



**Impact Evaluation Study  
Of  
Rural Development Project - 24: Greater Faridpur Rural  
Infrastructure Development Project (Employment  
generation and poverty alleviation project through  
participatory rural infrastructure development)**



*Carried out by*  
**Evaluation Sector**  
Implementation Monitoring and Evaluation Division (IMED)  
Ministry of Planning, Government of People's Republic of Bangladesh

*Conducted by*  
**Research Evaluation Associates for Development Ltd. (READ)**

**June 2013**

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(Employment generation and poverty alleviation  
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## Executive Summary

**Background:** The Government of Bangladesh prioritized development of roads, bridges/culverts and growth centers/markets as means to ensure development of agriculture leading to the overall socio-economic development of the country. Specifically, the assumption was that improvement of physical communication will strengthen marketing facilities, which will enable the farmers to earn fair prices through increased sale of agricultural products. The ultimate aim was to improve communication network, marketing facility for the rural poor in order to improve their quality of life. Rural Development Project-24: Greater Faridpur Rural Infrastructure Development Project was implemented to generate employment and alleviate poverty through participatory rural infrastructure development process.

### ➤ Project Profiles at a Glance

- **Name of the Project:** Rural Development Project-24 : Greater Faridpur Rural Infrastructure Development Project (Employment Generation and Poverty Alleviation Project through Participatory Rural Infrastructure Development)
- **Sponsoring/Administrative Ministry/Division:** Local Government Division, Ministry of Local Government, Rural Development & Co-operatives.
- **Executing Agency:** Local Government Engineering Department (LGED).
- **Location of the project:** Faridpur, Rajbari, Gopalganj, Madaripur & Shariatpur District.
- **Investment cost ( PCR)**

	(Tk. In Lakh)	
	Original	Latest Revised
(a) Total	20000.00	49948.67
(b) Taka	5000.00	28918. 53 (GOB 11962.18 + DRGA 16956.35)
(c) Foreign Currency	-	-
(d) Project Aid	15000.00	21030.14
(e) RPA	15000.00	17754.90

**Project Implementation Period ( PCR ) : July 1998 – June 2009)**

### Objectives of the Project:

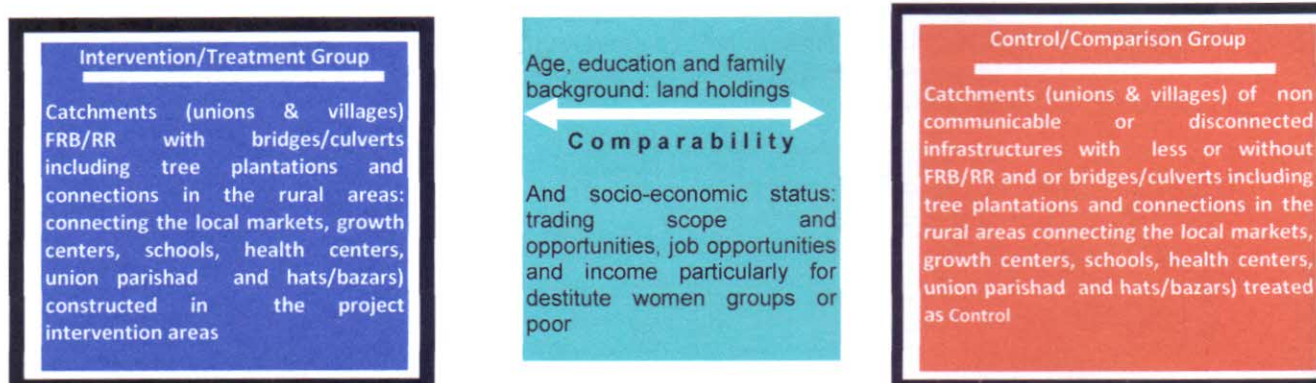
- To build rural infrastructures i.e. Upazila road, Union road, Bridge/culvert on Upazila road and Union road, which will improve rural communication network, improve economic condition of the landless and marginal farmers through agricultural production and expand rural trade; it will also improve overall economic activities of the project area.
- To facilitate marketing of agricultural production and ensure fair price of the agricultural product through construction and upgrading physical facilities of growth centers/important markets. Better marketing facility will ensure the farmers to produce more crops.
- To create short term and long term employment opportunities for the rural poor through construction and maintenance of rural infrastructure.
- To create employment opportunities for destitute women and improve the environmental condition through tree plantation by the side of the Upazila road and important union roads.
- To rehabilitate flood damaged infrastructure in the project area, which has damaged in the floods of 2004 and 2007.



## Objectives of the Current Assignment

- I. To review the implementation status of the project in respect of financial aspect and major components: Upazila and union roads, bridge/culverts, flood-damage infrastructures and improvement status of growth center/markets/tree plantation.
- II. To review the rationale of the project in respect of concept, design, location and time.
- III. To assess impact of the project activities on employment creation of especially destitute women, self employment, agriculture production (irrigation, drainage, flood control) and related commercial activities, environmental improvement, overall socio-economic benefits and poverty reduction of the community of the project areas.
- IV. To identify the strengths, weaknesses and threats towards project activities.
- V. To recommend appropriate measures for more improved management of project activities and its sustainability and replication in future.

**Study Methodology:** The study was conducted in the five districts of greater Faridpur: Faridpur, Madaripur, Rajbari, Gopalganj and Shariatpur administering both quantitative household level survey and in-depth qualitative investigations. To assess the net outcome of the project, the principal method adapted was to compare the findings of the survey between the Intervention and the Control areas; the diagram below illustrates the same.



In addition, in the absence of availability of baseline data; the questionnaires and all other data collection instruments (where applicable), either at the household or at the community/institution levels, inquired the status at both pre (1998 or prior) and post project (2009 and current) periods.

**Summary Sample:** The total sample for the household survey was 4313: (80%) males and 255 females (20%); and the distribution by districts and by Intervention and Control (50% of Intervention) areas is shown in the table below:

Assessment areas	Faridpur	Madaripur	Rajbari	Gopalganj	Sariatpur	Total
Intervention	575	575	575	575	575	2875
Control	288	287	287	288	288	1438
Total	863	862	862	863	863	4313

**Sample of infrastructures for physical verifications:** The primary method of data collection was through on the spot physical verifications of the infrastructures constructed in the Intervention/Project areas 27 Upazilas of 5 districts of Greater Faridpur. The proportion of the sample infrastructures physically verified (as in ToR) are as follows: Upazila roads- 10%: 9 nos (57.6 km); Union roads- 10%: 21.5 km; Construction works of bridge and culverts on upazila and union road (in meter) — 5%: 425.18 m; Improvement works of growth centers — 10-15 nos: 15 nos.; Construction works of Union Parishad Complex — 5 nos.: 5 nos.; Tree Plantation works — 50 km: 50 km; Earth maintenance works on roads and bridges—200 km: 200 km; Works on flood rehabilitation 2004 and 2007- 10 %: Flood Rehabilitation Roads (in km): 14 km and Flood Rehabilitated Bridge/Culvert (in m): 22.4 m (10%).



**Data Collection from field:** Data for the study were collected from March to April 2013. The statuses of data collection of the study are given below.

- Reviewed PP, PCR and Evaluation reports
- Completed 100% of the Quantitative household level survey
- Physically verified 100% of the sample infrastructures as per ToR
- Conducted Intensive interviews with the concerned project personnel and allied officials: 120 (97%)
- Conducted Focus Group Discussions (FGDs): one per union: 20 (100%)
- Conducted a local level workshop in Pangsha Upazila, Rajbari on 12 March 2013; and
- Collected union profiles

### **Assessment of Socio-economic Impact of the Project (Household Findings)**

**Sample Characteristics:** Mean age of the male respondents is 43 years, both in the intervention and in the control areas, while that of the female respondents, it is 38 years in the Intervention and 36 years in the Control areas. In the project area, the literacy rate is 61%, while in the control area, it is 51%, slightly lower than the national literacy rate, which is about 58%. Female respondents in both the intervention and in the control areas are currently married, while 96% of the males both in the intervention and in the control areas are currently married. Majority of the respondents are involved in farming; while other occupations include; business, service, vendor, grocers, rickshaw pullers, micro and minibus drivers, helpers, mill workers etc. Mean monthly family income estimated by the male respondents in the project areas is higher additionally by 58% over that of the period prior to project implementation: pre project period: Tk. 7945 and post project period: Tk. 12587. On the other hand, the post project period mean monthly family income also estimated by the male respondents in the control area is Tk. 8881, which is less than project area by 29%.

**Impact of Road, Bridge/Culverts :** About two third (64%) of the female respondents have been benefiting from the constructed road, culvert and bridges road for carrying their agro products such as paddy, wheat, corn, jute, sugarcane, oil seeds, pulses, vegetables, onion etc. Due to improved communication network, the local people are getting benefits particularly in the following context: Speedy transportation and communication network; Increased volumes of trade and commerce in terms of transaction and trading of goods and services; Increased agricultural production; Increased high yield variety of crop productions; Increased the price/value of agro products; Increased the opportunity of educational attainment of children; Enhanced the activities of different institutions/sangho/agency/ NGO/health centers. Transportation costs have decreased by 43% in the intervention area, while 11% in the control areas. In the Intervention areas, average time to travel to the markets has reduced by 37 minutes (from 65 to 28), while the average costs for traveling have reduced by Tk.10 (from 55 to 45). On the other hand, in the control areas, average time spent is about 66 minutes, while the average costs incurred is about Tk.75.

**Impact on Agriculture Production:** The land used pattern has changed after project intervention. The single (14.7 %) and double (5.6%) crop cultivation reduced and triple (15.3%) and quadruple or more crops (35%) cultivation has increased after implementation of project. The average cropping intensity is increased from 168 % in the pre project condition to 206.2% in the project areas. 92% opined that after construction of roads, bridges crop production has significantly increased and 80% of the control areas respondents expressed similar opinion. Now cultivated Hybrid, HYV and LIV instead of local variety of crops after project. The farmers were able to harvested 2- 29 metric tons additional yield from their land. Overall cropping intensity has changed about 38.2% after project intervention. Farmers of project areas adopted modern production technologies and are growing multiple crops instead of single crop.



**Impact on related commercial activities:** Without local market facilities cultivators cannot get appropriate price for their different produced agricultural products. Majority respondents (92%) opined that the construction of road, bridge/culverts helped the rural people with excellent marketing net work. Among the types of development of market facilities are: smooth marketing environment in the locality (92%), reduced the time for marketing agro products in the locality (67%), the distance of market/bazaar has shortened due to speedy communication network (64%), producers are able to sell their goods in the local markets in any time (39%), created better opportunity for wholesaler as there is an opportunity for trading the collected good (28%) and opportunity has created for local people to do the middleman ship (Faria) in buying and selling of goods(25%).

**Expansion of industries in the project areas:** About 66% respondents expressed that no industries in their areas before project and only 7% respondents expressed similar opinion after implementation of the project. There are 3 types of agro based industry sector such as poultry farm, rice mill and cottage industries before project intervention. The highest expansion occurred after project in poultry farm and rice mill, agro seed shop and cow/goat rearing and oil mill.

**Employment opportunities created for destitute women:** 92% males and 93% females respondent said that opportunities have increased for women folk in the context of improved communication than before. These include, easy to reach to the nearest bazaar, girl students easily can go to educational institution (school/collage) and health centers, Women are now engaged in various income earning activities, local poor and vulnerable women are able to earn from tree plantation. They are also have the environment to go to market for selling their various products and shopping the daily essentials. Village women have better scope of mobility and socialization. Helped to get involved the destitute women in management and caring trees and plants; created job opportunities for female folk especially for destitute women out of sale proceeds of tree and tree products.

Socio-economic condition of female respondents' has improved due to construction of roads and bridges. Socio economic developments, like social emancipation (mobility), educational attainment of children, getting better health care services increased leading to improvements of the living standards and empowerment of the women. In contrast, the women in the control areas are relatively disadvantaged in achieving the mentioned socio-economic statuses.

### **Assessment of the Implementation status of the project**

**From PCR:** The implementation period of the project was originally scheduled from July 1998 to June 2001. Subsequently the project period was revised and extended up to June 2009. Overall physical progress of the project was 100% and financial targets achieved were 100%. The project provided better road communication in the rural areas through construction of roads and bridge/culverts on UZR (FRB) & Union roads. It has enhanced the marketing facilities of agricultural products through development of growth center. Construction of Union Parishad complex has further strengthened the organizational and administrative capacity of Union Parishad to a great extent. Thus, the project provided direct benefit to the rural people.

### **Findings of Physical Observation**

The study team observed and physically verified construction of different types of infrastructures. The observations specifically verified the implementation status, and it also investigated the status of current repairs and maintenance and the level of use and its effectiveness.



### Summary findings of observed infrastructures

Infrastructures	Project (PCR) achievement	Sample observed	Status observed	Types of Problems
Upazila roads	Target was 576.53 km and actual achievement is 576.53 km (100%)	Sample observed 57.6 km on 9 Upazila roads	<p>Out of observed 61.332 km on 9 Upazila roads:</p> <ul style="list-style-type: none"> <li>3 roads: 14.95 km (24%) were found fully operational with no problems</li> <li>4 roads: 28.927 km (47%) are operational but with some minor problems</li> </ul> <p>Rest 2 roads: 17.452 km (29%) are operational but with major defects</p>	<ul style="list-style-type: none"> <li>Minor problems are pot hole found and carpeting damage in few places in the road. The vehicle can move but will create problem in future.</li> <li>Major problems are the vehicle could not run freely due to serious damage of carpeting; settle down of pavement, removal of earth from the shoulder, problems in approaches and pot hole in road surface.</li> </ul>
Union Rural Roads	Target was 215 km and actual achievement is 215km 100%)	Sample observed 21.5 km	<p>Out of observed 25.24km on 13 Union rural roads:</p> <ul style="list-style-type: none"> <li>3 roads: 3.6 km (14%) were found fully operational with no problems</li> <li>7 roads: 13.405 km (53%) are operational but with some minor problems</li> <li>3 roads: 8.23 km (33%) are operational but with major defects</li> </ul>	<ul style="list-style-type: none"> <li>Minor problems are: Damage of carpeting in few places, crack and pot hole on road surface. The vehicle can move but in future will create problem due to further deteriorate of the road.</li> <li>Major problems are: Damage of carpeting in many places, settle down of pavement, removal of earth from shoulder, big pot hole on road surface. The vehicle cannot run freely and immediate repair needed.</li> <li>The local people also mentioned that the kutchra part of the developed rural road become unusable during rainy season due to serious damage.</li> </ul>
Growth Centers	Target was 62 growth centers development and actual achievement is 100%	Sample observed 15 nos. growth centers.	<p><b>Growth Centers:</b> Out of observed 15 growth centers:</p> <ul style="list-style-type: none"> <li>1 no. is operating with good condition.</li> <li>14 nos. are operating with some problems</li> </ul> <p>Use of Growth Centers and its benefits: Additional increase in terms of gross income from the market annually is 292% during post implementation period over the previous period;</p> <ul style="list-style-type: none"> <li>Market days commenced improved from 51 days at pre project period to 74 days during post project period; an additional improvement of 45%;</li> <li>Average number of persons visiting the market increased additionally by 40%; and</li> <li>Sellable items from the market increased</li> </ul> <p>The obvious impact of such an increase in the volume of trade and commerce due to operational of a rural market would be on increase of wage earnings and employment, particularly for poor.</p>	<ul style="list-style-type: none"> <li>✓ Inadequate drainage system (6);</li> <li>✓ Problem of drinking water (4);</li> <li>✓ Lack of cleanliness of the market area (12);</li> <li>✓ Drainage Problem/No drainage system (2);</li> <li>✓ Water logging due to heavy rain fall as the drainage work not adequate (1);</li> <li>✓ Repair of toilet (2)</li> <li>✓ Somewhere plaster of floor of sheds are damaged (1);</li> <li>✓ Lack of garbage pit of GC area (5)</li> <li>✓ Repair of garbage pit (5)</li> <li>✓ Construction of Management committee office needed (1)</li> </ul>
Union Parishad Complex	Target was 20 UPC construction and actual achievement is 20 UPC	Sample observed 5 UPC	<p>Observed 5 UPCs: of these</p> <ul style="list-style-type: none"> <li>4 UPCs need no repair; 1 UPC need major repair</li> <li>4 UPCs completed on time</li> <li>2 UPCs constructed within the budgeted amount</li> </ul>	<ul style="list-style-type: none"> <li>✓ Painting is needed (1) UPC</li> <li>✓ Maintenance needed (1)</li> </ul>



Infrastructures	Project (PCR) achievement	Sample observed	Status observed	Types of Problems
Bridge/culverts on Upazila and Union rural roads	Target was 8503.61m of bridges/culverts on Upazila and Union rural roads and actual achievement is 8503.61m: 100% achievement	Sample observed 650.90m bridge/culverts on 12 bridge/culverts bridge/culverts (7.7%)	<ul style="list-style-type: none"> <li>Bridge/culverts observed being used</li> <li>Pier, abutments, girders, top slab, railing, retaining and wing wall of bridges/culverts in good condition.</li> </ul>	<ul style="list-style-type: none"> <li>Approach road of remaining bridge/ culverts: not good</li> <li>Approach road on both sides partly damaged; and side slopes not smooth; in a few places pot holes on the roads exist, which creates problems for smooth movement of vehicles.</li> <li>Clear opening flow of water not sufficient</li> </ul>
Tree plantation on Upazila and Union roads	Target was tree plantation on 495 km of Upazila and Union roads and actual achievement is 495 km (100%)	Sample observed 50 km tree plantation	<ul style="list-style-type: none"> <li>On 10 roads covering 50.94 km, Mehogoni, Akashmoni, Nim, Shishu, Jackfruit, Mango, Raintree planted</li> </ul>	<ul style="list-style-type: none"> <li>As per observation on an average 38.7% road side trees are surviving</li> </ul>
Flood rehabilitation 2004 and 2007 (Roads)	Target was 140 km rehabilitation of flood damaged road on Upazila & Union roads and actual achievement is 140km (100%)	Sample observed flood rehabilitation 14km roads	<p>Out of observed 16.06 km on 12 flood rehabilitated roads :</p> <ul style="list-style-type: none"> <li>1 roads: 0.4 km (2.5 %) were found no problem and fully operational</li> <li>10 roads: 14.5 km (90.6%) are operational but with some minor problems</li> <li>1 road (Dhanjil bazarto naril rail gate road): 1.1 km (6.9%) found operational but with major problems.</li> </ul>	<ul style="list-style-type: none"> <li>Minor problems are: formation of pot holes, damage of carpeting in few places and cracks on road surface.</li> <li>Major problems are: Carpeting broken in many places, pot hole developed in most of the surface, road sides broken in some places.</li> </ul>
Flood rehabilitation 2004 and 2007 (bridges/culverts)	Target was 224 m of bridges/culverts	Sample observed 32 m bridge on 2 Upazila Roads .	<ul style="list-style-type: none"> <li>Observed bridge/culverts were found operational</li> <li>All the component of the bridge/culverts i.e. pier, abutments, girders, top slab, railing, retaining and wing wall are in good condition</li> </ul>	<ul style="list-style-type: none"> <li>Condition of approach roads of 1 bridge/culvert is good</li> <li>Approach of the one bridge is not in good condition one side slopes are not smooth, one side approach road are partly damaged and in few places, pot holes have formed which creating problems to smooth movement of vehicles and railing is partly damaged.</li> <li>Others Bridge is good but some pot holes have formed in the connecting road.</li> </ul>
Earth maintenance works on roads and bridge,	Target was 4070km earth maintenance works construction and actual achievement is 4070km (100%)	Sample observed earth maintenance works on roads and bridges 200-km	<ul style="list-style-type: none"> <li>Road maintenance work was executed on the basis of requirement of site condition. Routine and periodic were ok executed. Road maintenance work was executed in several ways such as labour contracting</li> <li>System (LCS), open tendering and by engaging local destitute women on basis of requirement. After completion of project now maintenance was executing through other project or by Gov maintenance fund.</li> </ul>	<ul style="list-style-type: none"> <li>Fund allocation for maintenance some times was not sufficient for that reason emergency maintenance was difficult in time.</li> </ul>

**Findings of Intensive Interviews:** Out of 20 LGED officials, 16 (80%) affirmed that supervision and monitoring of project Implementation was satisfactory, while one official ignored such function and 3 did not answer. Fourteen (70%) officials claimed that the



assigned tasks were completed as per target, while 5 officials opined that it was not as per target and one did not comment.

**Findings of 20 FGDs with community leaders (160 participants--males & females) in the project area:** Community leaders included farmers, businessmen, teachers, religious leaders, and service holders. 13 FGD participants mentioned that the construction work of roads and bridges were completed in the year 2002 and 2003. On the other hand, participants of 7 FGDs said that the roads and bridges were completed in the years of 2004-2005 and in 2006 - 2009.

**Perception of the community on the benefits accrued due to construction of road, bridges and culverts , GC , UPC ,Tree plantation:** Improved communication network have helped mostly the disadvantaged people, especially the women, elders, and disabled to obtain health care services from local health complex and centers. Local agricultural producers could transport their products to the markets. Local people of remote villages are now able to reach the district/upazila head quarters easily. Small traders are benefited by promoting their business at the grass root level. Farmers and producers are able to get fair price of their agricultural products. Students can easily reach their institutions. Agricultural products, like vegetables, fish, meat, paddy, jute, rice, pulse, wheat, mustard, duck-chicken, potato, onion, chili, pine apple, banana, turmeric, ginger, etc. are easily marketed. FGD members also stated that road side tree plantations undertaken through LGD initiatives also contributed positively to the growth of rural economy through participation of the poor and vulnerable women who are entrusted with the responsibilities of management of the plantations. Road side tree plantations contributed to social forestry and hence improved environmental balance.

**Findings of Local Level Workshop:** The participants opined that due to the implementation of the project, the local people have benefited to a great extent. Moreover, the overall quality of the work was good and satisfactory. Some participants informed that the poor people and the women of the locality also benefited as they joined as laborers during the construction works, tree plantation and earth work. But some of the participants opined that after construction, a few roads and bridges have damaged due to frequent movements of overloaded vehicles. But no repair work was carried out since its construction.

#### **Strengths of the project**

- The project facilitated for creating easy and smooth communication network, i.e., the physical communications network has improved and travel time between places has shortened;
- Local people enjoy improved income and employment opportunities;
- Local people travel more and can explore jobs and businesses;
- People obtain various services from UPCs, like birth, death, citizenship certificates, including that of village courts;
- Local women, especially the poor, vulnerable and destitute are engaged as laborers in the manufacturing units;
- Social network created around growth centers and markets impacted on increased interactions men, women, elderly, disabled and children: People increasingly participate in various social festivals and ceremonies.
- The project has helped to mitigate the water logging situation;
- Improved communication ensures saving of time, energy and money;
- People invest capital in social services, like clinics and schools creating opportunities;
- Increased mobility of the women has expanded their income earning opportunities; and
- Price of lands have soared.

#### **Weaknesses of the project**

- Repairs and maintenance works were suffered due to shortage of funds;
- Increased movements of transports caused dust and noise pollutions;
- Delayed in appointment of consultancy firm due to procedural formalities in the ministry as well as in JBIC hampered to fulfill timely completion of the target & objectives of the project;
- The project lacks its Baseline information;
- The maintenance work was supposed to be at the disposal of upazila parishad and about



- 25% maintenance work was not done timely due to the negligence of upazila parishad;
- Project Completion time and cost was increased due to delay of signing of agreement. Moreover, flood occurred in 2004 and 2007 delayed the work and that also increased the project cost;
- Responsibility for the maintenance of Union Complex is not yet finalized ;
- Growth Centre is under land ministry but by maintenance by upazila. So, sustainable maintenance is hampering;
- Policy gap for maintenance of local market some times creating problem; and
- Allocation fund for Maintenance is not satisfactory

### **Recommendations for Sustainability**

- Without timely disbursement of fund a project should not be started;
- Time over-run and cost over-run that caused delaying the project implementation must be addressed;
- In every development project there should have a provision for substantial maintenance cost as the development partners like World Bank has agreed to provide such funds
- Proper and regular repair and maintenances of the roads, bridges/culverts need to be ensured; local community may be encouraged to get involved in the maintenance work in this regard;
- Some part of the approach and feeder roads need to be widened for better communication and transportation;
- The project should have its Baseline information so that a comparison can be made before and after situation of the project in the context of socio-economic, demographic, infrastructures and other related development;
- Effective monitoring systems are needed to ensure timely repair and maintenance of infrastructures in order enhance effective use of these by the community;
- Restrain movements of heavy vehicles to ensure durability of the roads and bridges;
- Women's corner in all growth centers and all markets should be established to empower the rural poor women by increasing the activities and involvement of women;
- The earmarked women's toilets are located outside the market area often create insecurity for women investors. Therefore it is suggested that these toilets must be attached in the women's corner of the growth centre/market. Moreover there should have the provision of one mother's room for feeding the infants and to take a nap and change their dresses and able to manage the menstruations;
- Arrangement for adequate provision of fund allocation from union council for maintenance work could be made;
- Policy for the maintenance of Union Complex and growth centers are required to finalized ;
- Ensure proper management and maintenance of the growth centers, Tube wells and toilets by the Bazaar committee;
- Strengthen social mobilization campaigns encouraging increased tree plantations and their maintenance and protection for the benefits of the poor and vulnerable women; and
- Prior to tree plantations, community needs to be oriented by LGED about their responsibilities on maintenance and protection.

**Conclusion:** The farmers within project areas are now more interested to produce their agro products in bulk as the improved communication and transportation network have ensured about fair price of their products through expanded marketing opportunities. Income and employment opportunities for the local people have also increased. Even the village people can explore new jobs and businesses in distant areas. Local women especially the poor, vulnerable and destitute are able to engage as labors in various manufacturing units and they are gradually becoming self reliant.

Road communication has saved local people's valuable time, energy and money. People are now enjoying better standards and quality life. The project has generated direct employment opportunities for the rural poor. Community groups may be organized for ensuring repair and maintenance of constructed project infrastructures. Tree plantation schemes on both sides of the roads may be further strengthened through increased participation of landless poor and destitute woman.