitutes the lifeblood of the DOC rural development programme, seems to be a mixed bag with less success stories and more failure stories. Much of this is attributable to the existing messy cooperative structure pointing to the pressing need for overhauling and recasting the entire cooperative structure of the DOC. It needs to be revitalised by clearly identifying and eliminating the inherent structural weaknesses of the unsuccessful cooperatives. The point that needs to be

stressed here is that innovative programmes require field development with new ideas. The extent of the DOC field development does not appear to be so extensive and adequate as expected. It requires massive extension work especially to promote self-help cooperatives through education extension and advocacy.

The Role of the State: Beside its regulatory role through legislation, the powers of the State should explicitly be limited to *inter alia* registration, deregistration and control of compliance with the law. As with other business enterprises, the State would be called upon to safeguard the interests of third parties and of the public related to the founding and the dissolution of a cooperative, but there is no room for the State to intervene during normal course of a cooperative's activities. Such a rudimentary role of the State would best guarantee non-discrimination. Clearly, the State's role is to provide an enabling environment for the cooperatives to be run as business enterprises. The legislation should include a clear statement of this new role so that "over-zealous" bureaucrats cannot vary it in implementation. The non-statutory role of the State is to do for the cooperatives what the State also does for other business sectors. The emphasis is on helping the cooperatives to be more business-like to strengthen other institutions upon which the cooperative sector depends for success. It should also assist the cooperators to resolve their disputes through the arbitration process laid down by law, and to attend promptly to their genuine complaints. In sum, public policy on cooperatives should acknowledge the autonomous character of cooperatives, its democratic underpinning and entrepreneurial mode, and state clearly the place and role that the government envisages for cooperatives in the wider socio-economic setting.

The Role of the DOC: Market forces have their own distortions, which, if not addressed, can also hurt the cooperative sector. Therefore, if

the responsibilities being shed by the State are not taken over by the DOC, market forces alone may not produce the desired results. Therefore, the DOC and other professional bodies in the cooperative movement will have to step in to play that role, especially in such areas as representation, advocacy, capacity building and self-regulation. In addition, the DOC will have to step up cooperative education, training and other activities to strengthen the management capacity of the cooperatives and their organisations.

Broad Theme: *Industry and Services Sector Issues*

Review of Equity Entrepreneurship Fund

Study Team:

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Sponsor: Bangladesh Bank

Budget: Tk. 14, 95,000/-

Time Frame: April 2012 – April 2013

The Equity Entrepreneurship Fund (EEF) was set up by the government to encourage investments in promising but somewhat risky food processing, agro-based and ICT related industries, and thereby contribute to employment generation and socioeconomic upliftment of the country. The distinctive feature of the Fund is that the financial support is in the form of equity and not credit. The underlying concern is to facilitate investments by young, educated and enterprising investors who do not have the ability of placing adequate collaterals for institutional credit to finance investment.

During the first 10 years of its existence, the EEF received a total disbursement of Tk.925 crore from the government. A total of 697 agro based projects and 48 ICT projects were

sanctioned for EEF funding up to the end of April 2011. The average size of the agro based project was Tk. 4.41 crore while it was Tk. 3.97 crore in the case of ICT projects. The sanctioned equity amounted to 43.6 per cent of the project size in agro based projects as opposed to 40.9 per cent in the case of ICT projects.

Although the EEF support is limited to a maximum of 49 per cent of project cost, the respondents in the study survey reported that they had already undertaken investment nearly 3.5 times the EEF amount received and nearly 3 times the sanctioned EEF amount. Considering the sanctioned amount and investment already undertaken, the equity participation by EEF for agro based project comes down to only 32.8 per cent. For ICT projects, this proportion is observed to be 47.6 per cent.

While EEF support seems to have been targeted well with regard to employment size group, the overall size of employment generated appears rather small, indicating high cost of job creation. In agro based projects, productive employment has been generated for only 4,001 persons by 95 enterprises under study. Similarly, in ICT projects, productive employment has been created for 60 persons by eight enterprises under study. The implied cost of each job created works out at more than Taka 18 lac for agro based projects and more than Taka 22 lac for ICT projects.

The picture with regard to production appears quite unsatisfactory. Nearly 29 per cent of the responding enterprises (28 in number) did not have any production last year. Seven of these 28 enterprises never undertook production although for these enterprises the EEF was sanctioned way back in 2005-2007. Apart from these 28 enterprises without production, another 3 enterprises sanctioned in 2006 did not have any production for first 5 years and

started production only in the current year. Twenty eight of these 31 enterprises belong to agro based category. In the case of the ICT industries, 3 out of the 8 reporting enterprises (38 per cent) did not have any production last year and remained closed for past 1-3 year period.

In the course of the field survey, information was elicited from the respondents regarding major problems faced in implementing and running the project. Of the 103 respondents, 43 indicated one or more such problems. Delays and corruption in EEF disbursement is the most frequently mentioned problem. This is followed by the issue of underestimation of the project size, lack of institutional support, and working capital related problems.

The other major problem that has impacted upon the performance of the EEF supported projects is lack of proper institutional supervision. The entrepreneurs complained that the director nominated by the government remained detached and maintained only partial contact instead of taking active interest in the working of the project. In such a lax environment, the main tools of monitoring, namely, regular holding of board meetings and AGM attended by government nominated director, submission of quarterly reports and follow ups on year-ending balance sheet, profit and loss accounts, etc. have been largely ineffective.

Major Recommendations

A set of recommendations, short-to-medium-to long term in nature, have been made to make the EEF process more functional and effective. To make the EEF disbursement more secure and effective, private venture capital firms should be allowed to operate as EEF managers. Necessary regulatory frameworks in this regard need to be developed so that both domestic and foreign venture capital firms can be involved in EEF

operations. Due to equity ownership, the venture capital firms will be expected to provide other necessary services to investors, such as providing introduction to potential customers and suppliers, helping obtain additional financing, and other strategic and operational advices. Under the current system, EEF enterprises do not get these services as was revealed from our survey.

Since the current system of EEF operation is not working properly, it is suggested that the EEF can be operated under “refinancing scheme” mode. Under such schemes, Bangladesh Bank will provide fund to a venture capital (VC) firm so that the firm can invest it by its own choice following a well-designed guidelines. This mechanism might ensure active participation of the VC in investee firms operations as well as it may secure the investments.

The present pool of funds available for venture capital (EEF) is very limited both in terms of amount and number of sectors. The pool of domestic venture capital needs to be augmented by increasing the list of sophisticated institutional investors permitted to invest in venture capital funds. This should include banks, mutual funds and insurance companies up to prudential limits. Later, as expertise grows and the venture capital industry matures, other institutional investors, such as pension funds, should also be permitted. The venture capital funding is a high-risk investment and thus be restricted to sophisticated investors. However, investing in venture capital funds can be a valuable return-enhancing tool for such investors while the increase in risk at the portfolio level would be minimal. Internationally, over 50 per cent of venture capital comes from pension funds, banks, mutual funds, insurance funds and charitable institutions.

Development of a proper venture capital industry particularly in the context of

Bangladesh is important for bringing to market high quality public offerings (IPOs). In the present situation, an individual investor becomes a venture capitalist of a sort by financing new enterprises and undertaking unknown risk. Investors also might get enticed into public offerings of unproven and at times dubious quality. This situation can be corrected by venture capital backed successful enterprises accessing the capital market. This will also protect smaller investors.

The venture capital funds are set up for a limited life and on maturity—the returns are distributed amongst the investors. The structure of venture capital funds should therefore protect the interest of investors and the liquidation process should be as simple as possible. In this context, Limited Partnership (LP), Limited Liability Partnership (LLP) and the Limited Liability Company (LLC) are commonly used and widely accepted structures internationally. These structures limit the liability of investors to the extent of funds committed, at the same time, they can solve liquidation problem of enterprises. For venture capital funds which deal in high risk investments, structuring flexibility is very important to meet their business strategies. In Bangladesh, such structures like LP, LLP and LLC are not well recognised. For the development of VC industry in Bangladesh and also to facilitate and attract the foreign investment in venture capital industry, such alternative structures need to be provided by bringing appropriate changes in legislation.

Implementation of these recommendations would lead to creation of an enabling regulatory and institutional environment to facilitate faster growth of venture capital industry in the country in the medium-to-long term. However, some short-term measures need to be undertaken to run the current system properly.

As a large number of EEF projects have failed or remained inactive, the current EEF disbursements should be based on strict technical and financial scrutiny. Only a limited number of projects (say, 4-5 projects in a year) should be chosen for funding under the existing mechanism until the operation handed over to private VCs under a refinancing scheme.

To avoid asymmetry of information in project selection, a model of “Syndication” in initial investment proposal can be applied to ensure good investments. In addition, current system of “control right—sending nominee to board,” share buy-back and other regulatory rules should continue.

Lien bank system appears to be almost non-functional. The provision of the lien bank getting 25 per cent share of the dividend that accrues to the government against its equity contribution appears to insufficient to get due services from the Lien Bank. Therefore, more incentive mechanisms for Lien banks should be developed to make the system functional.

The EEF enterprises should be allowed for additional financing, particularly bank financing in the form of working capital for good rating enterprises. At all stages of financing/investments, the equity ratio of 49:51 should be maintained, which may facilitate flow of funds. This is important in the sense that in many cases the ratio came down to 32:68, which created problem in equity sharing.

A survey of EEF enterprises should be made on a regular basis (for example, every six-month basis) through recruiting a professional supervisory or credit (investment)-rating agency—further investment (installments) should be contingent upon good rating/report of the agency.

Broad Theme: *Physical Infrastructure Development*

Long-run Socio-Economic Impact Study of Rural Roads and Markets Improvement & Maintenance Project - II

Study Team:

Zaid Bakht
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Sponsor: LGED

Budget: Tk. 55, 40,000/-

Time Frame: January 1997 – April 1998

The study provides an assessment of the long-term socioeconomic impact of rural transport and trade infrastructure development carried out by the Local Government Engineering Department (LGED) during 1997-2002 under the project titled Rural Roads and Markets Improvements and Maintenance Project-II (RRMIMP-II).

A quasi-experimental design involving “before-after” and “with-without” analysis has been applied in the study. Using a set of criteria, 10 Feeder Roads Type-B (FRB), which were enlisted for development under RRMIMP-II were selected as project roads for the impact study. In addition, 4 control roads, which were not enlisted for development, were selected from areas that were similar to the areas around the selected project roads. Three sets of field surveys were carried out before and after road and market development, which included (a) household survey, (b) transport survey, and (c) community survey. The report assessed how road and market development triggered changes in various production sectors of the village economy covering transport, trade, service, agriculture and rural manufacturing and also examined changes at the household level with respect to household’s assets holding.

Changes in the Volume of Passenger and Freight Traffic

The project roads experienced much higher growth in passenger and freight traffic during the inter-survey period than the control roads and as a result the level of passenger and freight movement on the project roads in 2005 far exceeded that on the control roads, although the picture was quite different in 1997 prior to road development. Seasonal variations in traffic movement were also significantly reduced on the project roads after road development and the adverse effect of weather on traffic movement seems to have been neutralised by road development. In fact, Project-1 roads recorded higher volume of passenger traffic in rainy season compared with the dry season after road development. Most of the growth in traffic in the dry season was realised during the initial years of road development. However, growth in passenger and freight movement took greater time to realise in the rainy season.

Changes in Modal Composition of Freight Traffic

In 1997, bulk of the freight on project roads was carried by non-motorised vehicular mode (rickshaw van, bullock cart, bicycles etc) in both dry and rainy season. After road development, the volume of non-motorised vehicular freight increased quite rapidly, but the pace of increase was much faster in the case of motorised traffic. The yearly rate of growth of motorised freight traffic for the overall period (1997-2005) is observed to be much higher than that for non-motorised freight traffic in both dry and rainy seasons. Consequently, motorised mode dominated freight traffic on the project roads in 2005. Trucks, tractors and motorised three-wheelers were the major modes of freight transportation in 2005. In the initial years of road development, transportation of freight by

bullock cart registered significant increases. But in the long run, rickshaw vans displaced bullock carts and the volume of freight transported by bullock cart declined sharply. A similar switch towards motorised mode also happened in the case of the control road. This was contributed by improvement of part of the control road and the subsequent introduction of motorised three-wheelers on these roads. However, the size of the freight traffic carried on non-motorised and motorised modes on the control road was much lower than the size of similar freight carried on the project roads in 2005.

Changes in Freight Composition

After road development, the composition of freight carried on the project roads became more diversified with significant increase in the volume of perishable items, forestry products and manufactured goods. In contrast, the control roads showed improvement in the transportation of freight mainly with respect to forestry and other products. This was largely due to increased movement of trucks carrying road construction materials as development work on part of the control road was initiated during the Phase-III survey.

Changes in Passenger Fare

Passenger fare (per km per person) declined sharply in 2005 over the level prevailing in 1997 in both Project-1 and Project-2 areas for the major modes of passenger transportation, namely, rickshaw, rickshaw vans and motorised three-wheelers. Project-2 roads recorded slightly higher levels of passenger fare compared to those recorded for Project-1 roads in 2005. The rate of decline in passenger fare has been steeper in the case of Project-2 roads. Control roads recorded significantly higher levels of passenger fare in 2005 over those recorded for the project roads. In the case of rickshaws in both dry

and rainy seasons and rickshaw vans in the dry season, control roads recorded significant increase in the fare level in 2005 over those prevailing in 1997.

Broad Theme: *Natural Resource Economics*

Study on Sustainable Land Management in Bangladesh: Issues, Constraints and Potentials

Study Team:

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Sponsor: Ministry of Environment and Forest

Budget: Tk. 35, 61,550/-

Time Frame: December 2009 to June 2011

Land is an extremely scarce natural resource in Bangladesh. The issue of land, its management and access to it is very important. It has several dimensions. First, the problem of diversion of land (nearly 1 per cent on an average in a year) from agriculture, which raises the question of land use policy. Second, human practice of land use, which is more often than not driven by various policies including economic ones such as pricing, taxation and subsidies, sometime leads to land degradation. The unbalanced application of modern agricultural technologies has seriously degraded our soil quality, fertility and bio-diversity.

Environmental degradation that takes place as part of the natural process some time indirectly exacerbated, due to human interventions, tends to deplete the productive capacity of land. This is the third process of land degradation. Fourth, the nature and changes in (average) farm-size, (unequal)

distribution pattern of landownership and (exploitative) tenural relations of land may have direct influences, sometimes adverse, on the growth and poverty conditions of the country through their deleterious effects on land management. Fifth, the access to public land is particularly important as a sizeable portion of such land (khas, char and vested land) is under the control of influential private individuals. For addressing the question of productive efficiency and distributive justice, the public lands or at least their use rights may be transferred to the poorer sections of the society.

Given the above, the study provides certain services in order to mainstream sustainable land management (SLM) in related policies, institutions and legislation; develop capacity and strengthen institution for implementation of the National Land Use Policy; enhance SLM knowledge; and develop human resources for local level institutional coordination and SLM advocacy. The overall objective of the study is to provide an understanding of cost-effectiveness of SLM practices and identify the main economic reasons and/or constraints for adoption of SLM measures and provide policy suggestion in choosing investment alternatives by the farmers.

Land degradation in different forms is occurring all over the country. In terms of seasonal dryness and drought conditions, about 43.0 per cent of the country is being affected because of declining soil quality, seasonal dryness, and drought conditions. Agricultural intensification and the increase in irrigated area have led to a number of environmental problems, including loss of bio-diversity through the conversion of forest land to agriculture and abandonment of indigenous crop varieties in favour of high yielding varieties, leading to irreversible loss of the country's genetic resources. River erosion is

having tremendous impacts on agriculture and human habitation. The reduction of flow in the Ganges during the dry season has changed the hydrological regime with salinity intrusion in the entire Khulna-Jessore region. Salinity intrusion has degraded the soil and the ecosystem, leading to decreased agricultural production. A total of 1.65 million hectares of land is affected by different degrees of salinity within Barisal and Khulna divisions.

Land degradation in Bangladesh is principally the result of increasing population, intensification of agriculture, weak governance, inappropriate agricultural practices, accumulation of pollutants in the land and water systems, unplanned industrial and infrastructural growth as well as urbanisation, trans-boundary reasons including upstream water withdrawal, climate change, sand deposition, insecure tenancy and overexploitation of resources, salinity intrusion, and natural environmental changes. In the face of climate change, there is growing evidence that temperature, rainfall patterns, plus sea level rise will worsen the land productivity for agriculture.

The direct impacts of land degradation at the local level are increased poverty specifically the extreme poverty, food insecurity, deterioration of natural resources which adversely affect socio-economic conditions and livelihood support systems, scarcity of drinking water, deteriorating health and nutrition of the population and reduced availability of biomass for fuel. Land is the most important economic and social asset for most people in Bangladesh, particularly for the poor. Over two-thirds of Bangladeshis live in rural areas and most live at subsistence levels.

In addition to above, the key findings of the study also include the following:

- Use pattern of the resources is changing – various forms of tenural system are now taking place in an increasing proportion;
- Land fertility is declining – One of the important reasons for this is unbalanced use of fertiliser, irrigation and pesticides;
- There are variations in input prices and its use across seasons and regions;
- Productivity varies significantly depending on the use of inputs;
- Input demand is elastic with respect to both input and output prices;
- There are variations in soil quality, fertility, input use and productivity across regions.

The policy priorities for sustainable land management may, therefore, include the following:

- Need to identify the “hotspots” of land degradation;
 - Need to have an understanding of optimal mix of inputs for production of different crops in different agro-ecological zones;
 - Appropriate economic instruments (such as, prices, subsidies, taxes, etc.) can be used to promote optimal use of various inputs for crop cultivation and other agricultural practices;
 - Economic instruments can also be used to promote efficient tenural systems ; and
 - Raising awareness about SLM and spatially focused approach to the entire issue is necessary.
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Broad Theme: *Climate Change Impacts*

Gender, Social Capital, Local Government and Climate Change Adaptation in Bangladesh

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Sponsor: World Bank

Budget: Tk. 60, 13,856/-

Time Frame: July 2010-June 2012

Bangladesh is one of the high population density countries and vulnerable to climate change. The high level of poverty and vulnerability and degraded ecological system make it even more vulnerable to climate change, which threatens the development achievements over the last decades. While significant progress has been made over the past several decades, women still predominate among the poorest with limited mobility or access to resources or information, which is reflected in the deaths of nearly five times more females than males in floods and cyclones in Bangladesh. As women's participation in paid work outside home is low in Bangladesh, changes in crop, fishery, poultry and livestock production could severely impact the livelihood and well-being of women and their children. Given the gender differential in vulnerability, it is important to have social assessments and institutional analyses that include gender based experiences in collective actions and support from local institutions/networks for developing inclusive strategies for increased climate resilience. Gender-sensitive analysis is also important to direct aid and plan for full and equitable recovery in the case of frequent

climatic events such as floods and cyclones, whose frequency and intensity are expected to rise with climate change. Furthermore, gender-sensitive analysis is important to ensure women's participation in long term climate change adaptation strategies, which might have been constrained due to their traditional social norms in the country.

A number of methodological tools and techniques (both quantitative and qualitative) are adopted in the study. To capture an overall overview of the lives, livelihoods, climatic vulnerabilities and adaptation mechanisms of the different communities living in the study areas, a wide range of PRA tools are used. In order to understand the gender disaggregated patterns of vulnerability from a wider perspective, a structured household questionnaire with separate gender module has been used to collect data at the household level. In order to explore the gender dimensions of vulnerability and adaptation to climate change, two complementary tools are used. One is the Event Analysis, which is administered at the group level as a PRA exercise and the other is the Life History Analysis, which involves interviewing an affected individual about his/her experiences regarding climatic hazards that they have faced.

Major Results

Gender vulnerability primarily depends on climatic, asset base and social conditions

Women face social, economic and political barriers that limit their coping capacity. Social barriers are created by various institutions which restrict their mobility as well as hinder their awareness and empowerment. This base condition of the women in Bangladesh renders them more vulnerable as they have lack of access and ownership to capital assets. Even if they have ownership of assets, they are

mostly non-functional due to their lack of access and decision making power. Thus women are incapable of transforming their assets in order to adapt to changing conditions.

Household adaptation creates vulnerability for women

Women are usually responsible for managing household activities starting from cooking, ensuring foods, fetching water, nurturing children and so on. Due to occurrence of various climatic hazards, their responsibilities increase significantly compared to that of men at the household level. During hazards women consume lesser amount of food after providing meal to the rest of the family members. In order to ensure the security of young girls during hazards, parents usually try to married them off in their early teen-age period. As a result, such adaptive capacity of poor families increases vulnerability of women. These multiple roles of a woman including involvement in economic activities along with traditional household chores create an extra stress on women.

Climatic hazard negatively intensifies women's health management

In order to ensure security and minimise the cost, poor families married off their daughters at early teen age during hazards. Early marriages not only hamper female education, but also increases rate of early-teen pregnancy and poor maternal health. In cyclone prone and tidal flood prone areas, unavailability of family planning services also creates health problems. On the other hand, in cyclone prone areas women suffer from malnutrition due to lesser food intake during hazards.

Social capital plays important role in adaptive capacity

In rural areas of Bangladesh, traditionally people have been depending on social capital

in terms of building effective adaptive capacities to minimise the impacts. During hazards poor people who have social connections with the rich and middle can take shelter and water from their houses. But people higher up the wealth rank usually have greater networks. Collective action requires people from all classes to come together to help rebuild the community after disasters and to participate disaster preparedness work.

Social capital is also important in migration. People only migrate when they know someone who has migrated to the place of interest and after migration they need social networks to find work and place to live as well. Women from the cyclone and river erosion-prone areas migrated to location where local men have already migrated. Men give information about job opportunities to them so that they may migrate in order to enhance their livelihoods.

Adaptive capacity varies significantly among gender

Adaptive capacity is context-specific and varies from country to country, from community to community, among social groups and individuals, and over time. It varies not only in terms of its value but also according to its nature. The scales of adaptive capacity are not independent or separate: the capacity of a household to cope with climate risks depends to some degree on the enabling environment of the community, and the adaptive capacity of the community is reflective of the resources and processes of the region. During hazards male members of the families have to deal with crops, have to deal with family, have to deal with livestock and they have to deal with many other things. But male is less vulnerable than women because they are physically strong than women and they are much aware about the fact of hazard. And more or less they are relatively more educated than women. The

female are more vulnerable during hazard time compared to male. In cyclone prone area, there is no privacy for women in shelters. They have to fetch the water from very far away. They have to deal with children, cooking and many other household chores. Lesser food consumption of female members during hazards is also a frequent household adaptation strategy. Apparently, in all areas early marriage is found as a very common adaptive capacity among poor class.

Women empowerment results in better climate change adaptation capacity

Empowerment of women can greatly enhance their access and ownership of assets. Awareness about gender empowerment and decision making power will ensure their deserved rights. In general, women in the rich class have greater access and ownership of assets owing to their greater empowerment. Poor women are more aware than middle class, because they are more mobile. They have more information and can raise their voice as well. Although this mobility of the poor is actually a result of their vulnerability, they are forced to give up their social norms and work outside the village in order to support their families. Thus women empowerment in the hazard prone areas, be it forced or chosen, puts women in a better position in terms of asset ownership, access and transformation capacity.

Policy Implications

In order to increase the adaptive capacities of each of the communities, it is essential that their asset base is increased to an adequate level.

Climate affects gender groups disproportionately, which usually results in women being the most negatively affected. The overall vulnerability of marginal people (such as poor, physically/ mentally challenged, ethnic minority, etc.) in any given hazardous

geophysical context is high. However, among any such group of marginal people, vulnerability of women is of the highest order. But though women are disproportionately affected, they are not favoured by policy or society. In fact, it is the opposite. Thus in order to ensure effective gendered adaptation to climate change, there is need for changes in both policy and at social level.

Women's coping efforts are severely challenged by gender relationships and handicapped by power structure both within the household and within the community. It appears that simple coping would not help women much to reduce their vulnerability, raising awareness regarding the anticipated elements of risks and early warning could facilitate them to strengthen their approaches to coping. However, such programmes must be tailor-made to cater the needs of the target audience—the women and the disadvantaged.

Policy focus should widen the lens to integrate gendered views and multiple hazards. With the advent of secondary hazards along with the primary hazard in the hotspot, there is a need for a policy approach with a wider lens. Government policy in disaster mitigation and prevention only account for the more visible primary hazard, and neglect the effects of secondary hazards. Policy should also be gender sensitive as from previous arguments.

The BIDS Research 2012-2013: Major Findings and Policy Implications of Completed Studies provides the summary information on major findings and policy implications of the research studies that the Institute completed during the period July 2012 to December 2013. The research agenda of the period covered priority issues in different aspects of the Bangladesh economy which have been grouped under various thematic areas, such as *Macroeconomic Policy and Employment; Agriculture and Food Security; Education, Health and Social Development; Energy and Power Sector Issues; Safety Nets and Social Protection, Governance Issues; Industry and Services Sector Issues; Physical Infrastructure Development; Natural Resource Economics; and Climate Change Impacts.*

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