Summary of Section D: BGP Interventions: Participatory Water Management

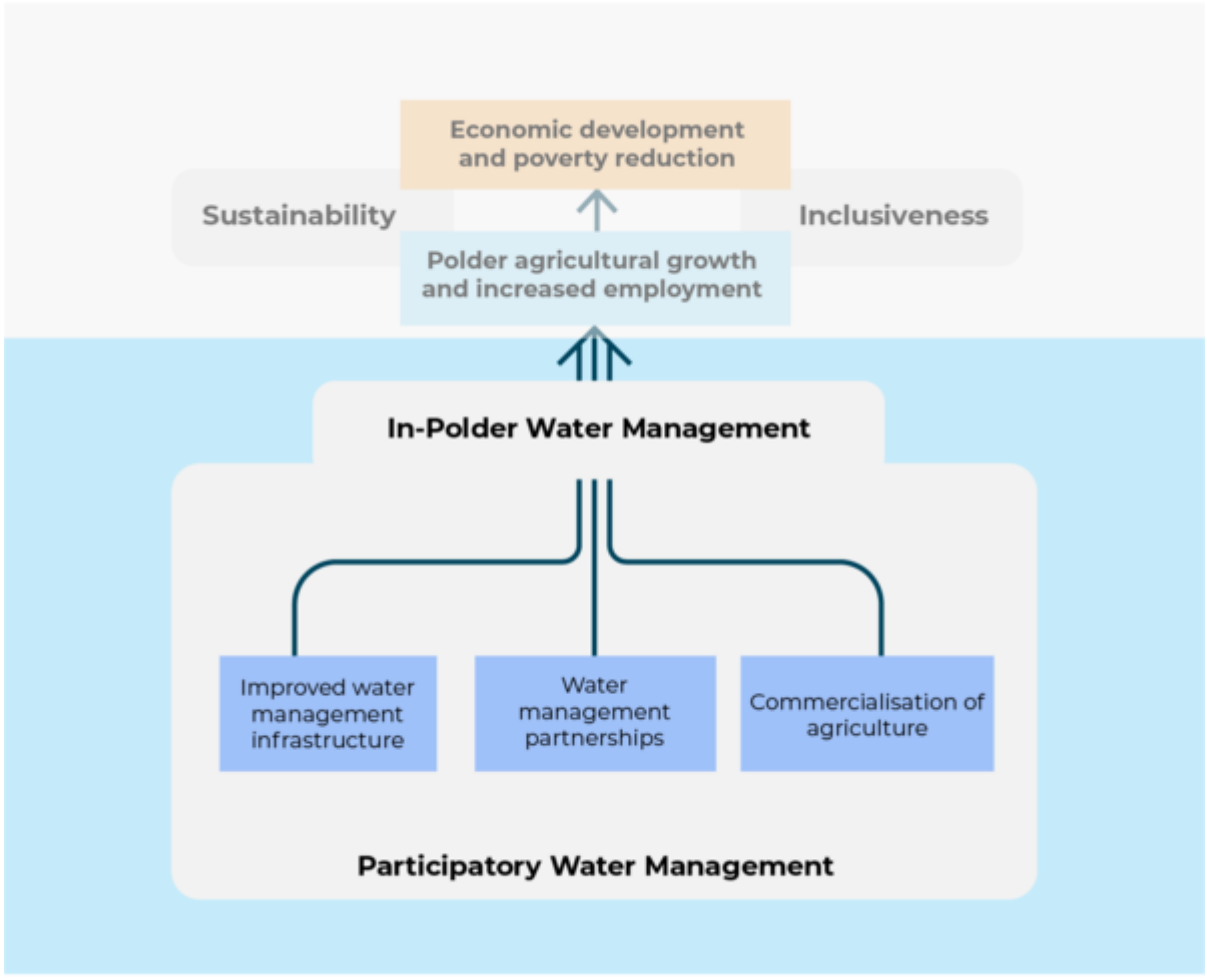

Figure D.1: Participatory Water Management and it's components, highlighted on the ToC.

Participatory Water Management (PWM) in BGP comprises a set of activities that aims to utilise water infrastructure for transforming agriculture in the coastal polders; and which thereby forms the central driver for intensified local economic development in the project area. The PWM activities includes: **consultation** of communities; **capacity building** of water management organisations; addressing **gender dimensions** of water management; physical **in-polder water management** interventions); and development of a **water management partnership**.

Under Blue Gold, a unified approach towards Participatory Water Management was developed. This approach was documented in February 2017 in the form of a PWM Field Manual (in *English* and *Bangla*). Alongside the distribution of the manual, dedicated training in the unified approach was provided to all Community Development Facilitators (CDFs) in December 2016 and January 2017. A vivid testimony on the implementation of this approach in Polder 47/4 in Kalapara is presented in a *paper* prepared on behalf of the CDFs by colleagues at zonal level.

Through Blue Gold, O&M Agreements (in Bangla and an unofficial English translation) have been used to set out the respective responsibilities of BWDB and WMAs for routine, periodic and emergency maintenance. The main purpose of the agreements is to sustain the benefits arising from bringing land into cultivation – to protect the land from further waterlogging and to bring new land into cultivation. O&M agreements have been signed by the BWDB Executive Engineer with representatives of the Executive Councils for the 36 WMAs in the Blue Gold Program area.

To encourage good practice in water management, two versions of a manual for WMO executive members and BWDB field staff were prepared: a 'text-based' manual (in Bangla) for a more literate

audience; and a 'picture-based' manual (again in Bangla) for an audience that is less familiar with text-based advice. During preparation of the manuals, Blue Gold worked closely with field staff, WMO executives and other WMO members and incorporated their feedback to ensure that the manuals serve the needs and interests of farmers and fishermen. Feedback sessions with BWDB zonal staff have been used to establish that all required material is covered. Copies of the manuals were distributed to WMOs during the first quarter of 2021.

The key message of this section is that presently, Bangladesh does not use the full potential of participatory water management for engendering local economic development. Infrastructure development and agricultural development are generally undertaken as separate interventions, often under a strong central coordination; while the capability of local stakeholders to utilise water resources and associate infrastructure for a dynamic development of agriculture goes largely ignored. In addition to reviewing the PWM activities listed above, this section also looks at how BGP operationalised the **PWM concept** and it concludes with a section on a **way forward** for participatory water management to become the glue that welds water resources infrastructure and local agricultural-based development together.

□

Contents

Consultation and participation in planning[edit | edit source]

BGP, at its inception, addressed community consultation and participation in planning through a Polder Development Plan and local-level WMG Action Plans. Several lessons are drawn:

- Consultation of communities and their representatives is more meaningful if it starts well before the definition of infrastructure investments in implementation budgets
- Local governments and representatives of decentralised departments are relevant and constructive partners in local water resources planning
- Facilitated community planning should be complemented with coaching of community actions, e.g. for better agricultural production. A little encouragement helps people undertake the actions that they have planned for.
- Periodic review and adjustment is required to arrive at realistic ambitions, possibly in terms of higher productivity or profitability, and coherent and do-able actions.

Using these insights, BGP in the second half of its implementation period, linked local water management plans to catchment plans and subsequently to polder-level WMA plans. The ensuing plans focus on water management actions at different levels of the polder water system (see: In-Polder Water Management).

WMO capacity building[edit | edit source]

BGP helped activate 511 water management groups and 36 water management associations in 22 polders. In order to help these organisations to work for better water management, BGP applied the following principles in building their capacity:

- Build capacities of groups and teams
- Support both planning and implementation
- Let WMOs take the lead in implementing actions
- Promote WMOs to use their local network for achieving their aspirations.

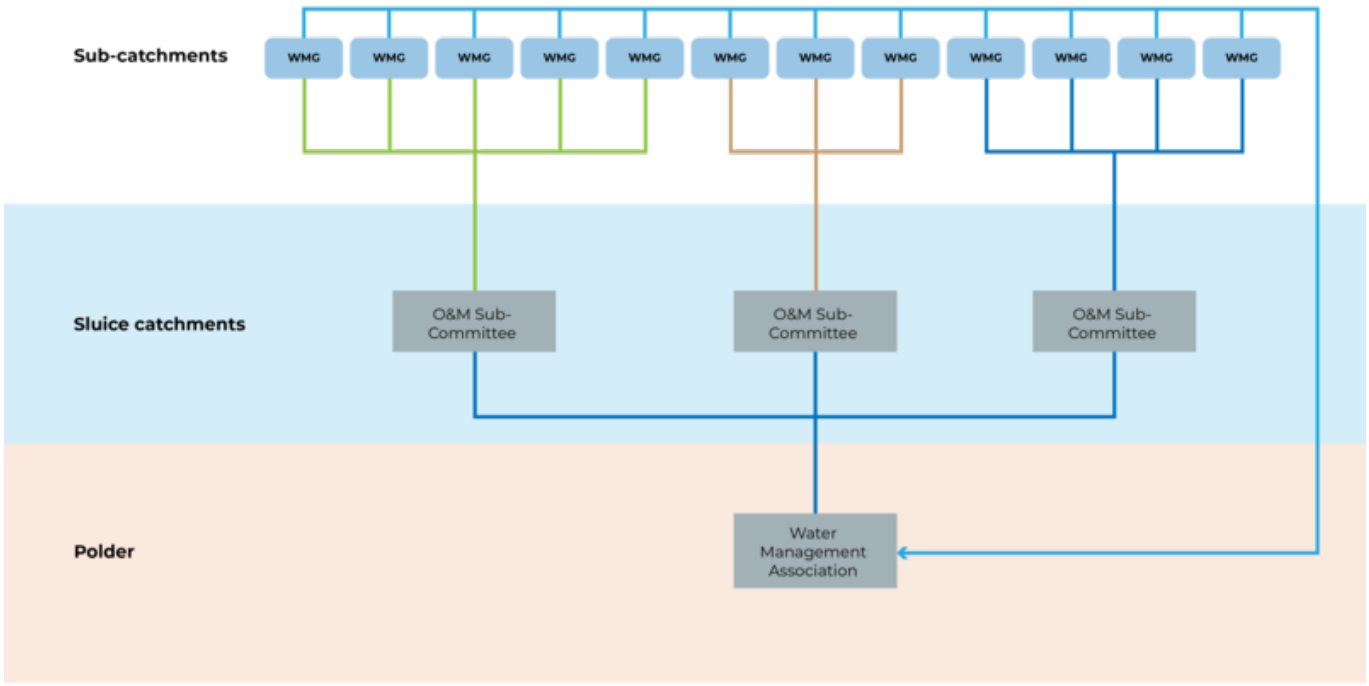

Figure D.2: Structure of water management organisations in a polder

Women's participation in water management[edit | edit source]

While the regulatory framework sets quota for women's participation in WMOs, BGP explicitly pursued that women in and above this quota would participate in an active and significant way. This resulted in women taking part with voice and vote in WMO meetings; in a significant number of women being executives in the WMOs; and in experienced female office bearers becoming successful contestants in local government elections.

In-Polder Water Management[edit | edit source]

Community participation helps shape actions that make better combinations of production practices and water management, at different levels of scale:

- Small-scale infrastructure and synchronised cropping at sub-catchments help bring forward the harvest of T Aman and creates the possibility to grow an additional winter season crop, often of high commercial value. Other combinations of improved production and better water management are possible.

- Operation of a sluice combined with keeping the khal functional ensures better water levels for production within the catchment.

Sound plans for catchment management together with active water management associations, helps local communities exercise control over the sluices that serve their areas.

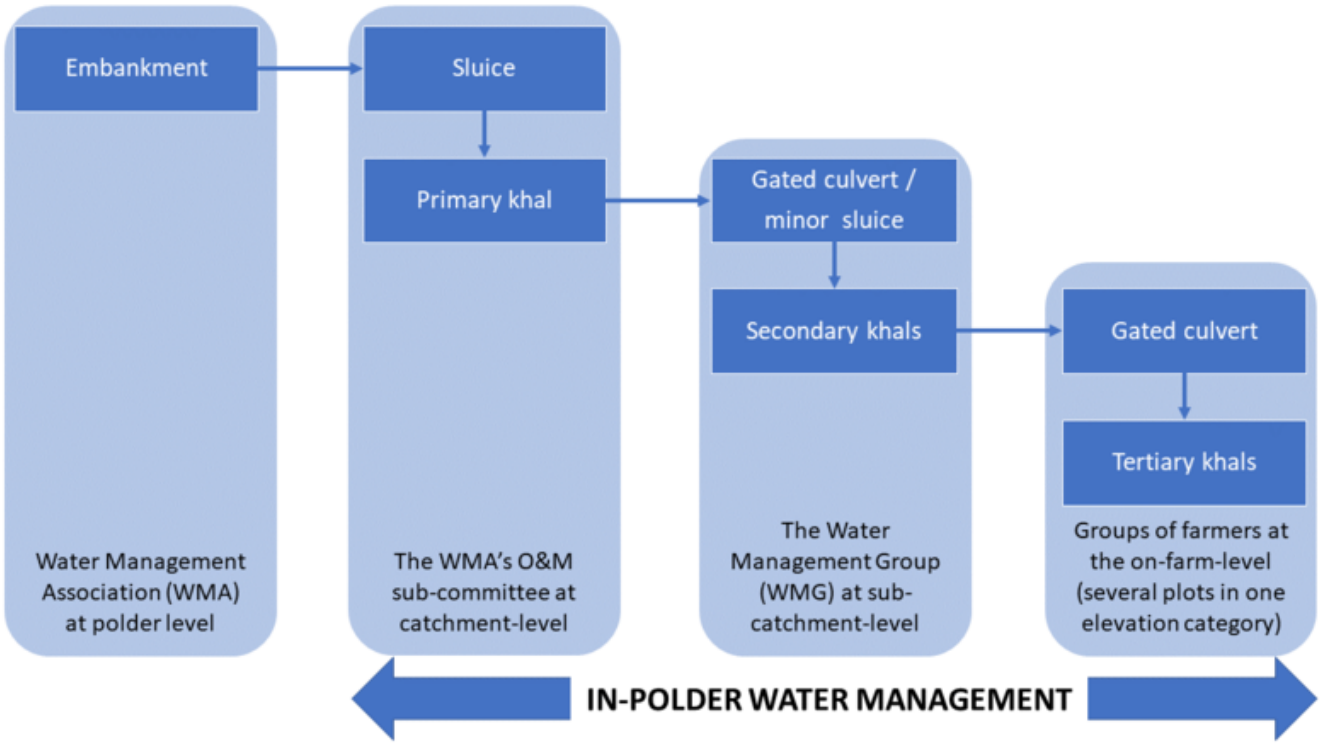

Figure D.3: In-polder water management – interventions at different levels of scale

Water Management Partnership[edit | edit source]

Water Management Groups and Associations achieve more when working with other people and entities:

- Having an 'orbit' of capable resource persons, helps WMOs undertake actions for better production.
- Good relations with local governments ensures WMOs are backed in a practical sense when (i) taking control over sluices; (ii) pursuing open drainage connections, and: (iii) mobilising resources for investment in small-scale infrastructure.
- Being known to staff of government departments enables WMOs to access their expertise and support. Given the special relation between WMAs and the BWDB, for each polder O&M Agreements (Bangla and English version) have been entered into by these parties.
- Entering into a formal O&M agreement with BWDB makes it easier to face future challenges to the sustainability of main infrastructure.
- Representing their members to market partners (private sector) creates win-win opportunities in input procurement, production and marketing.

A strong WMO ensures it is supported by good and close friends.

Evolution of the PWM concept[edit | edit source]

BGP has built on the national regulations, rules and practices of participatory water management. It

helped clarify the WMO's relation to commercial activities; it enhanced the WMOs' focus on water management; it defined WMOs as entities with their own mandate; and it established a functional relationship between WMA and WMGs. In doing so, BGP – while being true to the spirit of the national policies – went beyond their letter. The regulatory framework now should consider the innovations that were tested in practice.

Way Forward[edit | edit source]

In realising that its take on Participatory Water Management has moved beyond how PWM is defined; BGP is presenting its experiences for review and consideration by the sector. To this end, it facilitated an independent expert panel to review how participatory water management can be improved as part of the overall governance of water resources in Bangladesh. This expert panel is to present its recommendations to the Bangladesh Delta Plan and its community of professionals.

See more[edit | edit source]

Previous chapter:
Chapter 13: Construction: Progress, Modalities and Lessons Learnt

Blue Gold Lessons Learnt Wiki
Section D: BGP Interventions: Participatory Water Management

Next chapter:
Chapter 14: Consultation and participation in planning

Section D: BGP Interventions: Participatory Water Management

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Chapter 20: Way Forward

Blue Gold Wiki

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A process by which the local stakeholders are directly and actively involved in identification, planning, design, implementation, operation & maintenance and evaluation of a water management project.

Theory of Change, planning tool

A process by which the local stakeholders are directly and actively involved in identification, planning, design, implementation, operation & maintenance and evaluation of a water management project.

Blue Gold Program

human intervention in the capture, conveyance, utilisation and drainage of surface and/or ground water in a certain area: a process of social interaction between stakeholders around the issue of water control.

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

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

The Blue Gold approach which integrated the earlier 'four components' (ie social empowerment, water management infrastructure, agricultural technologies and farming-as-a-business) into a single work process

Community Development Facilitator - a member of the Blue Gold technical assistance team who lived and worked in a specific polder, and provided the main point of contact between the project and the polder communities

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 Association - In Blue Gold, the polder-level representative of WMGs, and signatory to an O&M Agreement with BWDB

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.

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.

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

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

A process by which the local stakeholders are directly and actively involved in identification, planning, design, implementation, operation & maintenance and evaluation of a water management project.

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

Polder Development Plan - presents an integrated analysis and planning for a specific polder covering community mobilization, water management, agriculture, business development, environment, gender, and institutions. A deliverable product under the BWDB Development Project Proforma (DPP). PDPs for all 22 polders are available through the File Library.

Water Management Group - The basic organizational unit in Blue Gold representing local stakeholders from a hydrological or social unit (para/village). Through Blue Gold, 511 WMGs have been formed and registered. The average WMG covers an area of around 230 ha has 365 households or a population of just over 1,500.

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.

Water Management Association - In Blue Gold, the polder-level representative of WMGs, and signatory to an O&M Agreement with BWDB

transplanted aman; a rice crop, with nurseries for seedlings started in June/July, for transplanting in July/August in areas liable to a maximum flood depth of about 50cm. Harvested in November/December. Local varieties are sensitive to daylength whereas modern varieties are insensitive or only slightly sensitive.

A vertical gate to control the flow of water; also referred to as 'regulator'

drainage channel or canal

an idealised hydrologically independent drainage unit within a polder - comprising a network of inter-connected khals draining to a regulator from where water is discharged to a peripheral river. Because the land levels in a polder vary within a small range (typically up to a maximum of 1.5 m), water flows can be affected by downstream water conditions and eventually drain through more than one regulator at diffferent times of year. .

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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.

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Blue Gold Program Wiki