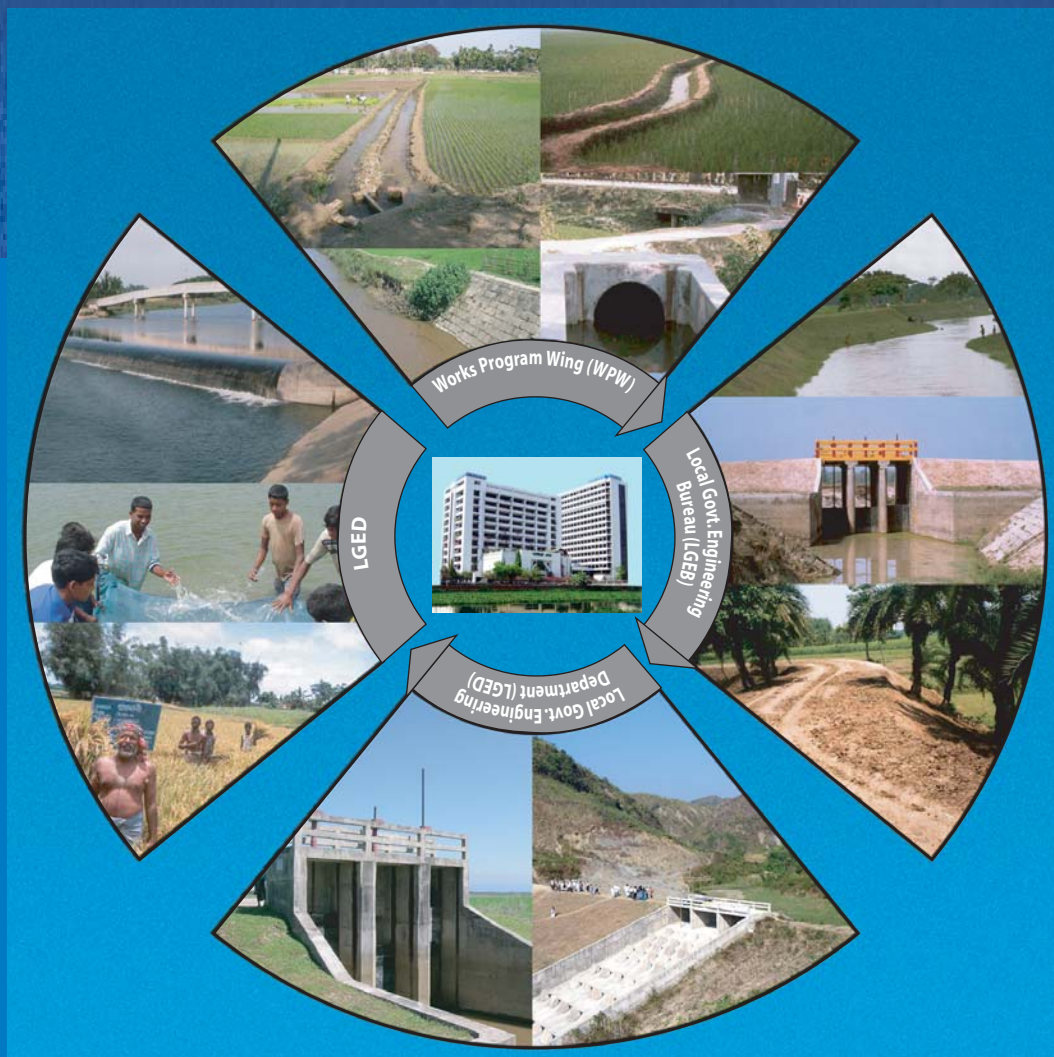




Ministry of Local Government, Rural Development & Co-operatives
Local Government Engineering Department

Activities at a glance

Small Scale Water Resources Development Intervention by LGED



L G E D

Small Scale Water Resources Development Interventions by LGED

From time immemorial, water resources have been playing an imperative role in flourishing of civilization. All living bodies including human beings have been using water as one of the unavoidable natural resources in their day to day life. Day by day the use of water has been diversified beyond the boundary of agriculture towards industries resulting in a substantial contribution to the economic development universally. Like most of the countries of the world, water resources have been performing as a leading medium in the economic development of Bangladesh, although it is an unfortunate fact that it faces frequent natural calamities like flood, draught etc. basically due to its geographical location. As such, interventions specially in surface water management have become an unavoidable reality and the management activities have been incepted through Thana Irrigation Project (TIP) since 1960s in Bangladesh. LGEDs involvement was as service provider within a limited scope under the then "Works Program" wing of Thana Training and Development Center (TTDC). LGEDs water management activities has been widespread withing the framework of the later version of TIP, namely Integrated Rural Works Program (IRWP) in 1980s under "Works Program" and Infrastructure Development Program (IDP) in late 1980s under LGEB. After reformation as LGED it has been implementing Water Resources Development activities as a component of development projects till 1995-96, which in succession has been uplifted to sectoral program under water sector that started its journey through Small Scale Water Resources Development Sector Project (SSWRDSP). Meanwhile, Government has made major reforms in water sector including the formulation of National Water Policy (NMPo) in 1999, National Water Management Plan (NWMP) in 2001, the Water Law 2013 and the Guideline for Participatory Water Management (GPWM). The NWPo mandates "The Local Government will implement FCDI projects having command area of 1,000 hectare or less". LGED, as the technical support providing agency to Local Government, prepares local water management plan and implements small scale water resources development projects in conformity with NWPo and NWMP with participation of local stakeholders. To manage water resources in a sustainable manner LGED has established a new unit, the 'Integrated Water Resources Management Unit (IWRMU).

Integrated Water Resources Management Unit (IWRMU)

The Integrated Water Resources Management Unit (IWRMU) of LGED, headed by an Additional Chief Engineer, came into being in 2003. The general mandate of IWRMU is to guide and steer LGED's activities in the water sector with specific responsibility to assist in enunciation of policies, formulation of strategies and plans, preparation of new projects, inter-agency coordination with line agencies, undertake studies and provide continued support to the subprojects of completed Projects.

LGED's SSWRD interventions objectives, activities and implementation process are presented below:

Objective

The overall goal is to support the Government's poverty reduction effort by increasing sustainable agriculture and fisheries production. The main objective is to develop sustainable stakeholder-driven small scale water resources management systems with special attention to the poorer section of the population.

Activities

SSWRD activities include (i) Constructing water management infrastructure and establishing sustainable management systems; (ii) Strengthening operation and maintenance by institutionalizing beneficiaries participation; (iii) Strengthening Government institutions and facilities by establishing sustainable water management systems and (iv) Enhancing the access of the landless poor in the subproject areas to employment opportunities and to public natural resources.



LGED Head Quarters

Subproject Implementation Process

Subproject implementation is participatory in nature and divided into four distinct stages under two parallel processes: "Institutional" involving software elements and "Technical" involving hardware elements. The stages of the subproject development process are as follows:

Stage 1: Identification and Feasibility

Driven by the local demand to address specific surface water management needs, the Union Parishad initiates a proposal to the Upazila Development Coordination Committee (UDCC). With approval from UDCC, the concerned Upazila Engineer prepares a brief proposal in prescribed format and forwards to the concerned Project Management Office (PMO) based at LGED Headquarter through Executive Engineer in the district level for prescreening. A team comprising multidisciplinary professionals carries out field reconnaissance, followed by Participatory Rural Appraisal (PRA). A Planning Concept Report (PCR) is prepared and presented before the District Level Inter Agency Project Evaluation Committee (DLIAPEC) for reviewing and approval of the proposed subproject. Subproject proposals reviewed and approved by the District Level Inter Agency Project Evaluation Committee is then assigned to consulting firms for feasibility study.

Stage 2: Design and Institution Building

Following the approval of DLIAPEC, engineering design and formation of Water Management Cooperative Association (WMCA), an association of beneficiaries within command area formalized through registration with Department of Cooperatives, are done along with motivational awareness campaign among stakeholders. Draft designs are prepared,

discussed with the stakeholders in a meeting in the field and approved by them. The WMCA, Union Parishad and LGED Executive Engineer sign a formal tripartite implementation agreement before tendering for civil works and contracting out Labour Contracting Societies (LCS) for earthwork. Before signing the implementation agreement, the WMCA must fulfill some prerequisites including: i) enrollment of at least 70% of the direct beneficiary households in the WMCA ii) collection of full O&M funds @ 3% on earthwork and 1.5% on the contract cost of construction works from the members of WMCA and deposit in a joint account operated by WMCA and LGED iii) project affected persons are consulted, environmental mitigation and resettlement plans, where required, are prepared and approved.

Stage 3: Construction and First Year O&M

Civil works are tendered to contractors and earthworks awarded to LCS groups comprised of local landless, disadvantaged males and females. The WMCA monitors construction through a 7-member committee trained on construction monitoring including one man and one woman from the Union Parishad. The members of this committee later form the O&M sub-committee. Training is provided to sub-committee members so that they can undertake O&M of completed infrastructure. The O&M sub-committee and LGED observe the adequacy of the infrastructure during first year O&M and if satisfactory the subproject is handed over to the WMCA through a formal lease agreement with LGED.

Stage 4: Sustainable Operation and Maintenance

This stage starts after subproject hand over and continues throughout its lifetime. Continuous monitoring and support is provided by the IWRM Unit of LGED and other partner agencies. The WMCA and the O&M committee are provided regular trainings so that they are able to carry out O&M of the subproject. The WMCA continues to prepare O&M plans, undertakes routine maintenance works and collects O&M fees from direct beneficiaries in proportion to their land area benefited by the subproject.

Completed and ongoing Small Scale Water Resources Projects

Small Scale Water Resources Development Sector Project at Union and Upazila Level (1995-2002)

The project covered 37 districts in the western half of Bangladesh. The Project cost was US\$ 58 million funded by ADB, GoN, IFAD, GoB and beneficiaries. 280 subprojects were completed including construction of 613 hydraulic structures, re-sectioning 945 km of embankments and re-excavation of 1,162 km of khals and canals. The Project improved agriculture of about 164,900ha of cultivated land and benefitted 142,500 farm households. Earthworks of 21 millions cubic meters created temporary employment of about 8.38 million person days. Incremental production recorded in 2005 was 242,371 tons of cereal, 158,900 tons of non cereals and 2,072 tons of fish.

Second Small Scale Water Resources Development Sector Project (2002-2010)

The Second Small Scale Water Resources Development Sector Project covered the whole country except three hill districts. The Project cost was US\$ 78 million, funded by ADB, GON, GOB and beneficiaries. The Project implemented 300 small scale water resources management subprojects which included construction of 771 hydraulic structures, re-sectioning 369.6 km of embankments and re-excavation 1,210 km of khals and canals. During construction, the earthwork alone generated 3.7 million person-days of employment that moved about 9.7 million cubic meters of earthworks. A study on 128 subprojects in June 2008 revealed that the annual incremental production was around 78,943 metric tons of cereals, 38,358 metric tons of non-cereals and 775 metric tons of fish.

Small Scale Water Resources Development Project in Greater Mymensing, Sylhet & Faridpur Areas (2007-2015)

Built on the achievement of the 1st and 2nd phase of SSWRDS Projects the JICA has been inspired to financially assist the Small Scale Water Resources Development Project in Greater Mymensingh, Sylhet and Faridpur districts. The Project aims at implementing 235-250 subprojects at a cost of BDT 5575 million. It is expected that 130,000 ha of agricultural land and 150,000 farm households will benefit. An increase of 185,000 metric tons of cereals, 145,000 metric tons of non-cereals, 10,000 metric tons fish and 6.5 million person - month employment generation is expected through the Project's implementation.



Subproject Location, PSSWRSP

Participatory Small Scale Water Resources Sector Project (2010-2017)

The ADB, IFAD, GoB and beneficiaries funded Participatory Small Scale Water Resources Sector Project was started in January 2010 with the target of implementing 270 new subprojects and 150 enhancement subprojects to be selected from among 580 subprojects implemented in the 1st and 2nd phase of SSWRDS Projects. The Project cost is US\$119.8 million. Out of which ADB is providing USD 55 million (Loan No. 2542 - BAN (SF) as loan and IFAD is providing USD 32 million (Loan No. 786 - BD and 808 - BD) as loan. It is estimated that a total area of 230,000 ha. will be benefited and an increased cereal production from 561,995 metric tons to 743,347 metric tons and non-cereal production from 285,587 metric tons to 417,161 metric tons may be achieved at subproject sites through the Project implementation.

Technical Assistance Project to Enhance Capacity Development of IWRMU

A Technical Assistance Project titled "Capacity Development Project for Participatory Water Resources Management Through Integrated Rural Development" in order to strengthen the capacity of IWRMU, jointly financed by the Government of Bangladesh and Japan International Cooperation Agency (JICA) is on going. It has been expected that the capacity of IWRM unit and the stakeholders will be improved in subproject planning, design and operation and maintenance activities through implementation of the JICA Technical Assistance (TA) Project.

SMALL SCALE WATER RESOURCES SUBPROJECT DEVELOPMENT PROCESS

