Blue Gold Program success story

Impact of water resource management at Amadkhali, Satkhira

Context and rationale for intervention

The canal travels downstream to meet the Betna river

The Amadkhali sluice gate connects to 19 beels

Local farmers noted that there were silt deposits in the canal following the floods of 2000

The silting of the outfall to Betna river and the poor drainage capacity of the canal resulted in congestion of the catchment. This affected small farmers cultivating aman and boro rice. They then leased out the land to fish farmers.

Large leaseholders then decided to use their land for fishing and started renting land from smallholders. This meant that smallholder farmers soon became jobless and had to migrate seasonally in order to find employment.

BGP assessed the impacts on T-Aman rice cultivation in the Amadkhali catchment area through focus group discussions (FGDs) in 2017 and 2018. This study was conducted during and after the T-Aman rice cultivation periods.

T-Aman rice was cultivated in 15 beels (1,782 hectares) out of a total 19 beels (3,111 hectares) in the area. The farmers in the area had suffered from severe to moderate waterlogging issues for 15 to 16 years and had started reaping the benefits of cultivation only recently.

BGP interventions

Following a needs assessment, BGP concluded the need to re-excavate the Amadkhali canal with a target to reduce waterlogging. This was necessary for the irrigation of monsoon crops and storage dry month crops.

With the partial pre-excavation work completed in June 2017, the water from adjacent beels started to drain out. Farmers assumed then that they would be able to cultivate T-Aman rice then. They did not have seedlings of their own, so purchased them from the nearby Tala and Kalaroa upazilas.

- T-Aman rice cultivated on 31% of total area in 2017
- Re-excavation completed in 2018
- Farmers had sufficient time to prepare seedbeds
- T-Aman rice cultivated on 54% of total area in 2018

Outcomes

- Total cost of canal re-excavation: BDT 61,900,000
- Total earning from aman rice for 2018 (4,132 acres x 52 mounds

BGP, funded by the Embassy of the Kingdom of Netherlands, changed the lives of inhabitants of the Amadkhali canal in polder 2. The 8.4 km long canal was re-excavated from 2016-2018.

"Our land was leased by rich people before BGP came in. We are now getting our land back from them."
-Hafizur Rahman, 45 years old, Dakshin Fingri

	Impact year				Notes
	2015	2016	2017	2018	
Area under T-Aman cultivation (acres)	1,583	1,735	2,413	4,132	Total beel area amounts to 7,683 acres
Impact (%)	21	22	31	54	

- per acre x BDT 750 per mound): BDT 161,100,000
- Rice farmers who had shifted away from previous patterns of land usage and means of livelihoods have started returning to using their land as they used to
- Mustard is now grown in moderate to high-lying areas in the catchment following the cultivation of T-Aman
- Farmers who had migrated to nearby cities for work are emigrating back as local employment opportunities have started growing

The polder team conducted FDGs across all 19 beels in the Amadkhali catchment in order to understand the impact on T-Aman rice production following re-excavation of the canal. The team also spoke to farmers who were not part of these FGDs, asking them of the benefits of re-excavating Amadkhali khal.

"The benefits are endless. We were inundated by water and could only grow boro rice. We are now able to cultivate two or three crops a year."

Even though fish farming proved more profitable for the same unit of land, it was more suited for a richer demographic, often from outside the region.

Smallholders feel more secure if they have access to rice throughout the year.

This encourages them to grow rice on their own land.

Other outcomes include:

Employment generation

Opportunity for livestock rearing

Opportunity to grow a third crop

The re-excavation of Amadkhali canal benefited, for the most part, the lives and livelihoods of marginalised farmers, and poor people.

"Many people in my union did not have work before. They would leave seasonally, looking for jobs. Thanks to the re-excavation, 4,132 acres of land can now be cultivated for T-Aman rice. This keeps people in the region."
-Shamsur Rahman, 55 years old, Chairman of Fingri Union

"Rice plays a vital role in ensuring our food security, being our staple food. Rice cultivation is interlinked with livestock rearing too. The straw we produce from rice saplings comprises the main food for our cows because we don't own large grazing lands. We use rice burn as feed for our poultry and cattle. So in a way, rice also helps us produce milk, meat and eggs, which are our principal sources of protein."
-Moshan Chandra Sarker, 55 years old, Gobindopur village

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