Case Study of C&P in a Small-Scale Water Resources Project

CASE STUDY QUICK FACTS

Project Name: Second Small-Scale Water Resources Development Sector Project in Bangladesh
Loan Amount: $34 million
Start Date of Implementation: June 2002
Expected Completion Date: June 2009
Current Status: 65% of project complete as of March 2007
Likely Completion Date: on schedule
Implementing Agency: Local Government Engineering Department (LGED) under the Ministry of Local Government, Rural Development and Cooperatives
ADB Project Staff and Consultants:
Past: Kenichi Yokoyama
Present: Zahir Uddin Ahmad
Rokeya Khatun
Documentation Available:

- Report and Recommendation of the President on a Proposed Loan to the People's Republic of Bangladesh for the Second Small-Scale Water Resources Development Sector Project
- Aide Memoire of the Mid-Term Review Mission 2005
- Small-Scale Water Resources Development Sector Case Study
- Gender Strategy
- Gender Strategy Matrix
- PAM, May 2002, Appendix 6, Detailed Implementation Arrangements and Capacity Building Plan

Subsectors Involved: Agriculture, Fisheries
Levels of C&P: Information sharing, consultation, collaborative decision-making, empowerment

Rural Water Needs In Bangladesh

The magnitude of the Second Small Scale Water Resources Development Sector Project in Bangladesh is an indication of just how badly needed water resource management is for rural life in this country. With the exception of the three districts of the semi-autonomous region of Chittagong Hill Tracts, this project covers 61 out of the country's 64 districts. It is here, in these rural areas where 90% of the country's poor live.

Agriculture and rural development are critical elements of the Government's poverty reduction strategy. Agriculture subsistence supports the vast majority of the population, while fishery is the main source of income and constitutes 60% of the animal protein intake by the poorest segment.

In Bangladesh, there is often an abundance of water. The challenge is management by

1. keeping it out of the agricultural areas (flood management)
2. getting the excess water out of the agricultural area (drainage), and
3. providing irrigation in the dry season, when water is scarce.

Project Background

The Second Small-Scale Water Resources Development Sector Project is a followup to an earlier project that helped prepare two important policy frameworks: the National Water Policy 1999 and Guidelines for Participating Water Management 2000. Both of these policies emphasized decentralization of water management and stringent stakeholder consultation, particularly by women. These policies provided the rationale for the demand-driven, bottom up approach of the current project.

The two main project objectives is poverty alleviation through livelihood improvement and social development. The three main components of the project are:

1. **Beneficiary participation** by assisting in organizing beneficiaries into Water Management Cooperative Associations (WMCAs) as a vehicle for participating in the selection, design, implementation and O&M of subprojects
2. **Development of small scale water control systems** through subprojects[1] with appropriate agricultural extension, fisheries development and environmental monitoring
3. **Institutional strengthening** of the executing agency, the Local Government Engineering Department, to be able to provide technical assistance to national, district and local levels for small scale water resource development.

This project did not include an explicit gender component. Instead, it integrated gender interventions under each component and project stage. Water projects cannot be undertaken without the *strategic* involvement of women, considering they are an important user, as they participate in agricultural production, particularly during the harvest and post-harvest activities. Hearing their voices increases the project's probability of success. During the project's implementation, a gender specialist was

[1] Subprojects have involved rehabilitation and construction of embankment and water control structures, re-excavation of drainage channels, developing the water retention capacity of canals, bells, borrow pits by re-excavation, improving existing irrigation systems and expanding irrigation command areas.

recruited to develop a detailed gender strategy and implementation plan, which involved women at every stage—in design, implementation, monitoring and O&M.

Overall, the project targets 280,000 farming households, or 1.7 million people across 300 subprojects. Subprojects have also involved awareness campaigns and training in conserving water and improving the productivity of land, wetlands and water bodies for agriculture and fisheries.

Consultation and, to a greater extent, participation are the hallmarks of this project. With technical guidance from ADB and NGO facilitation, communities have been involved in articulating their water needs, choosing technologies, designing the project, constructing the new infrastructure and taking over operations and maintenance.

Women and training are success factors in this project, and how they were integrated throughout the project is discussed in the various sections of this case study.

Implementing through Intensifying Levels of C&P

To accomplish the above stated components, the project is designed to progress through five stages of beneficiary-driven activities:

Stage 1: Identify the kind of water management projects needed
Stage 2: Form Water Management Cooperative Associations (WMCAs)
Stage 3: Plan, design and build these projects
Stage 4: Take over operation and maintenance (O&M) of the project outputs
Stage 5: Expand the scope of WMCA to microcredit and livelihood projects

These activities would eventually instill in them a sense of ownership in the project, and increase the sustainability of the project. With each stage, a higher level of people's involvement was required. The following table looks at how these stages operate on four levels of Consultations and Participation (C&P) as outlined in ADB's "Strengthening Participation for Development Results" guidelines.

Levels of C&P in Second Small-Scale Water Resources Project

Level	Description of Activity
Information sharing	(Stage 1) Participatory Rural Appraisals (PRAs) were the first activity mounted to gather the nature of demands from the beneficiaries. Simultaneously, an information campaign was waged on the merits of the project, using NGO Facilitators.
Consultation	(Stage 2) A Water Management Cooperative Association (WMCA) was formed for each subproject with beneficiaries as members. This became the main vehicle for consultation with stakeholders and where they conveyed their demands with the help of NGOs.

Collaborative decision-making	(Stage 3) WMCAs facilitated decision-making on construction, recruiting labor and how beneficiaries wanted to run their organizations.
Empowerment	(Stage 4) Active beneficiaries were further empowered as they joined the WMCAs and were responsible for operation and maintenance of projects. (Stage 5) A further manifestation came once they set up cooperatives and microcredit facilities for livelihood projects.

Executing C&P Stage by Stage

Stage 1: Identifying Water Management Projects

Building on its experience with the previous (yet ongoing) phase of this project, the Local Government Engineering Department (LGED) continues as the executing agency in this second rural water resource project. It demonstrated adequate ability to identify and follow effective procedures and arrangements for community-based, participatory water resources management schemes. With staff placed at district and subdistrict (*upazila*) levels and substantial decentralization in decision-making, LGED is well placed to assist local government units and the WMAs in developing water management systems and new stakeholder institutions.

The process of identifying projects with beneficiaries starts with at the LGED subdistrict level. These offices work with other local government units and beneficiaries in identifying needs and project possibilities. At this very local level, project proposals are initiated, then finalized by district LGED offices before being submitted to the LGED headquarters in Dhaka (also the project management office).

“This process was demand-based,” recalls Kenichi Yokoyama, the ADB project engineer at the initial stages of implementation. “People’s initiatives were awaited. We had more than 1,000 requests channeled through the local government.”

The LGED headquarters screens projects, with the assistance of national NGOs conducting Participatory Rural Appraisals and private firms conducting feasibility studies. Those with political agendas are supposed to be screened out.
The participatory rural appraisals are particularly important in confirming that communities agree with the project proposals and will assume responsibility for O&M once the infrastructure is completed.

Stage 2: Forming the Water Management Associations

Once a subproject is confirmed to be feasible, three activities get underway simultaneously: design, social mobilization and the formation of WMAs.

NGOs mount an awareness camp in the village using folk media, drama and songs. The messages in the songs range in topics—protecting water resources, preventing pollution, setting up cooperatives, and promoting women’s rights and gender issues. The

campaign also educates the villagers on their roles and responsibilities, especially their need to contribute financially to the O&M of the project.

Forming the WMAs is an important institution-building step. A WMA serves more than just the function of the project. This organization is to be a community's life-long vehicle for working with each other and the government, particularly through consultation, inclusive decision-making and management of their social and economic lives. A contracted, national NGO helps organize the WMA for each subproject.

Each WMA has a managing committee with 12 elected officers to run the day to day affairs of the project. There are also subcommittees for various activities, such as construction, microcredit or livelihood activities. The project's gender strategy further stipulates that one third of a WMA's members must be women and women must occupy one third of all seats on the managing committee and each subcommittee. According to project team's latest gender update (December 2006), many subprojects have achieved one third female membership and almost one third female members on the management committees.

Stage 3: Designing and Implementing Projects

The approved subprojects are designed by private consulting firms in consultation with the WMCAs.

Once a project is designed, an implementation agreement (which also acts as an approval of the design) is signed between three parties—the district LGED, the WMA and a local government unit called the Union Parishad. The agreement spells out the specific programs and each party's responsibilities. The LGED monitors the implementation, while the WMA participates in construction monitoring.

As a sustainability and social development measure, the WMA must meet certain criteria to be eligible to sign the implementation agreement. These criteria include: WMA enrollment of at least 70% of beneficiary households, collection of beneficiary contributions equivalent to an annual O&M requirements (which is deposited in a joint account between the LGED and WMA) and agreement with the government over plans that require resettlement or other environmental mitigations that affect people. These criteria are recommendations from lessons learned in the first phase of the project.

Labor Contracting Societies, which are local cooperatives of 20-30 local laborers, recruit beneficiaries for employment in the construction of project public works. To direct benefits to the poor, all earthworks of the project must be carried out by vulnerable local residents, with preference to destitute women. The project further stipulates that at least 25% of all laborers in Labor Contracting Societies be women, who are granted equal pay as male laborers.

Skills training has been a crucial input in each stage of the project and C&P process. During the design and implementation stage, the LGED and NGOs organize trainings for the beneficiaries in construction supervision. The Labor Contracting Societies members, both men and women, receive training in construction, as well as in gender and environmental issues. Here, they were informed of not only of their rights but also their roles and responsibilities.

In the interest of transparency, the stakeholders agreed that a plaque be placed at each project site to identify the WMA officers and contractors, the cost of the contract, and the time allowed to complete the work.

Stage 4: Taking Over Operation and Maintenance

One year after the completion of the civil works, the project is handed-over to the WMA for O&M responsibilities. During the one-year joint O&M, the WMA members receive training in bookkeeping, conflict resolution and various O&M facets. Important to note, having a vital role in O&M reinforces their sense of ownership.

Stage 5: Turning WMAs into Multipurpose Organizations

Through beneficiaries' own contributions and share allocations, some WMAs managed to build their capital assets to over $1,000. The WMAs now have savings for O&M, and could raise their capital asset levels to fund microcredit activities. This has led to a growth in economic activities such as seed multiplication, vegetable growing, poultry raising, cattle fattening, and culture fisheries in coastal regions.

The project team notes that removing the government subsidy is key to making cooperatives work. Previously cooperatives would default easily with no retribution. "Now, if they default, they are accountable to shareholders," say Yokoyama. In sum, they have now taken the responsibility to install a sustainable system in microcredit enterprises.

Apart from learning the ropes on O&M, beneficiaries were also trained with the help of NGOs to manage microcredit livelihood projects. The departments of agriculture extension and fisheries trained the farmers to grow new crops, use farm inputs and introduced new technology in fish breeding and harvesting. More than half of the microcredit enterprises are headed by women.

RESULTS AND LESSONS LEARNED

Overall, the beneficiaries' social and economic profile has improved considering there has been a rise in crop production, especially for rice, and more higher value crops like garlic and onions are being produced. Improved irrigation facilities and flood control now allow the farmers to plant two to three crops a year rather than just one; the catch of the fishermen has risen; and the recovery of credit among the WMAs is recorded at 98%.

Inevitably, the value of agricultural land has also appreciated substantially. More jobs have been generated from construction work and wage rates have noticeably increased, and more income-generating activities are apparent with the growth in microcredit. Easier access to water now allows the most destitute of women to venture into backyard activities like vegetable gardening and poultry raising to augment the family income.

Training to enhance the capacity of LGED staff itself has shown great promise, the project team reported half way through the project. There was a perceived behavioral change and this was manifested in many ways such as improved institutional support, better construction quality, changes in agricultural and fishery practices and well-performing WMAs.

The best example of social empowerment comes from two coastal communities, which formed their WMAs to challenge the wealthier land lessees, who were paying more for the land to be kept flooded for shrimp culture. The communities worked with the government to rehabilitate the land and drain it of salt water. Once the salt water was drained, they were able to reclaim the land to plant crops.

Giving beneficiaries their own sense of self-worth was a step in the right direction in ensuring success in project implementation. The LGED's monitoring system rates 40-50% of WMAs as "satisfactory," in that they are collecting funds and carrying out O&M. There is, however, a tendency among beneficiaries to defer or postpone collection of funds or not doing maintenance until the need arises, when it might be too late after a major calamity strikes.

"We try to encourage preventive maintenance, but this is a common problem throughout developing Asia," says Yokoyama. But the project team notes that 40%-50% rated satisfactory is still a drastic improvement from when there were no WMA's. In the past, projects normally deteriorated from a lack of O&M. Still, inculcating O&M among beneficiaries remains the biggest challenge for the project team. Related to this is a realization that there is a need for enhanced training in the management and administration of cooperatives and microcredit enterprises.

The LGED and the project team have began reviewing the use of NGOs as facilitators in the subprojects. Some facilitators have not perform as expected, sometimes because of the lack of training or motivation, especially if they were recruited from outside the subproject site. The project team is now experimenting with locally-engaged community assistants instead.

Through their constant engagement, women have become change agents, not just beneficiaries. Mainstreaming gender has impacted women's lives and livelihood and empowered them through participation in decision-making process.

THE FUTURE

The number of subprojects has been revised downwards to 290 against the original target of 300, mainly because the 2002 cost estimates of materials have increased significantly since then. The revised project is on track and is likely to be completed on time by June 2009.

The May 2006 update of the project team is upbeat, describing the project progressing as a result of "enthusiastic, interested and motivated beneficiaries group particularly women members as well as motivated project and LGED core staff." So upbeat are the implementers that the Government of Bangladesh has requested for a third phase of this small-scale water resources project to spread the benefits to more poor rural people.

The demand for a new third phase is evidence that a participatory type of project implementation can work well. "By introducing consultation and participation mechanism, we could motivate the people to address their problems on their own," says Yokoyama.

Strengthening the institutions could take a longer time, he notes, and needs the right kind of leadership and approach.