# 01 Overview, Purpose and Structure of Report

# Contents



# Overview[edit | edit source]

## The Coastal Zone[edit | edit source]

Bangladesh, the largest river delta in the world, depends for its economic growth largely on integrated and sustainable water resources management. The three major river systems of the country mark its physiography and life of its people. Its waters - its 'blue gold' - have fundamentally shaped Bangladesh culture. Efficient management of this immense natural resource remains a continuing challenge and offers at the same time tremendous opportunities. Starting from the 1960s, low lying tracts of land in the south-western coastal zone were enclosed by earthen embankments to create polders which protect coastal communities from tidal floods and surges. There are now 139 coastal polders enclosed by embankments of an overall length of nearly 6,000 km.

About 38% of the population in the coastal regions of Bangladesh live below the poverty line and face high vulnerabilities in terms of insecurity of food, income, water and health. However, there are ample opportunities to harness the resources of the coastal areas that can lift the population from poverty, create a sustainable environment and provide security and quality of life to present and future generations.

In addition to suffering from the effects of tidal floods and surges, the people in the coastal polders are vulnerable to the intrusion of saline water, shortage of fresh water in the dry season and the impact of extreme events such as cyclones. In the south-western coastal zone, river siltation hinders drainage and causes prolonged waterlogging in the polder after monsoon rains, which can persist for extended periods of up to six months. This in turn results in loss of crops and income, reduced food security and explains in part the higher than average poverty levels in the coastal belt. Climate change will only increase the threats posed to coastal livelihoods.

## Blue Gold Program[edit | edit source]

To address the situation of the coastal zone, the Governments of Bangladesh and The Netherlands agreed to improve the quality of life for communities in south-western Bangladesh. The 22 polders selected for interventions through Blue Gold are located in the districts of Patuakhali, Khulna, Satkhira and Barguna, have a resident population of around 800,000 and cover a gross area of 115,000 ha (refer to Figure 1.1). Specific objectives of the Blue Gold Program are to:

1. Reduce the threat to polder communities and their land from floods from river and sea, and from saline intrusion

2. Optimise the use and management of water resources for agricultural production, thereby increasing economic development for the polder communities, with a special focus on creating income opportunities for the poor and landless
3. Encourage the adoption of modern agricultural technologies and strengthen linkages with the private sector
4. Empower communities through water management organisations to lead natural resources-based development (agriculture, fisheries and livestock) with the support of public and private sector partners
5. Strengthen the institutional framework for sustained water resources development and related development services.

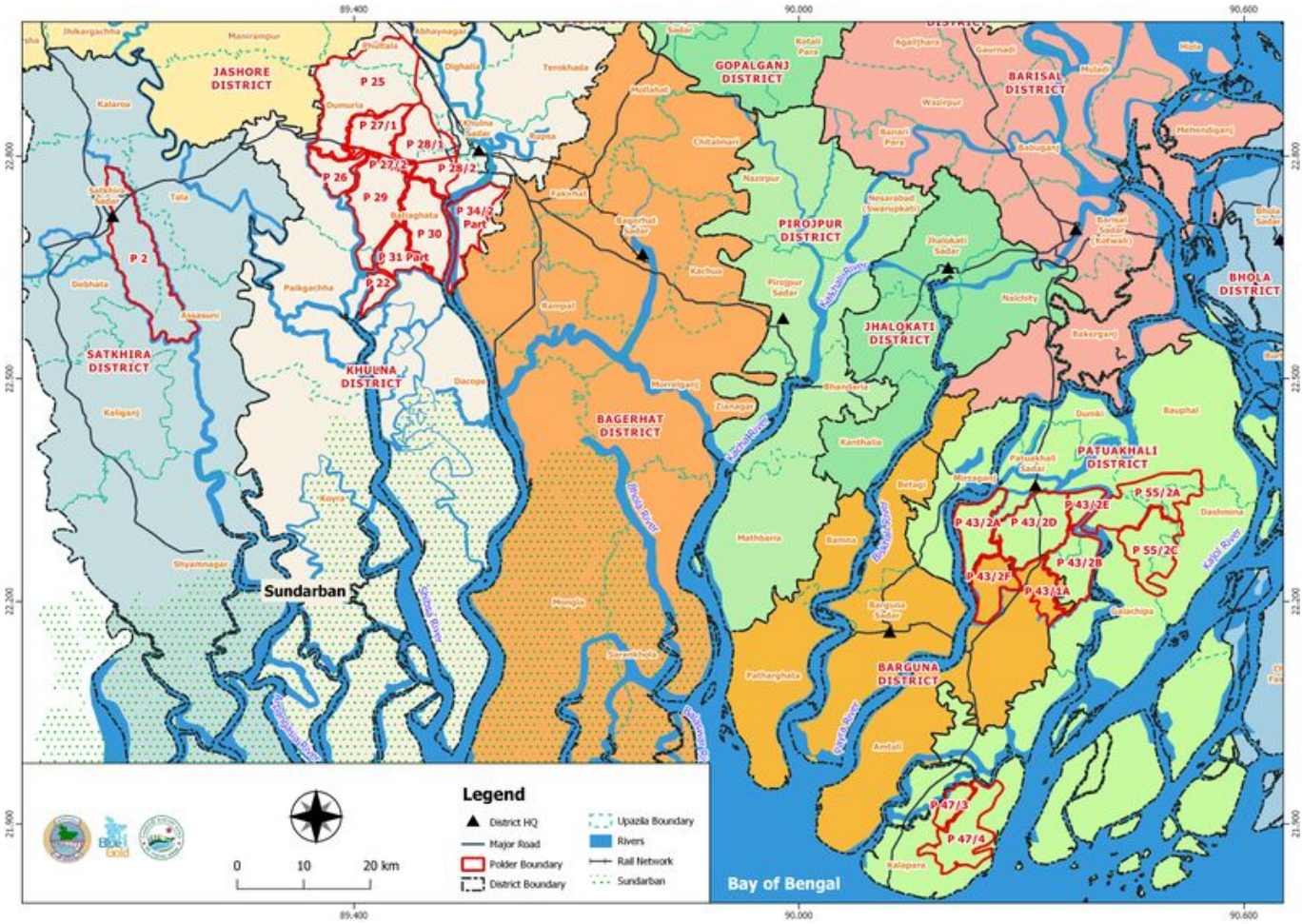


**Figure 1.1** Map of Project Area

A number of government agencies implement the program:

*The **Bangladesh Water Development Board** (BWDB) is the lead agency, responsible inter alia for protecting the communities from flooding and surges by ensuring the integrity of the embankments and associated structures, and for forming and registering water management organisations (WMOs).*

*The **Department of Agricultural Extension** (DAE) works alongside farmers to encourage the selection and cultivation of crops and varieties that are well-suited to the coastal environment and which, as part of an interlinked annual cropping system, form the basis for profitable business.*

*In addition, the **Department of Livestock Services** (DLS) and **Department of Fisheries** (DoF)*

*provide specialist advice for the development of training modules to farmer field schools, and contribute to other project interventions.*

***Local government institutions** (LGIs), especially Union Parishads (UPs), are partners in polder development planning, coordination and maintenance.*

The total project investment amounts to € 75.3 million, allocated as follows (Table 1.1):

Table 1.1: Project budget by financier

| **Contribution** | **Amount** |
|---|---|
| **Government of Bangladesh** | |
| BWDB | € 13,513,713 |
| DAE | € 535,015 |
| **Total** | **€ 14,048,728** |
| **Government of the Netherlands** (grant) | |
| Administered by BWDB | € 27,320,000 |
| Administered by DAE | € 1,495,000 |
| Technical Assistance | € 32,425,663 |
| **Total** | **€ 61,240,663** |
| **Grand Total** | **€ 75,289,391** |

The Blue Gold Program was implemented from 2013 to 2021. Project implementation activities were planned to be completed by end-June 2021, whilst administrative closure of the project continued for the six-month period from July to end-December 2021. During this period of administrative closure, final payment certificates for civil engineering construction contracts and other service contracts were processed, recommendations for reimbursement by EKN were prepared, and contributions to the BWDB project completion report were made.

## Water management for development[edit | edit source]

For the inhabitants of the 22 polders selected for support by the Blue Gold Program, water is the most significant natural resource. This resource would be the 'blue gold' of their local economy, if its destructive force were sufficiently controlled and if its productive potential were adequately harnessed. To fulfil these conditions, a 'water management for development' approach is adopted in which water safety is improved by repair and rehabilitation of main polder-level water management infrastructure, and water productivity and profitability are enhanced by optimising the synergy between agriculture, market opportunity and in-polder water management.

The Blue Gold Program is established to help enhance local development through improved water safety and enhanced water profitability - summarised in the strapline 'water management for development'.

In 2018, in the face of long-term uncertainties and risks brought on by global climate change, the Government of Bangladesh adopted a long-term perspective on the management of its water resources. With a view to achieve a safe, climate-resilient and prosperous delta, the 'Bangladesh Delta Plan 2100' sets out a strategy and investment plan for the water sector.

The experience of the Blue Gold Program contains lessons on how to apply a 'water management for development'-approach. While BGP's setting is specific (i.e. 22 predominantly rural polders in the

coastal zone), some of its lessons may be generic for the coastal zone; while others might even by relevant for the country as a whole.

# Purpose of the Report[edit | edit source]

Now that the investment portfolio of the Bangladesh Delta Plan 2100 is gradually taking shape, there is a window of opportunity to inform future investment strategies and plans for the coastal zone with lessons that can be drawn from the Blue Gold Program.

At the end of a project implementation cycle, the governments of Bangladesh and the Netherlands require documentation of the scope of project investments, and their impact and outcomes. In the case of the Blue Gold Program, a number of reports are planned. BWDB and DAE will prepare Project Completion Reports to account for the funds provided through their respective Development Project Proformas (DPPs), and these are then complemented by a "lessons learnt" report prepared by the technical assistance (TA) team. The separate purposes for these two types of report are described below.

## Project Completion Reports (PCRs)[edit | edit source]

On completion of a development project, all implementing agencies that receive public funds are obliged to prepare and submit a formal Project Completion Report (PCR) to the Implementation Monitoring and Evaluation Division (IMED) of the Ministry of Planning. For the Blue Gold Program, both BWDB and DAE received funding in accordance with separate Development Project Proformas (DPPs) approved by the Planning Commission.

The format for an IMED PCR is strictly controlled to ensure coverage of standard items, including: a description of the project, the status of implementation at the time of reporting, the project's financial and physical scope, its achievements, an analysis of benefits, evidence of monitoring and internal and external audits, and a descriptive report.

## Lessons Learnt Report[edit | edit source]

This report has been prepared to complement the BWDB and DAE PCRs, with the aim of recording lessons learnt for use in the design and implementation of future interventions in the coastal zone. The aim of this report is to review and analyse approaches and methodologies used in the delivery of Blue Gold, how and why they evolved over the lifetime of Blue Gold with reasons for the adaptations and adjustments that were introduced and an explanation for the timing of the intervention.

One of the main aims of this report then is to pass on this knowledge and experience to the planners and policy makers working towards the realisation of the Delta Plan, and to those responsible for the design and implementation of future projects in the coastal zone.

The lessons learnt report was written before the end of the project while resources within the technical assistance (TA) team were available. DAE's involvement as a stakeholder partner finished at end-December 2020, whilst BWDB's involvement continued to end-December 2021. During 2021, a reduced TA team with a limited analytical capacity was largely focused on assisting with quality control and payment certification for construction contracts, and with capacity building of water management organisations focusing mainly on the new polders.

## Structure of this report[edit | edit source]

This report is laid out in eight sections (Sections A to H), as described in Table 1.2.

Table 1.2: Report Structure and Content

| Section | Summary content |
|---|---|
| A Background and context | Background and context; Institutional setting; social physical and environmental context; project design; previous interventions; project definition |
| B Development Outcomes | Overview of monitoring and evaluation work; outcomes at household and community level |
| C Water Infrastructure | Overall objectives of structural interventions; investments; preparatory works; construction and quality control; reimbursement |
| D Participatory Water Management | Consultation; capacity building of water management organisations; women's participation; in-polder water management; partnerships; from concept to implementation; and way forward |
| E Agricultural Development | Commercialisation of agriculture based on improved water resource management, to drive economic development in the polders |
| F Responsible Development | Reaching marginalised groups: women, landless households and extremely poor |
| G Project Management | Project management arrangements; technical assistance; organisational development; training; horizontal learning; communications; monitoring and evaluation; project database; environmental impact assessments |
| H Innovation Fund | Objectives, evolution of procedures, types of projects and implementers, contracting modalities, lessons learnt, management arrangements, achievements, conclusions |

## See more[edit | edit source]


Previous chapter:
**Summary of Section A: Background and context**

**Blue Gold Lessons Learnt Wiki**
**Section A: Background and context**

Next chapter:
**Chapter 02: Institutional Setting**

**Section A: Background and context**

| Chapter 01: Overview, Purpose and Structure of Report | Chapter 02: Institutional Setting | Chapter 03: Social, Physical and Environmental Context |
|---|---|---|
| 1. Overview<br>2. Water management for development<br>3. Purpose of the Report<br>4. Structure of this report | 1. Executive Authorities<br>2. Implementing Agencies<br>3. Other public sector organisations<br>4. Private Sector | 1. Geography of the coastal zone<br>2. History of polders<br>3. Social context<br>4. Polder infrastructure |

**Chapter 04: Policy framework, history of interventions and project definition**

1. Policy and regulatory framework for Participatory Water Management
2. History of interventions
3. Project definition
•

<table>
<tr><th colspan="3">Executive summary: A Call for Action</th></tr>
<tr><th>Section A: Background and context</th><th>Section B: Development Outcomes</th><th>Section C: Water Infrastructure</th></tr>
<tr>
<td>Summary<br>• Chapter 01: Overview, Purpose and Structure of Report<br>• Chapter 02: Institutional Setting<br>• Chapter 03: Social, Physical and Environmental Context<br>• Chapter 04: Policy framework, history of interventions and project definition</td>
<td>Summary and Introduction<br>• Chapter 05: Outcomes and Impact from Participatory Water Management<br>• Chapter 06: Outcomes and Impact from Agricultural Development<br>• Chapter 07: Inclusive Development Approach: Outcomes and Impacts from Homestead Based Production<br>• Chapter 08: The Outcomes and Impact on the Livelihoods of Women<br>• Chapter 09: The Overall Outcomes and Impacts on the Livelihoods of Coastal Communities in Blue Gold Polders</td>
<td>Summary<br>• Chapter 10: Coastal Infrastructure<br>• Chapter 11: Investments for Polder Safety and Water Management<br>• Chapter 12: Survey, Design and Procurement<br>• Chapter 13: Construction: Progress, Modalities and Lessons Learnt</td>
</tr>
<tr><th>Section D: BGP Interventions: Participatory Water Management</th><th>Section E: Agricultural Development</th><th>Section F: Responsible Development: Inclusion and Sustainability</th></tr>
<tr>
<td>Summary<br>• Chapter 14: Consultation and participation in planning<br>• Chapter 15: WMO capacity building<br>• Chapter 16: Women's participation in Water Management<br>• Chapter 17: In-polder water management<br>• Chapter 18: Water Management Partnership<br>• Chapter 19: Operationalisation of the PWM concept<br>• Chapter 20: Way Forward</td>
<td>Summary<br>• Chapter 21: The Evolving Approach to the Commercialization of Agriculture<br>• Chapter 22: Lessons for Agricultural Extension in the Coastal Zone<br>• Chapter 23: Outreach and Outcomes of Commercialisation Interventions</td>
<td>Summary<br>• Chapter 24: Gender equality and women's empowerment<br>• Chapter 25: Poverty Focus: development of homestead production<br>• Chapter 26: Poverty focus: Labour Contracting Societies<br>• Chapter 27: Sustainability</td>
</tr>
<tr><th>Section G: Project Management</th><th>Section H: Innovation Fund</th><th>Files and others</th></tr>
<tr>
<td>Summary<br>• Chapter 28: Project Management Arrangements<br>• Chapter 29: Technical Assistance: Context, Scope, Contractual Arrangements and External Service Contracts<br>• Chapter 30: Evolution of TA Organisational Arrangements<br>• Chapter 31: Capacity Building<br>• Chapter 32: Agricultural Extension Methods and Communication<br>• Chapter 33: Horizontal Learning<br>• Chapter 34: Monitoring and evaluation<br>• Chapter 35: Management Information System<br>• Chapter 36: Environmental Due Diligence</td>
<td>Summary<br>• Chapter 37: Purpose, fund evolution and management<br>• Chapter 38: Overview of BGIF Projects<br>• Chapter 39: BGIF Lessons Learnt</td>
<td>• File Library<br>• Glossary and acronyms<br>• Frequently Asked Questions</td>
</tr>
</table>

Increase in the capacity of a country or an economic region to produce goods and services. It also refers to the increase in market value of the goods and services produced by an economy. It is usually calculated using inflation adjusted figures, in order to discount the effect of inflation on the price of the goods and services produced

management actions required to address the changing demands on water resource systems both in the present and the long-term future so as to avoid system degradation

Typically undesirable increase in concentration and deposition of water-borne silt particles in a body of water.

Soil is regarded as waterlogged when it is nearly saturated with water much of the time such that its air phase is restricted and anaerobic conditions prevail. In agriculture, various crops need air (specifically, oxygen) to a greater or lesser depth in the soil. Waterlogging of the soil stops air getting in. How near the water table must be to the surface for the ground to be classed as waterlogged, varies with the purpose in view. A crop's demand for freedom from waterlogging may vary between seasons of the year.

An area of low-lying land surrounded by an earthen embankment to prevent flooding by river or seawater, with associated structures which are provided to either drain excess rainwater within the polder or to admit freshwater to be stored in a khal for subsequent use for irrigation.

A livelihood is a way of making a living. It comprises capabilities, skills, assets (including material and social resources), and activities that households put together to produce food, meet basic needs, earn income, or establish a means of living in any other way.

A defined set of temporary activities through which facilitators seek to effect change

hectare

The influx of sea water into an area that is not normally exposed to high salinity levels - for example, the inflow of seawater into a fresh water wetland or a fresh water aquifer.

assumed in this report to operate up to 0.5 acres (0.2 ha)

Bangladesh Water Development Board, government agency which is responsible for surface water and groundwater management in Bangladesh, and lead implementing agency for the Blue Gold Program

Water Management Organizations - The common name of organizations of the local stakeholders of a water resource project/sub-project/scheme. The concept WMO typically refers to WMGs and WMAs (and/or WMFs) together

Department of Agricultural Extension, a department of the Ministry of Agriculture responsible for disseminating scientific research and new knowledge on agricultural practices through communication and learning activities for farmers in agriculture, agricultural marketing, nutrition and business studies.

Department of Livestock Services, a government department under the Ministry of Fisheries and Livestock responsible for the livestock industry in Bangladesh

Department of Fisheries, a government department under the Ministry of Fisheries and Livestock responsible for regulating the fisheries industry in Bangladesh

Local Government Institutions - Union Parishad, Upazila Parishad etc

actions taken to prevent or repair the deterioration of water management infrastructure and to keep the physical components of a water management system in such a state that they can serve their intended function.

Embassy of the Kingdom of the Netherlands, the contractual representative of the Minister of Foreign Trade and Development Cooperation of the Netherlands and signatory to the agreement for the Blue Gold Program with the External Resources Division of the Ministry of Finance as the signatory for the Government of Bangladesh

The strapline of the Blue Gold Program for a transformative approach to smallholder agriculture which combines water infrastructure and locally-led initiatives for better water management, using modern agricultural technology and a business-orientation.

the amount of output (such as crops) produced per unit water

In-polder water management; term used in Blue Gold to describe water management interventions which aim to deliver excess water from the field through field drains to secondary khals and thence to primary khals for evacuation through the sluice/regulator

Blue Gold Program

Development Project Proforma: a formal document which sets out the intention of a GoB organisation to invest in a development project, seeking approval for the investment and, if successful, a budget allocation. The DPP follows a prescribed format, including the project's financial and physical scope, benefits, and proposals for monitoring and internal and external audits. The approval of a development project proposal follows a number of stages: formation with preliminary studies, formulation to develop greater detail and with additional information to make the economic case for the project, scrutiny by the executing agencies and concerned ministries, appraisal by the Planning Commission, recommendation for approval by Project Evaluation Committee (PEC), Minister/ECNEC approval, and inclusion of a budgetary allocation in the Annual Development Plan (ADP).

Technical Assistance

A process through which stakeholders influence and share control over development initiatives and the decisions and resources which affect them.



### Namespaces

- Page
- Discussion

### Variants



# Blue Gold Program Wiki

The wiki version of the Lessons Learnt Report of the Blue Gold program, documents the experiences of a technical assistance (TA) team working in a development project implemented by the Bangladesh Water Development Board (BWDB) and the Department of Agricultural Extension (DAE) over an eight+ year period from March 2013 to December 2021. The wiki lessons learnt report (LLR) is intended to complement the BWDB and DAE project completion reports (PCRs), with the aim of recording lessons learnt for use in the design and implementation of future interventions in the coastal zone.