

# ROADS FOR ECONOMIC GROWTH: AN APPROACH IN BANGLADESH

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## ABBREVIATIONS

ADP	: Annual Development program
LGED	: Local Government Engineering Department
RHD	: Roads and Highways Department
UP	: Union Parishad (Lowest tier of administrative unit)
Upa zila	: subdisrtict
Zila Parishad	: District Council
LGIs	: Local Government Institutions
LCS	: Labor Contracting Society
BDT	: Bangladeshi Taka
GOB	: Government of Bangladesh
GDP	: Gross domestic Product

## ABSTRACTS

Bangladesh is one of the few countries in the world that has all modes of transport serving the needs of economy and people. It has a vast network of highway and rural roads, a railway system, inland waterways. The road network has all most non-existent with only 600km of narrow paved roads existing in 1947. The road network expanded to an impressive, most of which 301,368km were built after independence in 1971.

Bangladesh remains primarily a rural society, with about 80% of the population living in rural areas. Although rural Bangladesh is poor, it has many characteristics, which result in a highly active rural cash economy in which mobility and trading are of crucial importance. As predominantly rural country, rural infrastructure plays a vital role in supporting economic growth changing the socio-economic condition.

Considering this in 1984, the Government of Bangladesh outlined its rural development strategy focusing on development of physical infrastructure involving roads, markets, storage facilities. Minor irrigation etc. Since then improved rural roads and infrastructure that have created opportunities for economic growth and poverty reduction. Roads have reduced transportation cost and the cost of consumption and production of goods and services by increasing mobility making bridge between urban and rural. Road related studies reveals that household consumption is likely to get a boost from increased household income, consequently reducing poverty. Rural roads investments in Bangladesh have been pro-poor, that transformed poverty incidence declination from 51% in 95-96 to 25% in 2015. GDP Growth Historical Change are

1972-75-1st Budget in -- 2.75%

1973-79---- 5.91%

1980-89 ---4.01%

1996-1997- 4.49%

1996-1997 -4.49 %

2014-15---6.55%

(Source Planning Commission)

Bangladesh Pratidin Dec 9 /2016

2015-2016—7.11%

In the last 7 seven years only 17 country have achieved 6% GDP Growth in the world.

(Source planning commission)

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## 1. INTRODUCTION

Many inhabitants in Bangladesh suffer from inadequate and expensive transport infrastructure and services. Poor access to transport constrains economic and social development and contributes to poverty. Better transport services can stimulate economic activity and social improvement, leading to easier access and more efficient transport services—a virtuous circle that reduces poverty and improves the life's of poor rural residents. Improving rural people's access to essential services requires improving mobility through transport infrastructures and services as well as the location, price, and quality of facilities. Better mobility gives people access to services -education, health, and finance, trading, income earning opportunities, and social, political and community activities.

Bangladesh is one of the few countries in the world that has all modes of transport serving the needs of economy and people. It has a vast network of highways and rural roads, a railway system, and waterways, two seaports, maritime shipping and civil aviation and national airline. Yet this has not always been the case. At the time of the Indian sub-continent partition in 1947, the landmass comprising today's Bangladesh was served primarily by a network of Inland Water Transport provided informal boat services to isolated rural communication and long-distance cargo and passenger services. The road network has all most non-existent with only 600km of narrow paved roads existing in 1947. During the war of liberation in the early 1970s, most of the transport Infrastructure that existed up to that time was practically destroyed or damaged; many bridges, ports and airports have to be rebuilt from scratch.

From this low level Transport endowment, Bangladesh has made significant strides to develop a modern transport system to support the needs of a developing economy. Most of the improvement has happened in the roads, followed by the ports and civil aviation .The Road network expended to an impressive 301,368km, most of which were built after independence in 1971. Bangladesh has developed major roads corridors connection Dhaka city with key economic centers and towns, and a network of village roads connecting communities to market centers and the main road and river jetties. New bridges connect communities with Road Transport, as well as integrate whole regions, including the Multipurpose Jamuna Bridge that provides uninterrupted east-west road and rail connection in Bangladesh.

Bangladesh remains primarily a rural society, with about 77% of the population living in rural areas. Although rural Bangladesh is poor, it has many characteristics, which result in a highly active rural cash economy through agriculture sector in which mobility and trading are of crucial importance. As predominantly rural country, rural infrastructure plays a vital role in supporting economic growth.

## 2. STRATEGIC PLANNING FOR RURAL DEVELOPMENT

Rural Transport is crucial to poverty reduction. Poor access to transport in the rural area constrains economic and social development and contributes to poverty. Improving rural people's access to essential services requires improving mobility through transport infrastructure to services and the location, quality and prices of facilities. Better mobility facilitates to deliver and receive the better services - education, health, foods, agricultural input delivery and products delivery, income generating opportunities social, political and community activities & this alleviate poverty. The Government Rural Development Program originated in 1960's conceptualized as an instrument for providing agricultural production as well as economic growth. The RD model comprises four elements such as

- Two-tier Cooperative-Krishak Samabaya Samity (KSS) and the Thana Central cooperative Association(TCCA)

- Rural Works program (RWP)
- Thana Irrigation Program (TIP)
- Thana Training and Development Centers (TTDC)

### **3. RURAL DEVELOPMENT STRATEGY IN BANGLADESH.**

The Government of Bangladesh (GOB) formulated and adopted the Strategy for Rural Development (RD) in 1984. A study also conducted by World Bank and GOB for fine tuning and reshaping the strategy. The strategy includes, among others, that the RD Projects will have a combination of three components such as a) Development of Physical Infrastructure including roads, bridges, storage and markets b) Irrigated agriculture, minor drainage and flood control works c) Production and employment program for the rural poor.

### **4. RURAL TRANSPORT INFRASTRUCTURE DEVELOPMENT ACTIVITIES.**

The rural Transport infrastructure activities are -Improvement of Upazila Road, Improvement of Union Road, Improvement of Village Road, Construction of Bridges and Culverts, Development of Growth Centers and Rural Markets, Tree Plantation on Slopes of Upazila Roads, Union/village Roads, Embankments, Routine Maintenance of Earthen Roads, Herring Bone Bond (HBB) Paved Roads and Structures, canal digging and landing station (river jetty/ ghat).

### **5. RURAL ROAD NETWORK AND ITS IMPACT**

Local Government Engineering Department(LGED), under Ministry of Local Government has been mainly implementing various Rural Infrastructure Development Projects that have resulted encouraging positive impacts. Of them the Rural Road improvement projects have some common components, which have specifically targeted to improve the rural road network, establishing access to services (Agriculture, health, education and other services) and marketing facilities which fuelling economic Growth. Improvement of the Rural Infrastructure facilities tremendously enhanced rural communication network and as a consequence, activated rural economy attributable to an increased agricultural production and expanding rural trades. Various studies carried out to this effect, have concluded that development of Rural Road networks in good condition has far reaching implications towards poverty alleviation by directly or indirectly generating income.

- reduced the cost of marketing and improved operation of both input and product markets through improved linkages with other sectors;
- lowered labor costs significantly in the developed areas;
- increased agriculture production to a significant margin;
- caused household income to rise to a reasonable level;
- Encouraged saving and investment indirectly through its positive effect on income.

A numerous studies were conducted on the impacts of Rural Transport and Trading Infrastructures. In one Impact Study by Bangladesh Institute of Development Studies ( BIDS), an independent organization, financed by World Bank was conducted. A quasi-experimental design involving “before-after” and “with- without” Road was applied in the study. The study results reveals:

#### **Cost Savings**

- MT increased to 360% while NMT rose by 242%.
- Freight carried by MT went up 98% on an average.
- Transport cost reduced by 30% for both MT and NMT.
- Travel time declined by about 30%.
- VOC gone down by 7% for MT and 10% for NMT.

### Education

- Number of teacher in educational institution increased at faster rate.
- Rate of increase in female teacher is significant.
- Significant improvement of female student enrollment.
- Total enrollment went up by 29.4% from 19.4%, where as female enrollment went up by 31.7% from 12.9%.
- Drop out fell down by 14%

### Health

- Increasing visits of patients to healthcare centers in project area, with female patient visits growing at a faster rate.
- This shows that road under development is indeed a hindrance for female patients to access health services.
- Doctors' attendance in the rural hospital grows significantly.

### Agriculture

- Average yield per hectare of different food and cash crop increased by 6%.
- Both farm gate and home-based sale has increased by 50% and 65% respectively.
- Average increase of road side land price gone up by 278%.

This dictates the necessity of more investment in rural Roads Development and Maintenance.

## **6. INSTITUTIONAL FRAMEWORK FOR RURAL TRANSPORT: DEVELOPMENT AND MAINTENANCE**

Through transformation of the erstwhile Works Program Wing (WPW) under the GOB Development Budget for executing the works, the Local Government Engineering Bureau (LGEB) was created under the GOB Revenue Budget in October, 1984. LGEB was upgraded as the Local Government Engineering Department (LGED) in August 1992 under Ministry of LGED & Co-operative Ministry. LGED's Chief Executive is the Chief Engineer who is supported by 7 Additional Chief Engineers, 11 Superintending Engineers, 6 Executive Engineers, 6 Assistant Engineers at the HQ, 14 Superintending Engineers at region, 64 Executive Engineer's at the districts and 485 Upazila Engineers at the Upazilas. The total number of Engineers and staff under the permanent establishment of LGED is now 11068 of which 83.22% works at the grassroots level (Upazila). LGED is now one of the primes Engineering organization engaged in the transport Infrastructure development of Bangladesh.

- Other Local government Institutions (LGIs) for Rural Road Development and maintenance are a) Union Parishad, b) Upazila Parishad C) Zila Parishad.

## **7. LGED AND ITS JURISDICTION IN NATIONAL ROAD NETWORK**

The Government of the People's Republic of Bangladesh, under its Gazette Notification No. PC/TS/Classification Committee/06 dated 6<sup>th</sup> November 2003 reclassified the National Road System in to six categories, redefined them and re-delineated the ownership and responsibilities of the concerned organizations in conformity with its latest policy (**Table-1**). Subsequently, through circulation of two other Notifications the responsibilities and ownership have further been made specific by roads' categories. These Notifications have endowed LGED as an organization with the sole ownership of all Upazila Roads and Union Roads.

**TABLE 1 Road Re-Classification, Definition and Ownership 2003**

SI No	Type	Definition	Ownership and Responsibility
1	National Highway	Highways connecting National capital with Divisional HQ/s or sea ports or land ports or Asian Highway.	RHD*

SI No	Type	Definition	Ownership and Responsibility
2	Regional Highway	Highways connecting District HQ/s or main river or land ports or with each other not connected by National Highways.	RHD
3	Zila Road	Roads connecting District HQ/s with Upazila HQ/s or connecting one Upazila HQ to another upazila HQ by a single main connection with National/Regional Highway, through shortest distance/route.	RHD
4	Upazila Road	Roads connecting Upazila HQ/s with Growth Center/s or one Growth Center with another Growth Center by a single main connection or connecting Growth Center to Higher Road System**, through shortest distance/route.	LGED*/LGI*
5	Union Road	Roads connecting Union HQ/s with Upazila HQs, growth centers or local markets or with each other.	LGED/LGI
6	Village Road	(a) Roads connecting Villages with Union HQs, local markets, farms and ghats or with each other.	LGED/LGI
		(b) Roads within a Village.	

*Source: Bangladesh Gazette 1<sup>st</sup> Part, 6 November, 2003*

LGED, at present, is one of the Prime Engineering organizations of the Government of the People's Republic of Bangladesh. This organization mostly concentrates in rural area development. It is the general consensus that LGED is one of the most efficient and effective organizations under the Public Sector in Bangladesh that delivers timely and quality output particularly in the case of developing and maintenance of rural infrastructures/ specifically rural roads. This organization is also highly committed towards creating a sustainable surface communication Infrastructure network within its portfolio.

LGED, being its roots spread all over the country at the grass root and becoming fully dedicated from the very outset towards improving the lot of the vast majority people living in rural areas, highly qualifies for becoming a principal organization under the Public Sector for the management & Rural Road Network maintenance.

## 8. CURRENT STATUS OF RURAL ROADS AND THE PRESENT CHALLENGES

Rural Road network of the country comprises a total of 298,344 km (**Table-2**). Of which 27,254 km (72%) of Upazila Roads, 17,742 km Union Roads (40%), 13,994 km Village Roads Type-A (12.76%) and 4,281 km Village Roads Type-B (4%) have been improved during the post-liberation period until now. A total of 1,154,406 m of bridges/culverts has also been built on the Rural Roads of various categories during this period.

**TABLE 2 Road Network under LGED/LGI**

Road Network							
Road Type	Total Number	Total Length (km)	Developed (km)				Earthen (km)
			BC	RCC/CC	HBB/BFS	Total	
Upazila Road	4,494	37,819	26,783	471	2,481	29,735	8,085
Union Road	7,974	44,752	17,238	504	4,276	22,018	22,733
Village Road-A	37,572	109,622	13,486	508	6,956	20,950	88,672
Village Road-B	56,974	106,152	3,995	286	3,465	7,746	98,405
<b>Total</b>	<b>107,014</b>	<b>298,344</b>	<b>61,502</b>	<b>1,769</b>	<b>17,178</b>	<b>80,449</b>	<b>217,895</b>

Bridge/Culvert						
Road Type	Total Need		Already Developed		Need to be Developed	
	Total Number	Total Length (m)	Total Number	Total Length (m)	Total Number	Total Length (m)
Upazila Road	62,217	464,447	57,858	369,650	4,359	94,797
Union Road	66,963	425,593	58,917	305,491	8,046	120,103
Village Road-A	100,315	574,321	71,090	324,148	29,225	250,172
Village Road-B	75,751	372,487	41,480	155,117	34,271	217,370
<b>Total</b>	<b>305,246</b>	<b>1,836,848</b>	<b>229,345</b>	<b>1,154,406</b>	<b>75,901</b>	<b>682,441</b>

*Source: Road Database of Road Maintenance and Road Safety (RMRS) Unit, LGED, November 2011*

These roads provide cardinal access to the growth centers and markets; farms; financial, educational, social and welfare institutions; rural services delivery centers etc. which have contributed immensely towards increased agriculture productions, facilitated marketing of agriculture products, easy availability of agricultural inputs at the farm level and reaching the health, education and administrative services at the door steps of the marginal common people of the rural areas vis-à-vis the stakeholders. Unless the rural paved roads are properly developed and maintained, the results of these investments would be frustrated and it would fail to harness the real benefits. However, the road maintenance activities suffered a lot during all the previous years since 1992-1993 when funds first started flowing from GOB Revenue Head to LGED on road maintenance purpose. This has rendered the financial demand on road maintenance to be increased at an exponential rate. Mobilization of the requisite financial resources has become the real challenge of the time as such. The challenge is being aggravated unusually with the frequent occurrence of severe natural calamities like flood and cyclone during its post-occurrence period in addition to plying of highly overloaded vehicles very often.

## 9. FINANCIAL RESOURCE MOBILIZATION FOR RURAL ROADS

Investment on rural infrastructure and its maintenance is financed from several sources, the locally mobilized resources are from the Union Parishads and the Upazila Parishad, Zila Parishad, the "Block Grant from Government for Union and Upazila Development and Zila Parishad (LGIs). LGED Development & Revenue Budget is centrally administered projects, International Food-Aided Infrastructure Projects and Development partners and Government funded Rural Infrastructure Projects.

### 9.1 "Government and Development Partner Financed Rural Infrastructure Projects"

- are the principal source of fund for Rural Roads/ Infrastructure. The amount available varies from year to year depending on how many projects are ongoing. Depending on the demand Government Development Program the following are the scenarios for Rural Road financing.

Up to current 2015-16 FY, total number of ongoing Investment project is 86 nos.

- Total Project value: BDT 614.19 billion (100%).
- GOB Project value: BDT 360.0 billion (59%).
- Project assistance (PA): BDT 254.1 billion (41%).

This year 2015-16 FY ADP allocations for Rural Roads Development is BDT 83.81 billion. GOB share is BDT 49.26 billion (58.78%) and donor share is BDT 34.54 billion (41.22 %). This shows that GOB share is increasing and donor share is in decreasing trend.

Union Parishads the lowest tier of LGIs: a) generate income from: (a) lease of markets, (b) leases of fish ponds and ferries, (c) taxes (business fees, entertainment, street lighting, permit fees); and (d) fees and tolls on services and facilities maintained by the Union Parishad. The Upazila receive also part of the income of markets. Although these resources are limited they should grow in future with some growth in parallel with, or as a consequence of, certain investment programs for example, one Growth center market

(Naohata) increased its revenue from the auction of market management, from Taka 400,000 to Taka 2.8 million following the infrastructure works carried out under a RD project. However, in accordance with the Government's decrees, a portion of the increased, revenue remained in the Union Parishad account.

b) UPs have significant local revenue raising powers but at present collection performance is very poor. A proportion of the revenue from the annual leasing of smaller markets is channeled directly to the UPs, while a proportion of that from larger markets is channeled to the Upazila to be allocated to development activities.

At present the major source of revenue for development activities is the GOB Annual Development Program (ADP) Block Grant for Union from central government..

UPs are financially weak, their average annual income, though widely varying among them, being only about US\$16,000 equivalent, from all sources: from directly raised revenue, share of market leases, and the annual "Block Grant" from Central Government which is allocated based on some socio-economic criteria for spending under pre-fixed guidelines.

If devolution and decentralization is to work, the Union Parishads will need to have increased and reliable revenue sources and will need the/authority to decide on how its funds are to be invested and the priorities for different programs. The Union receives block grant from Central Government. The grant allocation is as follows.

FY 2014/2015 BDT100 million

FY2015/2016 BDT100 million

Presently UP also receive block grant from a project namely LGSP financed by World Bank for development works and major portion is spend for Rural Roads Development and Maintenance.

Upa zila Parishad; The next tier of Local Government Institution (LGI) is Upazila Parishad where offices of 45 Ministries / Department are established. The Central Government delivers / channelizes services to the people through them and the development program is also implemented accordingly.

A proportion of the revenue from the annual leasing of larger markets are channeled directly to the Upazila Parishad, The Upa zila Parishad also mobiles some resources from taxes, fees, levies on different services they render to the peoples. At present major source of resources for development activities is the Government (GOB) Annual Development Program (ADP) Block Grant for Upazila Development,. This amounts to an average of BDT 10 million per Upazila in FY 2015-2016; 60% of the Block Grant is earmarked for work on roads, culverts and bridges in the Upazilas Unions.

FY 2014/15 BDT4200 million

FY2015/2016 BDT4300 million

ZILa Parishad: Next higher tier of Local government Institution (LGI) is Zila Parishad with its jurisdiction whole district that comprises 10 to 16 Upazilas. They also raise fund within their Jurisdiction by imposing taxes, levy, very big market lease values, leasing their land those are not using by them, leasing canal/ river jetties, leasing Govt. derelict tank, rent from auditorium, park etc. They also get a portion of land transfer taxes (1%) presently. Central Government (GOB) also allocates block grant for them. 60% of which is earmarked for Rural Roads Development and maintenance.

It appears from the above that increasing the resources of the local bodies is of major importance. It has already been recommended to give more decision power about selection of infrastructure projects to local authorities with local community participation and to provide matched funding for priority type of infrastructure projects. These measures should increase the willingness to raise more local, resources. It is important that all locally raised resources can be retained locally. In the recently revised system UPs may retain only 15 percent of income of a big market would produce more additional income if they are motivated It is also necessary to increase the resources by transferring more centrally raised taxes to the

local bodies. At present resource from land transfer taxes 2 percent of which is transfer to the Up. Since land values go up as a result of better infrastructure, local bodies have rightful claim to this revenue to help maintain the infrastructure and to provide a stable source of revenue.

Another option for resource mobilization for Rural roads may be leasing a road for specific period say five years to private sector after development though tendering with specific responsibilities for maintenance throughout the period termed as Toll roads. These may be started as pilot basis. Guidelines/ principles preparation are under process. This system should be administered by the grass root level LGIs Upazila Parishad where LGEDs staffs are available. There would be a Road users committee. The Union Parishad and Road Users committee would supervise the program. Initially it could be started with at least one road in one Upazila. Depending on the success this process would be replicated to other Upzila (sub district) Rural Roads maintenance/ development. This is under consideration of the Government.

Other option for resource mobilization would be raising fuel cost and a portion channelized to Local Government Division for Development and Maintenance of Rural Roads depending on the demand.

A related issue for road fund raising is Road Pricing on Rural Roads as these roads are widely spread throughout the country people are getting benefit from them. The responsibility may be deployed to Union Parishad. It is expected a significant amount would be collected to UP fund earmarked as road fund. This option may lead to UP self sufficient for Road Maintenance. Initially this option is being applied to Industrial areas where heavy loaded tractor trailer are using the Rural Roads.

Prior to 1991, the funding for maintenance of Rural Infrastructure virtually did not exist. Beginning in 1992/93, GOB began allocating funds from the revenue budget for road maintenance to be executed by LGED. From an initial annual fund of BDT 350 million the "LGED Revenue Budget for Maintenance" also increased significantly although the bulk of rural roads already improved necessitated increased demand of huge funds for maintenance. Since, increased resource allocation for maintenance is not possible in proportion to increased demand for maintenance, the gap between maintenance need and the funding is gradually widening and more and more fund is needed. The present scenario for Rural Roads Maintenance fund is follows:

FY 2013/14 Taka 8.25billion

FY2015/2016 Taka 10 billion

100 percent of this allocation is utilized for maintenance works. It is estimated that this fund is only 20% of requirement.

Another large source of funding is "**International Food Aided Infrastructure Projects**" for maintenance.

### **Financing by Private Sector**

The local transport operators and the traders are among the main beneficiaries of the rural roads and they are equally anxious to see that the rural roads remained perfectly fit for year-round use of transports. They are the stakeholders receiving direct financial benefit from the rural roads. The Development and Maintenance of Rural Roads involves a huge finance and they need to be a partner hereto. A **minimum of 10 percent of the road maintenance costs** they shall contribute to the maintenance fund of LGED that will minimize to some extent the present financial shortfall in respect of the rural road development & maintenance. Such funds should be utilized for the roads belonging to contributors' respective geographical area.

LGED should try Public-Private Partnership (PPP) option in the Rural Road Development and maintenance in different ways, like adopting **Performance Based Maintenance Contracts (PBMC)** system for a specific period to simultaneously improving the maintenance quality and to bringing down the maintenance backlog. LGED's concurrent introduction of this system as trial is now going on. The



PBMC should take effect in LGED on regular basis only' if the system is proved to be effective, efficient and worthy one from the trial results.

### **Development project for Backlog Maintenance**

LGED since its inception has fully developed a huge number of Sub district (Upazila) Roads and Union roads and even a few Village roads. Many of them have already crossed their design life and getting deteriorated day by day. The deterioration has further been aggravated by LGED's financial incapability to fix them by undertaking appropriate maintenance measures. The roads as such are increasingly becoming unfit for vehicular use. The accumulated backlog maintenance is thus going up every year. The backlog maintenance may be reduced by taking up separate development projects in a planned way.

### **Provision for maintenance fund in Rural Roads Development Projects**

Government will formulate Development project with provision to earmark some portion of the project cost in the project document of every development project of Rural Roads for maintenance from own resources as well as development partner's fund. LGED shall utilize this fund on the maintenance of sub district (Upazila) and Union roads within the project areas of the respective project during the entire period of project implementation.

## **10. ENVIRONMENTAL CONSIDERATIONS**

All rural road development and maintenance programs shall be environment-friendly. All cares must be ensured to protect and preserve the natural environment by eliminating any possibilities of negative environmental impact while preparing the yearly maintenance programs. The major activities on environmental protection should inter-alia include measures that will prevent soil erosion of embankment, deforestation of road sides' trees planted during improvement of the road, cross drainage facilities are kept fully functional; and the road embankment and pavement do not spread dusts. All these services can be obtained by activities like replanting the road side trees that get dried/dead or damaged by cattle, by keeping clean the bridges and culverts on regular basis, placing new openings in the case the existing structures are inadequate to allow quick passage of storm drainage or fixing up any damaged structures and sealing road surfaces that may include repairing the road surface potholes and ruts, placing an overlay on the existing surface, re-sealing the road surface etc. Maintenance program should strictly follow the relevant provisions of the GOB's latest approved Environmental Policy.

## **11. ROAD SAFETY**

Although the Rural Roads have so far recorded of a much lower accident rate compared to the accidents occurred on the national highways or regional roads, any such future possibilities cannot be totally ruled out in case of rural roads also. To keep this possibility at the minimum level, the rural roads' geometry and the technical specifications of their structural composition must comply with the national or regional standards for the rural roads. Particular attention should be given to put appropriate and adequate road signs. Arrangements for holding appropriate consultation with and awareness raising campaigns for the road users once in a year shall be held about Road safety. Most importantly the maintenance program should strictly confirm to the relevant provisions of the GOB's latest approved National Land Transport Policy.

## **12. STAKEHOLDERS' PARTICIPATION**

The communities living within the rural roads' influence areas and the transport operators using the roads are among-others the main stakeholders of the rural roads. Stakeholders should be encouraged to participate at different levels of engagement of rural road maintenance that will build up a sense of ownership of the rural roads among them and they will come forward to assist the Government Agencies and the LGIs for successful implementation of the rural road maintenance programs, to regulate movement of overloaded vehicles and to make voluntary contributions either by extending labor and/or

money. LGED and LGIs should hold regular meetings and workshops with them to enable the stakeholders to remove any ambiguities in their understanding of their role in rural road maintenance, the Village roads in particular. As a follow up action of this policy, LGED should also develop a comprehensive but easy understandable guideline on stakeholders' participation at the different stages of Rural Roads maintenance that would help the stakeholders to form a clear perception about their role.

### **13. MANPOWER DEVELOPMENT**

LGED should make efforts to develop skill, efficiency and capability of its own manpower, the maintenance crews/workers and the LGIs' staffs involved in implementation and monitoring of maintenance programs. Towards this end, appropriate technologies should be followed and training is to be imparted with all concerned in every year on regular basis prior to program implementation starts. LGED should give special attention and make extra training arrangements for the women workers to turn them into an effective workforce, especially for the off-pavement maintenance activities. LGED should also conduct special orientation courses for the persons involved in planning and preparation of maintenance programs/ schemes so that right type of maintenance programs are selected, appropriate technologies are applied and the programs become cost-effective making the scarce resources optimally utilized.

### **14. GENDER EQUITY AND EMPLOYMENT GENERATION**

Women are involved at all stages of the Rural Road Development and Maintenance right from planning to implementation. It may be demarcated as program identification, scheme preparation and/or designing, program appraisal, program implementation, supervision, monitoring and evaluation. Women labors are mainly engaged for any off-pavement maintenance activities. However, they will be also engaged for on-pavement maintenance activities as appropriate. All strategies and steps in this regard are evolved by LGED, widely circulated and appropriately applied- in name of LCS program.

### **15. VEHICLE OVERLOADING CONTROL**

One of the major causes of road damage is plying of overloaded vehicles on the Rural Roads. A ban is to be imposed upon plying of any vehicles above 8.2 tons Axle Load on the Upazila roads and Union roads and 5.0 tons on Village roads. The movement of overloaded vehicles is also regulated on rural roads and the relevant provisions of the GOB's latest approved National Land Transport Policy now in force are strictly adhered to.

### **16. RESEARCH/STUDY AND INFORMATION MANAGEMENT**

LGED's Road Development and Maintenance and Road Safety (RMRS) Unit shall preserve all information relevant to Rural Road maintenance including accidents occur on Rural Roads and casualty record each year. RMRS Unit in consultation with Inter Unit Coordination Committee (IUCC) of LGED shall adopt appropriate research and study on the critical and advanced technological development issues. Trials are to be conducted on performance improvement and reduction of accident and casualty. LGED should also continue its strive for developing new labor-based appropriate modes on Rural Road maintenance, but not allowing any concession to the quality standard so that more employment opportunities become available further for the rural marginal poor, the destitute women in particular. LGED should also strive for updating its maintenance procedures and standards in consonance with the best prevailing standards and practices in the management of maintenance programs to derive optimum socio-economic benefit in the context of Bangladesh.

## 17. PRESENT ECONOMIC STATUS / ACHIEVEMENT IN BANGLADESH (COUNTRY SCENARIO)

Rural transport plays vital role in alleviating poverty of rural poor. It has tremendously changes the life style and increase human development index. They are getting Government and non-government services such as health, education, and modern agriculture input supply & selling buying, Information communication, has easy access of essential commodities, quickly, easily & at their door steps and that changing their life style and social dignity. Quick urbanization is occurring. Presently no body embraces death without food and medical treatment. The country is at the track of lower middle income group, moving towards Middle income Group with sustained and continued GDP 6%-7% for the last ten years. . Rural roads investments in Bangladesh have been pro-poor, that transformed poverty incidence declination from 51% in 95-96 to 25% in 2015.

Historical GDP Growth Change is

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2015-2016—7.11%

2016-2017—6-58%

In the last 7 seven years only 17 country achieve 6% GDP Growth in the world.

( Bangladesh Planning Commission)

### *The Economic Survey- & Study reveals that*

- Since independence GDP has tripled (2.75% in 1972-7.11% in 2015-2016)
- Per capita income US\$224 in 1971 to US\$1314 in 2015
- Inflation brought down 8.9%-6.2%
- It has already gone past MDG target for child mortality 48 per 1000 birth
- Net enrollment in primary school is almost 100% and retention rate is 80% and consistently rising.
- Female students outperforming their male counterparts in primary and secondary education.
- Literacy rate increase 23% to 67%
- On other socio economic indicators performing very well.
- Food production tripled 10 Million MT in 1971 to around 35 Million MT.
- Population growth rate decline from 2.9% in 1974 to 1.4% in 2006
- Child mortality has fallen substantially (38 per 1000 live birth)
- Population Growth Rate come down to 1.37%
- Poverty incidence reduced from 51% in 95-96 to 25% in 2015
- Life expectancy increased unto 70.6 years
- Gender parity has achieved.
- Electricity coverage enhanced from 48% to 72%.
- Country is on track to become middle income country in 2021
- Already recognized as lower middle income country by world Bank and other organizations.'
- Improving rural mobility to reduce poverty requires a combination of appropriate transport infrastructure and better transport services using an affordable means of transport.
- Stake holder participation & demand-led activities will enhance sustainability of transport system.

## **18 INTERNATIONAL APPRECIATION**

The institution for implementation of these activities called Local Government Engineering Department (LGED) has been rated by the World Bank as one of the most efficient and effective government organization. The institutional aspects are:

- Decentralization
- Professionalism
- Monitoring system
- Informal decision making
- Leadership
- Team work and Sense of Mission

Impressed by the LGED's development model, Nepal has already started a similar department in that country.

## **19. CONCLUSION**

- Rural transport plays a vital role in alleviating poverty of rural poor.
- Improving rural mobility to reduce poverty requires a combination of appropriate transport infrastructure and better transport services using an affordable means of transport.
- Stakeholder participation and demand lead activities will enhance sustainability of transport system.
- Government policy, sharing the responsibility of different agencies, local Govt. bodies should be clearly defined.
- In Bangladesh LGED is pioneer in improving mobility for the rural poor, establishing/developing rural accessibility.

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