



IRF WORLD ROAD MEETING 2017

/ 14-17 NOVEMBER / DELHI / INDIA /

Speaker: Engr. M. A. Quader

Senior Transport Adviser

Shelida Associates Inc

Ex. SE. LGED

Email: mdabdulquader@yahoo.com



WELCOM

Presentation
On
Roads for Economic Growth :
An Approach in Bangladesh

Presented By:

Engr. M. A. Quader

B.Sc. (Civil), M.Sc. Transport (UK)

Superintending Engineer(Rtd), LGED

Senior Transport Advisor

SheLadia Associates INC, Marryland

USA. Email:

mdabdulquader@yahoo.com

Overview of Presentation

- **Background**
- **Policy and Strategy**
- **Why we would Finance for Rural Roads /Rural Transport!**
- **Institutional Framework for Rural Transport**
- **Rural Transport Infrastructure**
- **The Road Network in Bangladesh & Responsibilities**
- **Rural Road Network**
- **Financing Rural Roads**
- **Gender Equity Strategy**
- **Findings**
- **Conclusion**

National Policies in Rural Transport

Strategies and Policies Related to RD

- ❖ **Rural Development Strategy (1984), RD Strategy Study 1996 by WB**
- ❖ **National Rural Development Policy 2001**
- ❖ **National Strategy for Accelerated Poverty Reduction 2005-2011**
- ❖ **National Land Transport Policy**

Rural Development Strategy (RD Strategy, 1984)

- ① **Development of Physical Infrastructure including Roads, Structures and Markets**
- ② **Irrigated Agriculture, Minor Drainage and Flood Control Works**
- ③ **Production and Employment Program for the Rural Poor**

National Strategy for Accelerated Poverty Reduction 2010-2015

The Road Map for accelerating poverty reduction broadly constituted of :

- ✓ **Pro-poor economic growth**
- ✓ **Human Development and**
- ✓ **Governance**

Why we will Finance for Rural Roads

- Facilitate better access to agricultural activities-input supply, extension service & trading products.
- Encourage investments due to saving of transport cost, information access and access to credit.
- Enhancing trading activities and providing better market linkages and integration.

Rural Transport and Employment

- **Generate new employment opportunities-
changing land use and agricultural production.**
- **Create wage employment in non-farm
activities.**
- **Increase labor mobility in particular for
females.**
- **Increase more employment opportunities for
women and men.**

Rural Roads and Human Development

- **Facilitating the access to education, health care and other social services.**
- **Improving household welfare by improving availability of different consumable goods and services, providing greater economic, social mobility and upliftment.**

Impact study conducted on Financing Rural Roads by

- **World Bank**
- **IFPRI -BIDS**
- **GOB-GOJ Program Level Evaluation**
- **Independent South Asian Commission on Poverty Alleviation**
- **International Labour Office, ILO, Geneva, Issue 2005**

One Impact Study conducted on World Bank Financed Project in Bangladesh on Rural Roads investment

A Quasi experimental design was adopted in the study 10 roads of which 5 project & 5 non project roads were selected :

- **Data were Collected “with & without roads” & Before & after road”. Seasonal variation of roads usages (Dry & Wet Seasons were considered , The data were analyzed; The findings are as ;**

Findings of study on Financing Transport & Trading infrastructure/Rural Roads

Cost Saving

- **MT increased to 360% while NMT rose by 242%**
- Freight carried by MT went up 98% on an average
- **Transport cost reduced by one third for both MT and NMT**
- Travel time declined by about 58%
- **VOC gone down by 7% for MT and 10% for NMT**

Education

- No. 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%

Findings of study on Financing Transport & Trading infrastructure/Rural Roads

Health

- Increasing visits of patients to healthcare centers in project area, with female patient visits growing at a faster rate. This shows that road underdevelopment 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%**

Findings of study on Financing Transport & Trading infrastructure/Rural Roads

Social

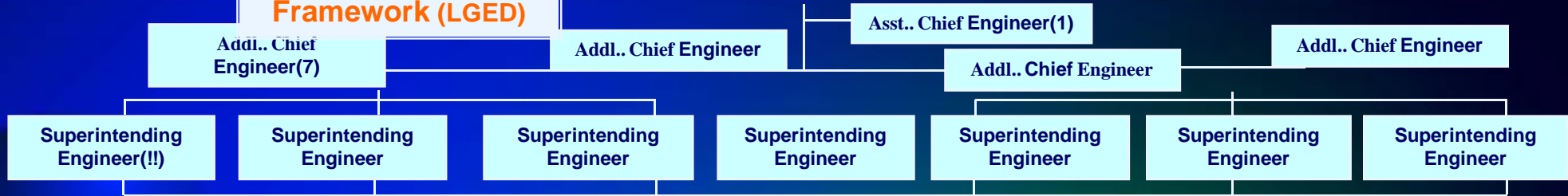
- Social value enhanced due to access road
- Created economic dynamic due to increase trading
- Reduced poverty level
- Generate social capital by Human Resource Development

Organizational set up for Rural Roads Development & Maintenance

- ❑ **Local Government Engineering
Department(LGED)**
- ❑ **Central Government Department under
Ministry of Local Govt. & cooperative.**

Institutional Framework (LGED)

Chief Engineer(1)



12	XENs	2	A E Mechanical / Electrical	4	Upper Division Assistant
5	XEN Mechanical (1) / Training (4)	2	Agronomist / Aquaculturalist	11	Stenographer
1	Architecture	2	Statistician / Accounts Officer	15	Steno Typist
1	Urban Planner	2	Estimators (SAE)	7	Accountant Assistant (1) LDA-cum-Typist
1	Transport Economist	2	Draftsman (SAE)	17	Moazzen (1) / Drivers
1	System Analyst	1	Mechanical Foreman	1	Duplicating Machine Operator
1	Computer Programmer	1	Imam	1	Ammonia Machine Operator
15	Assistant Engineers	2	Head Assistant / Accountant	25	MLSS

TOTAL MANPOWER = 146 (1.41%)

Superintending Engineer * x 14 (Region)

1*	XEN (Training)			1*	Driver
1*	Assistant Engineer			*1	M.L.S.S.
1*	Computer Operator cum Office Assistant				
			Total (14 x 7) =98		
			(0.68%)		

* borne by under development budget

Executive Engineer x 64 (District)

1	Senior Assistant Engineer			1	Accountant
1	Assistant Engineer			1	Steno Typist
1	Assistant Engineer (Mechanical) (in 22 Greater District)			1	Jeep Driver
1	District Sociologist			1	Truck Driver
1	Sub-Assistant Engineer			1	Road Roller Driver
1	Laboratory Technician			1	MLSS
1	Upper Division Assistant (UDA)				
			Total Manpower = 854 (8.28%)		

Upazila Engineer x 485

1	Assistant Upazila Engineer			4	Work Assistant
1	SAE (Construction)			1	Electrician
1	SAE (Maintenance)			1	Accounts Assistant
1	Draftsman (SAE)			1	Office Assistant
1	Community Organizer			1	LDA-cum Typist
1	Accountant			2	Chowkidars
1	Surveyor			2	MLSS
			Total Manpower =11068		
			MANPOWER : 83.22%		

TOTAL MANPOWER = 11068

Other Local Government Institutions for Rural Road Development & Maintenance

- ❑ Union Parishad- bottom level LGI
- ❑ Upazila Parishad(Sub district Council)
- ❑ Zila Parishad(District Council)

**RURAL TRANSPORT
INFRASTRUCTURE
/ROADS ACTIVITIES**

Rural Infrastructure Development Activities

- ❑ Improvement of Upazila Road
- ❑ Improvement of Union Road
- ❑ Construction of Bridges and Culverts
- ❑ Development of Growth Centers and Rural Markets
- ❑ Tree Plantation on Slopes of Upazila Roads, Union Roads, Embankments
- ❑ Routine Maintenance of Earthen Roads, Herring Bone Bond (HBB) Paved Roads and Structures

Donor Strategy

- We have 26 donors
- They have individual CAS-Reflects Sectoral Assistance
- Focus is pro-poor economic growth to achieve SDGs

Road network in Bangladesh

Government delineated the Jurisdiction of Road network among the different organisations

RHD

Responsible for

- National Highways-3813km,
- Regional Highways-4247km
- & Zila/ District Roads 13242km
- Total 21,302 km

Rural Road Net work

LGED and LGIs Roads:

- **Upazila Roads-37,790km,paved 27,421(74%)**
- **Union Roads -44,748 km,paved18,697km(42%)**
- **Village Road A-1,10,555km,paved15,219km(14%)**
- **Village Road B- 1,08,275km paved 4912km(5%)**
- **Total: Rural Roads- 3,01,368km,**
- **11,83,440m bridge/culvert built till today**

Financing Rural Roads

After liberation Government starts financing Rural infrastructure (Roads bridges etc) & formulated Rural development strategy 1984.

Resources Mobilisation for Rural Roads

a) Government and Development partners are major contributor for Financing through LGED.

- In 2016-17, 86 RD Project running- total allocation BDT: 624.19 billion
- GOB share BDT: 360 billion (59%)
- Donor share (PA): 254.1 billion (41%)
- FY 2016-17 ADP allocation- BDT 83.81 billion

Resources Mobilisation for Rural Roads

b) Local Government Institutions

1) Union Parishad: Lowest tier of LGIs

- Resources from taxes,
- Portion of market, pond lease money,
- Block grant from Govt.
- FY 2016-17 BDT= 100 million.

2) Upazila Parishad: where all Govt agency has set up and provide service to people.

- Portion of market, pond lease money,

Resources Mobilisation for Rural Roads

- **Resources from taxes,**
 - Block grant from Govt.
 - **FY 2015-16 BDT 4300 million**
 - 60% is earmarked for Rural Roads Dev.&maint
- **Zila Parishad**
- Lease money from markets , Jetties, Ponds etc
- **Land transfer taxes ,presntly 2%**
- Block Grant from Govt.- FY 2015-16-BDT; 3700 million),
- **60% is earmarked for Rural Roads.**

Resources Mobilisation for Rural Roads

Public Private Partnership : Innovative initiatives under process or some are piloting. These are;

- Leasing Rural Roads for specific period
- Road pricing
- Channelling a portion of Fuel Taxes to LGED for Rural Roads
- Performance based Contracting (PBMC)- is piloting in a IDA project

Maintenance Fund for Rural Roads

Government Revenue allocation; Raised BDT 350 million in 1992 to BDT 10 billion FY 2016-17 which only 20% of Demand

- **Rural roads maintenance program funded by WFP**
- **Government safety program**
- **Govt. Investment project – a portion kept reserved for maintenance**
- **Backlog maintenance project funded by GOB & Donor etc.**

Financing Rural Roads

- **Bottom up Planning approaches followed**
- **Emphasis is given on local priorities or peoples demand**
- **Structured participatory approach followed in selecting, planning, designing and implementation of Roads, Markets, Ghats (Jetty) & SUR**
- **As such people/ beneficiaries participate by cost sharing from own fund.**

Gender Equity Strategy

- Provides guidance to ensure that men & women have equitable input in planning and management of LGED's project and men & women benefit equally from LGED's program
- **Centrally LGED takes a coordinating role to ensure a consistent approach**
- Urban, Rural and Water sector take both coordinating and operational role

Women Empowerment

- Participation in decision making
- **Develop themselves getting IGA training**
- 100,000 directly employed in transport infrastructure & maintenance work annually in LGED
- **More works/jobs creates indirectly**

Innovative Approaches

- **Adopting structured participatory approaches including sharing of costs.**
- **Human Resource Development by Basic Training and Intensive training programs.**
- **Carrying out Community Road Safety Programs on a Pilot Basis.**
- **Providing community facilities for the Indigenous People.**
- **Mainstreaming Gender Issues by engaging of destitute women in tree plantation and Caretaking Programs.**

Contribution of Roads in Economic Growth

- **Transport Plays vital role in enhancing Economic Growth Reducing Poverty.**
- **It Changes life styles & Social dignity, increases Human Dev Index.**
- **Road investment in Bangladesh has been pro-poor declined poverty incidence in society.**

Historical GDP Growth Change is in Bangladesh

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%

2015-2016—7.11%

2016-2017- 7-4%

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

(Source Bangladesh Planning Commission)

Present economic status/achievement in Bangladesh

Economic Survey-& Study reveals that

- Since independence GDP has tripled(2.75% in 1972 to 7.4% in 2016-2017)
- **Per capita Income US\$224- US\$1410 in 2016**
- Inflation Rate brought down to 8.9%-6.2%
- **Food production tripled 10 million MT in 1971 – 35 million MT presently**
- Population growth rate declined **from** 2.9% in 1974 to 1.4% in 2016
- **Enrollment is almost 100% ,retention rate is 80%**
- **Literacy rate increase 23% to 71.4%**
- Child mortality has fallen substantially(38 per 1000 live birth)

Present economic status/achievement in Bangladesh

Economic Survey-& Study reveals that

- Poverty Incidence reduced from 51% in 1995 to 25% in 2016.
- **Life expectancy increased to 70.6 yrs.**
- Gender Parity has achieved.
- **Electricity coverage enhanced 48% 72%**
- Country is on the track to become middle income country in 2030.
- **Improving mobility to enhance economic growth requires a combination of appropriate transport infrastructure and better and affordable service.**
- Stakeholder participation & demand lead activities will enhance sustainability of transport System.

Findings

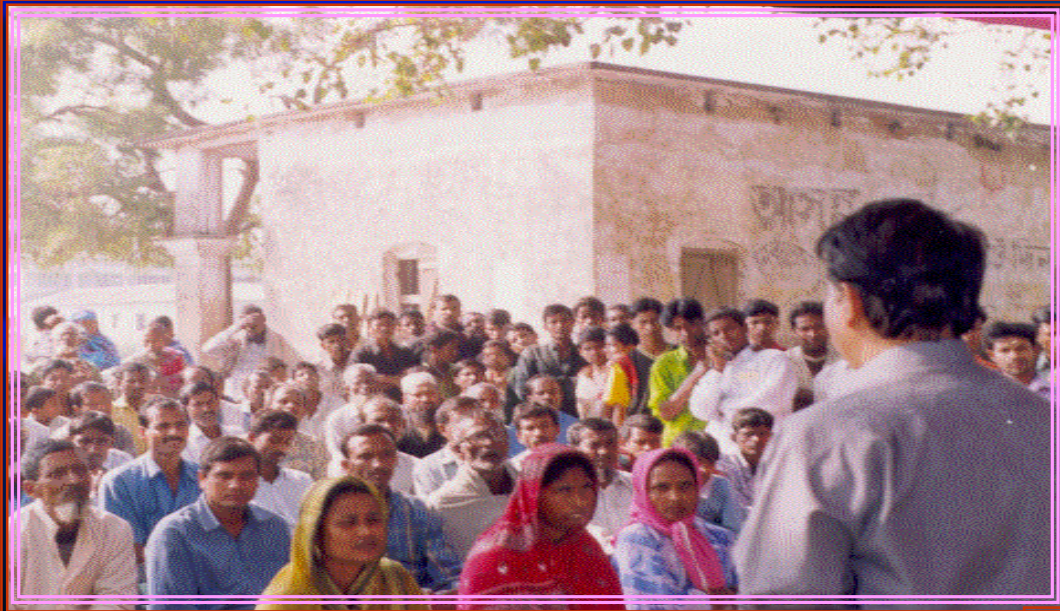
Rural Transport plays vital role in alleviating poverty of Rural Poor.

- Financing Rural roads yield significant contribution for economic growth of the country.
- **Stakeholder participation and demand lead activities enhance sustainability**
- Improving mobility facilitate to provide services to the people that increase Food production , decline population growth, increase literacy rate, decrease child mortality, Reduce Poverty incidence.

Purbadhala-Kapasia via Ghagra Road, Netrokona



Participatory Planning Sessions



Road Maintenance from GOB Revenue Budget



Conclusion

- **Let us sit together, think together, work together to reduce the poverty by establishing rural accessibility in an effective and efficient governance for achieving SDG's**



Thank you