Role of Good Governance in Rural Infrastructure Development In Bangladesh

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Abstract

Good governance is key to economic growth and reduction of poverty. This paper brings to light evidences of good governance in a government department, LGED, reflected in spectacular achievements and successes of its numerous rural infrastructure development programs, especially the development of rural roads, bridges and culverts, growth centers and construction of embankments which have significantly contributed to the generation of employment and income and reduction of poverty in rural areas. To accelerate the income and employment generation effects of infrastructure development, the ongoing LGED efforts need to be continued. For ensuing efficeint planning, implementation, operation and maintenance of the rural infrastructure, the paper recommends for adopting a community participation process with the involvement of local government institutions.

1. Introduction

Good governance is a very complex and multi-dimensional concept. The exponent of the concept of the good governance is the World Bank. According to the World Bank's standard definition, governance encompasses (i) the form of political regime (parliamentary or presidential or civilian and authoritarian or democratic); (ii) the process by which authority is exercised in the management of a country's economic and social resources for development; (iii) the capacity of governments to design, formulate and implement policies and discharge functions. Multilateral donor organizations generally equate good governance with sound economic management based on accountability, participation,

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predictability and transparency (Siddiqui, 1996:15). ESCAP provides a very short but powerful definition of governance. Governance means the process of decision-making and the process by which decisions are implemented (or not implemented).

Good or bad governance depends on the process of decisions. If decisions are taken consultatively and properly implemented, good governance occurs and if it does not happen so, it refers to bad or weak governance. Governance is the exercise of economic, political and administrative authority to manage a country's affairs at all levels. According to UNDP governance comprises mechanisms, processes and institutions through which citizens and groups articulate their interests, exercise their legal rights, meet their obligations and mediate their differences. Governance can be viewed as the sum of three major components: process, content and deliverables. The process of governance includes factors like transparency and accountability. Content includes values such as justice. Commission on Global Governance defines governance as the sum of the many ways individuals and institutions, public and private, manage their common affairs. Eight major characteristics of good governance are that it should be participatory in nature, consensus oriented, accountable, transparent, responsive, effective and efficient, equitable, and inclusive rule of law.

- It implies managing public affairs in a transparent, accountable, participatory and equitable manner showing due regard for democratic principles.
- It entails the prevalence of the rule of law and an independent judiciary, institutional checks and balances through separation of powers, and effective oversight agencies.
- Governance comprises the traditions, institutions and processes that determine how power is exercised, how citizens are given a voice, and how decisions are made on issues of public concern.
- Good governance assumes a government's ability to maintain social peace, guarantee of law and order, promote or create conditions necessary for economic growth, and ensures a minimum level of social security.
- In the concept of good governance it is asserted that political pluralism is a must for sustained economic development and it has to be steered by people's representatives.

- The governance agenda has laid more emphasis on better performance and effective role of public institutions.
- It is concerned with reliability and predictability, openness and transparency, accountability as well as efficiency and effectiveness of public policy. It puts emphasis on the process of decision-making and public policy formulation.
- It puts more emphasis on the rule of law and efficient public sector management.

Good Governance is equivalent to purposive and development oriented administration which is committed to improve the quality to life of the people, without being necessarily democratic in nature.

Some scholars opine that good governance means good government. In public sector, governance equates governmental responsibility and responsiveness to manage state affairs.

Good governance gives more importance to private rights and individuals initiatives (civil society). Governance comprises the processes that determine how power is exercised, how citizens are given a voice, and how decisions are made on issues of public concern.

Governance requires adequate and reliable information and efficiency in resource management and delivery of public services.

Methods of increasing accountability and making the administration responsive are the main issues of good governance.

To ensure good governance it requires a balance growth of public sector, private sector, local government and civil society. Efficient institutions are vital tools to ensure governance process. Governance is about process, value, content and outcome. An excellent education system is essential for developing a long-term development strategy of country. Sound education system along with a well-managed service sector is *sine qua non* for upholding the cause of public sector management. Governance requires creation of just laws that protect citizens from abuse in economic and political affairs or human rights. It ensures a judicial system that will uphold the law without bias. Law should ensure its supremacy, neutrality and equality at any cost although operationalising good governance is a tedious task. The communalization and criminalization of politics, brutalization of society, endemic corruption and chronic ineffectiveness of governments have

now-a-days questioned the very credibility of governance and maintaining its quality. It also includes services providing basic needs to the general mass of the country. In recent times, Bangladesh has achieved a remakable success in the field of good governance as can be seen in the separation of judiciary from the executive strengthening the Election Commission and the Anti-corruption Commission, reforms in public administration, setting up of the office of a Tax Ombudsman, reforms in the police, stakeholders' participation in the formulation of PRSP, and so on, This paper seeks to examine the governance system of the local government engineering dipartment of the government of Bangladesh which has been responsible for lilting and developing the country's rural infrastracture over the past three decades.

1.1 Rural infrastructure and Party Alleviation : the Nesses

Rural infrastructure refers to physical construction that generates services that are used as intermediate inputs in performing economic activities. A wide range of such constructions in the rural areas in Asia and Pacific countries may be identified e.g. transport and communication networks, water resources, safe drinking water and sanitation, energy and other services that create enabling conditions for the rural people to undertake economic activities and improve living conditions (Reddy, 2002). In the absence of these services, the policies and institutional measures to promote rural development are unlikely to successful. These infrastructures can be classified into two categories: i) Economic infrastructure which include physical infrastructures serving the households (e.g. transport, communications) and other economic services, and ii) social infrastructure, which includes health, education, housing and other institutional services as well as transfer and other payments that enhance both human capital and welfare. Agricultural growth cannot be ensured without creating socio-economic, technological and physical infrastructure of the rural areas. Rural infrastructure programmes reduce rural poverty in various ways.

Although major components of the physical infrastructure include a wide range of service providing institutions such as power (rural and urban), gas, renewable energy including solar energy, coal and other minerals, transport (road, railway, inland water and air) and ports (sea, air and land), the discussion on infrastructur in the paper will be limited manly to some of the activities of the Local Government Engineering Department (LGED), the largest civil engineering department of the Government of Bangladesh.

1.2. Objectives of the Paper

The general objective of the paper, as mentioned earlier, is to highlight the governance system of LGED, its activities and its projects. The specific objectives of the paper are:

i) To delineate some functions and activities carried out by LGED;

ii) To present results of in-depth Case Studies of two selected LGED projects;

iii) To identify the impacts of these projects relating to physical infrastructure as to measure how these projects affect rural life.

2. Local Government Engineering Department (LGED): The Biggest Investor in Rural Infrastructure in Bangladesh

The main functions of LGED are to provide technical support to the rural and the urban local government institutions (LGIs) and also planning and implementation of infrastructure development projects in the rural and the urban areas to improve communication/transport network, employment generation and poverty reduction. The detailed functions of LGED are given below:

- Plan and implement Works Programme at the Upazila level through the Upazila engineering setup and provide technical support to the Upazila Development Coordination Committees (UDCC) and the Union Parishads (UP).
- Provide technical support to the Pourashavas and the Zila Parishads.
- Construct Union Parishad Complex (UPC) and Union connecting roads throughout the country.
- Plan and monitor development of growth centre connecting roads and construction of bridges/culverts through the Project Implementation Committees (PIC) constituted by the Union parishads with food aid from the World Food Programme (WFP).
- Implement and monitor construction of roads and bridges-culverts in the rural areas under the Integrated Food for Development (IFFD) project with food aid supported by CARE.
- Plan, implement and monitor development projects with resources from the Government and the development partners with the objective of creating civic facilities in various city corporations and pourashavas.

- Plan, implement and monitor Rural Infrastructure Maintenance Programme (Paved roads and bridges/culverts).
- Plan, implement and monitor development projects with assistance from the development partners for construction of feeder roads, rural roads (including necessary bridges/culverts) and development of growth centres and river ghats etc.
- Plan, implement and monitor the development of growth centre/market connecting roads with the Upazila HQ.
- Prepare, implement and monitor small scale irrigation, flood control and drainage schemes at the Upazila and the Union levels.
- Prepare Plan Books of Upazilas, Unions and Pourashavas, prepare thematic/digital maps and prepare and maintain data-base of roads and social infrastructures.
- Implement and monitor construction/reconstruction/repair of the primary school buildings under the Primary and Mass Education Division (PMED) throughout the country.
- Perform functions relating to recruitment, transfer, promotion, disciplinary action of all officers and staff including the Upazila Engineers.
- Improve capability of the officers and staff at all levels of LGED through training in relevant topics.
- Impart training in relevant topics to the peoples' representatives, contractors, project implementation committees, LCSs and the beneficiaries involved with various development activities and increase their awareness about participatory process and role in development.

LGED implements projects and programmes in 5 Major sectors such as i) Rural Development and Institution Sector; ii) Physical Plan, Water Supply and Housing Sector; iii) Agriculture Sector; iv) Water Resources Sector and v) Transportation Sector. Apart from the above, LGED is implementing a range of programmes with foreign and local funding such as construction of ghat/jetty, sluice gate, drains, latrines/community latrines, bus/truck terminals, town halls, super markets/kitchen market, tube well etc. Recently, LGED has completed the construction of Khilgaon Flyover using indigenous technology. It is a new addition to urban infrastructure development in Bangladesh. During FY 1991-92 to 2005-2006 a total of 1,07,401 km. (64,549 km dirt road and 42,852 km paved

road) upazila road and union road and 5,32,391 meter bridge/culvert, besides 1,990 growth center/rural shopping center development, 15,967 km. tree plantation, 1,669 nos. UP complex bhaban, 2,48,938 hectare Flood Control Drainage Irrigation (FCDI) & Command Area Development and 386 Cyclone shelters have been constructed/reconstructed. The programmes of LGED for infrastructure development during FY 2005-06 are shown in Table 1:

Table 1 : Programmes of LGED for Infrastructure Development

Activities	Cumulative June-2000	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	Cumulative figure up to June'06
Dirt Road (km)	26257	10102	4555	4770	6252	6040	6573	64549
Paved Road (km)	15985	3870	3255	3839	4804	5237	5872	42852
Bridge/Culvert(m)	221082	67449	50882	42937	49405	60908	39728	532391

2.1 Rural Infrastructure Development Programme

Local Government Engineering Department (LGED) under the Ministry of Local Government, Rural Development and Co-operatives, has been implementing various rural infrastructure development programmes, especially rural roads, bridges/culverts, growth center, construction of embankments etc in rural areas. In FY 2005-06 the Local Government Engineering Department constructed 5872 km. of paved roads, 6573 km of dirt road, 420 Union Parishad Building/ complexes. These programmes created employment for about 132.77 crore-person days between 2000-01 and 2005-06 (Table-2).

Table 2 : Rural Infrastructure Development Programme

Activities	2000-01 Cumulative	2001-02	2002-03	2003-04	2004-05	2005-06	Cumulative (up to June 06)
Dirt Road (km)	36359	4555	4770	6252	6060	6573	64649
Paved Road (Km)	198455	3255	3829	4804	5237	5872	42852
Bridge/Culvert (metre)	288531	50882	42937	49405	60908	39738	532391
Growth Centre (no)	1237	124	142	154	186	147	1990
Employment Generation (lakh person-days)	7343.54	856.68	948.05	1338.1	1215.43	1574.91	13276.73

2.2 A Brief Profile of Allocated Cost and Achievement of Projects of LGED: 2005-06

Almost eighty five percent people of Bangladesh live in rural areas. Among the total population, 42% people live below poverty line. To reduce such massive burden of poverty, LGED is mandated to reduce rural poverty through creating rural roads and rural infrastructure, development of rural growth centres such as hut, bazars. During 2005-06 financial year in road development a total of 1261.81 crore Tk. was spent for development of 5877 Km. road. This has facilitated communication of rural populace, increased production, marketing of agricultural products and all these have resulted in increased living standard and reduction of poverty of the rural population. During the year 2005-06, LGED constructed/ repaired/ renovated 39728 M. bridge/culvert with a total of 399.75 crore Tk. During the same year, LGED spent 33.30 crore Tk. for development of 147 growth centres and hat bazars. On the other hand, for construction of Union Parishad Complex, LGED erected 420 UP Complex with an amount of 74.17 crore Tk. The description of project costs and achievemnts of projects during 2005-06 appears in Tables 3 and 4, respectively.

Table 3 : Description of Projects Cost and Physical Infrastructure Created through Various Projects in Rural Development, Institution and Transport Sector during the Period of 2005-06

Sl. No.	Description of the Projects	Creation of Physical Infrastructure	Cost (In Crore Tk.)
1.	Construction/ Repair/ Renovation of Paved Road (Union and Upazila)	5877 Km.	1261.81
2.	Construction/ Repair/ Renovation of Earth Road	6573 Km.	102.42
3.	Construction/ Repair/ Renovation of Bridge/ Culvert	39728 Km.	399.75
4.	Development of Growth Centre/ Hat Bazar	147 (In number)	33.30
5.	Tree Plantation	389 Km.	10.70
6.	Construction of Union Parishad Complex	420(In number)	74.17
7.	Micro Credit Programme	260 Organization	1.38
8.	Construction of Ghat/ Jetty	41(in number)	9.00
9.	Construction of Cyclone centre	10(in number)	10.82
10.	Maintenance of Paved Road Maintenance of Earth Road Maintenance of Bridge/ Culvert (under Development Budget)	44555 Km. + 801 Km. + 15442 M. +	472.65
11.	Maintenance of Paved Road Maintenance of Bridge/Culvert	32789 Km. + 24113 M.	399.92
	Total:	2775.92	

Table 4 : The Sector-wise Allocation and Achievement of the Projects Implemented by LGED during the Year: 2005-06

Sl. No.	Names of the Sector	Number of Projects	Resource Allocated (In Crore Tk.)	Achievement (In %)
1.	Rural Development and Institution Sector	47	18,169.74	100%
2.	Physical Plan, Water Supply and Housing Sector	11	2,301.48	99%
3.	Agriculture Sector	1	427.34	100%
4.	Water Resources Sector	1	15.96	100%
5.	Transportation Sector	3	1,248.56	100%
	Total of (1+2+3+4+5)	63	22,163.08	99.70%

3 Two Case Studies of Infrastructural Development in Bangladesh

3.1 Small Scale Water Resource Development Sector Project (SSWRDSP-2)

Water Resources play a vital role in economic development of the country. Major water resource development activities in this country started in the 1960s. The National Water Policy (NWP) was prepared by the GOB in early 1999 and it was approved by National Water Management Plan in 2004. According to that plan the local government division was assigned to undertake development, do maintenance and undertake Small Scale Water Resources Schemes. In this policy local government institutions were given responsibilities for implementation of flood control, drainage and irrigation (FCDI) projects having command areas of up to 1000 hectares. LGED has been implementing Small Scale Water Resources Development Sector Project (SSWRDSP) with the participation of stakeholders to support the Local Government Institutions (LGIs) in developing small-scale water resources at union level. LGED recognizes and emphasizes stakeholders involvement as critical for the sustainable water resources management.

The first SSWRDSP aimed at sustainable growth in agriculture production and incomes of about 140000 farm families in Western Bangladesh through the establishment of about 300 small –scale water resource development schemes although it successfully completes 280 small-scale water resource schemes. The project duration was from 1995 to 2002. The total cost of the project was US$ 53.5 million (Tk. 2,623 million), which was shared by various donors. The main donors of the projects were Asian Development Bank (US$ 28.3 million), Government of Netherlands(US$ 6.8 million), International Fund for Agricultural Development(US$ 8.8 million), Government of Bangladesh(US$ 8.9 million) and Beneficiary of Projects(US$ o.7 million).

After successful completion of the first phase the second phase started in July 2002 which will end in December 2009. The total cost of the SSWRDSP-II project was US$ 78 million (Tk. 4,219 million) which was shared by thee same donors except IFAD. For this time the name and cost shared by the donors were Asian Development Bank (US$ 34.0 million), Government of Netherlands (US$ 24.3 million), Government of Bangladesh (US$ 17.3 million) and Beneficiary of the Projects (US$ 2.4 million). The project will have to cover the whole of Bangladesh (61 Districts) except the three Hill Districts of Bangladesh. The overall objective of the project was to support poverty reduction efforts by increasing sustainable agricultural and fishery production. The main objective of the project was to develop sustainable stake-holders driven small scale water resources management systems with special reference to the poorer section of the population.

3.1.1 Impact of the SSWRDSP-II

Improved water management has resulted in the diversification of crop with the increase in cereal and non-cereal production. Increase in cereal production is due mainly to move rice cultivation in the monsoon season. On the other hand, more pulse, oilseed, vegetable and spice cultivation in the dry season increased non-cereal production. In Bangladesh, drainage improvement and floodwater control and conservation release the constraints on land use through facilitating cultivation in three crop seasons and increase per ha yield level. For example, if flood water level can be reduced in the late monsoon season, farmers can transplant aman rice and produce mustard immediately after the harvest of aman during the early dry season, followed by HYV boro rice during the late dry season and pre-monsoon season. The other factors contributing to the increase in the crop production included use of modern high-yielding varieties (HYVs), increased use of fertilizer and improvement of crop management. The fertilizer responsive HYVs have been well adapted in those subproject areas with sufficient drainage outlets, adequate residual soil moisture content and availability of water for supplementary irrigation as well as irrigation in the early dry season. Early dry season irrigation mainly increased wheat production.

Improvement of drainage effectiveness in the monsoon season was identified to be the most significant impact of the water control infrastructures in the subproject areas. This has substantially supported farmers to increase HYV transplanted *aman* rice area in this season. Poor drainage has been the major limitation to HYV transplanted *aman* rice production before the construction of

water control infrastructures in most subproject areas. Small farmers are highly benefited from the local water resources development, which provides opportunity to increase cropped area and more HYV cultivation. Adoption rate of HYVs is higher on smaller farms. Small farmers grow highly labour intensive and productive crops compared to large farmers who often select less labour intensive and low productive crops. HYVs rice yield is higher than the local varieties.

Compared to the local varieties, in HYV rice production on average 95.0% higher yield is obtained in the pre-monsoon season, 46.0% in the monsoon season and 87.0% in the dry season in the western part of the country. In HYV production, cultivation cost increased by as much as five-fold compared to the local varieties, particularly in irrigated aus and boro HYV rice production. However, the small farmers find the investment useful as the replacement of local varieties by HYV increases family income by 72.0%. Due to undertaking of SSWRDSP-II fisheries production increased both in floodplains permanent water bodies. The floodplains include lowland cropped areas where seasonal flooding depth is more than 90 cm. Permanent water bodies included perennially flooded depressions and river and canal beds. Fisheries production increased in floodplains and permanent water bodies. Initially, closing of canal by the ring dike during the construction of structures, delay in the installation of regulator gates and unplanned operation of regulators impeded fisheries production in the permanent water bodies. However, subproject design with proper control of the timing, depth duration of flooding ensures growing condition for crops while allowing fish migrate to and from spawning and feeding areas to effectively minimize impediments to growth of fish population.

3.2. Sunamganj Community Based Resource Management Project (SCBRMP) of LGED

Sunamganj Community Based Resource Management Project (SCBRMP) of LGED with financial assistance of IFAD launched its programme in January 2003 at Sunamganj, a most remote zone of Bangladesh where very little development assistance has reached yet to satisfy the minimum civic requirements of the people. The geographic set-up and location have made the area highly vulnerable to nature. Floods are almost a recurring incident in the area. More than 50% of the people of that area socially and economically maintain a very uncertain life. They have hardly any other scope to make a stable livelihood. SCBRMP works for that class of this haor basin with the objective to make at least 135,000 households free from poverty by the year 2014. Presently the project is engaged in four Upazilas of Sunajganj and has a plan to increase that number to ten gradually.

3.2.1 The Goal, Approach and Components of the CBRMP Project

Goal: The goal of the project is sustainable improvement in the livelihood and general quality of life of 135,000 poor households living in haor areas in Sunamganj. The other features of the goal of the project lies in parallel with the Millennium Development Goals.

The Approach: The core element of the approach is to mobilize the poor and inspire them to accumulate their potentials to build a self help society. With that end in view, grassroots level organization has been formed, both for male and female, at remote villages over all Upazilas of Sunajganj district. The members of the organization are being trained upon a need based assessment both for raising their human and technical skill in order to enhance their capacity to access into and manage sustainably the livelihood resources and further the project aims at establishing a pool of technically skilled activists that will continue providing the technology extension services to the people after the project end. Creation of access into natural and other physical resources and capital for better investment through systematic savings accumulation and credit accessibility of poor are one of the vital ingredients of the development approach of SCBRMP to assist the people in alleviating poverty.

Project Components: The project contains five major components. These are: i) Institutions building, ii) Labor intensive infrastructural development, iii) Microfinance, iv) Agriculture and Livestock development, and v) Fisheries development. A sustained institution building of the people is a crucial concern of the project. The basic structure of the project is formation of self help institution comprising male and female organizations at village level. A labour intensive infrastructure development component has been designed to promote employment of the poor during the construction time of the infrastructure like building village roads, village community center and sinking tube-wells, which have immense impact on the social life of the community. The unique feature of this component is people's participation in the implementation of the activities through an institutionalized manner under a committee namely Infrastructural Management Committee (IMC). Along with participation in implementation, this committee has further responsibilities to ensure proper use of the infrastructures as well as their maintenance.

Micro finance is another important component to mobilize group savings and foster credit facilities to the poor. The total earning by credit investment goes to meet the incentive given to organization officials for their managerial inputs and raising fund for future management need of the programme after phasing out of the project.

Agriculture and livestock component has been included in the project to develop these resources for more effective and efficient uses. Agriculture is highly prone to natural calamities, and livestock severely suffers from constant lack of feed. The project has a definite aim to address this crisis by introducing need based adaptive research result demonstration and other extension activities for upgrading the agriculture and livestock resources.

Fisheries development is a dominant component of the project. The major feature of this component is a massive access plan to beel (water bodies) resources. It plans to establish a sustained participatory resource management system. Around out of total 1000 beels, 600 beels are to be accessed by the project during its operational period, and these are to be handed over to the genuine fisher community. The project has become successful to have authority over 93 beels and the process has gone in practice to introduce a community based sustainable fisheries management to those beels. The project functions through a Beel Management Committee that comprised a team who represents the Beel User Group. Beel User Groups are the primary structure formed by intended beel fishers. There is another Advisory Committee involved in beel resource management comprising local people basically to act on major social and other conflict resolution in relation to beel resource access. Besides the beel access, around 1615 ponds are to be leased in and developed by the project and given to indigent women for earning by raising fish.

3.2.2 Achievement of the SBRMP Project

Till date, around some 8,922 poor people have been mobilized under 329 credit organizations of which 3,332 are male and 5590 are female. An amount of Tk. 3,481,947 has been mobilized as group savings. A total 1,870 number of organization members of which 685 are male and 1,185 are female have received credit and having training invested in different IGAs quite successfully. The value of gross loan portfolio of the project to date is around Tk. 6,589,800. Training has so far been received by 3620 organization members on human and skill development of which 1,354 are male and 2,266 are female. Meanwhile, village - wide need-based technology has been disseminated to the community through 239 demonstrations. Long-term authority over 93 beels has been established and access to 16 scheduled beels has been achieved. Meanwhile, Beel Management Committees (BMC) have been formed comprising representatives from the genuine fisher community for the accessed beels. A total of 9 ponds have been leased in for 7 years and given to indigent women after training them on fish

rearing. In infrastructure sector 23 number of total 30km pucca road have been built in the very backward area of villages, linking those villages with the main road and thereby with marketing centres. A total of 200 tube-wells have been sunk with a minimum coverage of 6000 households. Two-storied Village Multipurpose Center (VMC) has been built at 9 different places in three working Upazilas.

3.2.3 Impact of the SCBRMP Project Activities

During the very short span of time the following impact has been assessed:

In social and human context, the impacts include: i) Reduction of social isolation of the poor; ii) Development of leadership quality among the poor at village level; iii) Development of a sense of right on local resources through access in beels and ponds; iv) Increased participation at different levels of project implementation and ownership to project activities; v) Recognition of women's role in family and society; vi) Increased accessibility to safe water of the village people by sinking tube-well at remote water scarce villages; vii) Organization leaders are encouraged to take part in local government initiated development activities.

There are impacts in physical and environmental context. These are: i) People's access to market and other public and private facilities increased following creation of pucca road in villages; ii) A sustained community based resource management practice has been established for beel resource management; iii) People have become more responsive to redress the degraded resources like beel.

In financial context, some good habits are observed in members' attitude and behavior. These are: i) A habit of savings developed among poor people and thereafter the scope of access to credit increased, ii) Many poor people have got credit access and invested in IGA; iii) Many small loanees have reached the threshold to access into medium range of loan for broader investment; iv) Need based development activities have made them optimistic about development.

In technology extension context, there are impacts like i) Local activists have become effectively functional to render services to village farmers even on payment. ii) The project activities have brought the government extension agents close to the people and encouraged the people to seek services from them.

In sustainability context some positive changes have occured. Sustainability of the programme is of crucial concern. Sustained organization and continuous initiatives for development are the most wanted need of the project and with that view the people's participation has been put at the centre of all project activities.

Although the project is at an early stage, some indicators may be considered as programme sustainability. These are: i) increased capacity to identify the problems and objectives to meet their needs; ii) Organization members' interest and positive roles in planning and managing infrastructural activities; iii) Gradually transferring roles of SO to organization officials in conducting organization meetings by them; iv) Increased role of activists to render services to village people; v) Peoples' changed attitude to give proper care to natural resources.

4. Achievements of the Infrastructure Projects Of LGED

Till date a lot of studies have been conducted to assess the impacts of physical infrastructure of LGED. Some of the major impacts of programmes are described below:

- Development of rural infrastructure has contributed to the alleviation of poverty by indirectly generating income.
- Infrastructural development caused household incomes to rise by 33 percent, income from agriculture by about 24 percent, and that from livestock and fisheries by about 78 percent.
- Infrastructure development has had positive effect on health.
- Households in developed areas spend a large share of their incremental income on non-cereal foods, nonfood and services, which gives a boost to economic growth.
- Infrastructure development has increased the speed of diffusion of agricultural technology, reduced the cost of marketing and improved the operation of both input and product markets through improved linkages with other sectors. Infrastructural development has lowered fertilizer prices by 14 percent and raised the use of fertilizer by 92%.
- Infrastructure development has encouraged savings and investment indirectly through its positive effect on income.
- Road development has contributed towards more intensive farming in the project area and caused the price of double and triple cropped land to go up substantially. Road development has also led to higher production of fruits in the project area and contributed to higher price of orchard land.
- The project area has experienced a significant increase in cropping intensity while it has declined substantially in the control area.

- ❖ Road development has facilitated access to and adoption of mechanized means of cultivation.
- ❖ Road development has contributed towards intensive land use and better use of various inputs leading to positive growth in output. Intensive use of land has resulted in higher land productivity. It has also contributed to improved labour productivity in the project area. Value added in agriculture in the project area has depicted a positive real rate of growth.
- ❖ Number of road side shops has increased at a higher rate in the project area compared to control area.
- ❖ Road development has eased the supply situation by improving the transportation facility. This has had a favourable impact on the price level and on the inter-market price variations.
- ❖ There has been a significant increase in the number of bank branches, number of account holders and the volume of deposit in the project area after road development.
- ❖ Improved infrastructure has facilitated setting up of new educational institutions. The average number of all categories of educational institutions has been higher in the project area compared to the control area. The number of NGO-initiated schools has registered a sharp rise in the project area against their total absence in the control area.
- ❖ Infrastructure development has generated substantial opportunities for self-employment activities. The share of self-employment has increased significantly over wage-employment.
- ❖ Development of rural infrastructure has contributed towards diversification of the rural economy and poverty eradication by facilitating the adoption of various non-farm activities by the landless and the land poor population of the area. Non-agricultural employment is seen to have increased at a much higher rate in the project area compared to the control area.
- ❖ Infrastructure development has created increased employment opportunities for female workers by easing the mobility of female workforce and opening up markets for various non-agricultural products and services.
- ❖ Infrastructure development has rendered the labour market in the project area more flexible by easing the labour supply situation and thereby has had a favourable impact on the wage level. Nominal wage for agricultural labour has increased.
- ❖ Improvement in physical infrastructure is considered to be one of the most critical supportive elements for development of rural non-farm enterprises.

- ❖ Growth in Rural Non-farm Activities (RNAs) was observed in places well connected by all weather roads and having supply of electricity.
- ❖ Improvement in physical infrastructure has allowed greater integration of product and factor markets.

5. Concluding Remarks

During the last few decades Bangladesh has achieved remarkable success in improving governance in the country. By undertaking some macro-economic policies and socio-economic progammes, government has recorded massive success in reducing massive poverty, infant mortality, gender disparity in primary and secondary education, maternal mortality rate, lowering population growth and increasing access to education, safe drinking water and life expectancy and so on. Still there are daunting challenges in the way to ensure governance in the statecraft. A spectacular success story in the realm of good governmenc in the country is that of the Local government Engineering department under the Ministry of LGRD&C, some of the achievements of which are highlighted in the paper.

Since long the LGED through its neuerous infrastructural development activities has contributed immensely for ensuring good governance in rural development. In order to accelerate the income multiplier effects and employment generation from infrastructure development, efforts of the LGED will need to be continued through close interactions between the central and local government institutions. A proper decentralization of design, implementation and management of rural infrastructure programmes will have far-reaching implications for cost effectiveness, maintenance and provision for sustainable infrastructure services. To maximise the impact of decentralization, the formal rural infrastructure programmes (e.g. those implemented by LGED) should focus on the provision of basic economic and social services in collaboration with different local agencies, NGOs and the private sector based on shared of responsibilities through experience and best practice examples. To realize this, the overall power and responsibilities of local level institutions should be enhanced. In order to ensure efficient planning, implementation, and operation and maintenance of the rural infrastructure, a community participation process needs to be adopted with involvement of local government institutions, beneficiary groups, user committees, and the private sector.

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