



A maize field within the coverage area of Teesta irrigation project of Water Development Board (WDB), in Jharpara village of Dinajpur Sadar upazila. The photo was taken on Monday. PHOTO: STAR

TEESTA IRRIGATION PROJECT

Water scarcity, losses prompt farmers turn away from Boro

OUR CORRESPONDENT, Nilphamari

Farmers under the coverage of the Teesta irrigation project of Water Development Board (WDB) have been ditching Boro for other crops that require lesser irrigation and produce higher profits.

The Teesta irrigation project was intended to provide intensive irrigation support to farmers cultivating Boro and Aman paddy throughout the year in Rangpur, Dinajpur, Nilphamari and adjoining areas.

The farmers said they have been compelled to adopt such practice as the WDB delayed supply of water for irrigation until the end of this January. Whereas, the crucial time they needed the water was at the beginning of January, the peak time for cultivating Boro paddy.

Fall in prices of Boro paddy over the last couple of harvest seasons also convinced them to cultivate other profitable crops, the farmers also said.

While visiting the major branch of irrigation canal in the project area in Sadar upazila of Dinajpur yesterday, this correspondent saw vast areas in Gurguri, Jharpara, Kukhapara, Dakkhin Shalhati, Begpara, Monosapara and Fakirpara villages covered with maize, wheat, pumpkin and other crops.

Farmer Shafiqul Islam of Jharpara village said, “I didn’t get irrigation water from the canal in early January, the peak time for Boro cultivation. Since the authorities started operation at the end of January, I cultivated maize, which does not need much irrigation, on 1.5 bighas of land.”

In Kukhapara village, farmer Al-Amin had last year’s loss in mind. He said although the canal next to his land had sufficient water, two consecutive years of losses from Boro cultivation prompted him to opt for wheat on his two bighas of land.

Monindranath Roy, another farmer in Gurguri village said he also dropped Boro from his consideration due to the losses he incurred

last several seasons.

But this time, he said he hopes to make a profit of around Tk 3 lakh from pumpkin, onion and other vegetables he cultivated on five bighas land.

Agriculture Extension Officer Rafiul Bari, the designated officer for providing support to farmers in Dalia Division of the project, said most farmers were not prepared to sow paddy in early January due to excessive cold.

But the ones that were ready to start Boro cultivation that time, had to switch to other crops as the WDB did not start supplying water until January 27, he explained.

Asked, WDB’s Superintending Engineer in Rangpur Division Abdus Shahid said the water they were getting in the Teesta during early January was not sufficient to cover the entire coverage area, 1.10 lakh hectares, in the irrigation project.

They have so far been able to cover only 40 thousand hectares of land in the project area, he added.

PROTECTION AGAINST COVID-19

Tailoring factories catering to high face mask demands

OUR CORRESPONDENT, Nilphamari

As demand for protective masks soared amid impending fear for the spread of coronavirus across the country, more than three dozen small tailoring houses in Saidpur upazila town have been producing around 12 thousand affordable face masks.

Nearly 500 workers, mostly women, have been working round the clock at 35 to 40 factories set up in Nayatola, Mistripara, Munshipara, Chowmuhoni, Shahid Atiar Colony, Nimbagan and other parts of the town.

With wholesale price of Tk 20 each, the factories are not only meeting demand for masks in Nilphamari, but also catering to the demands in surrounding districts.

While this correspondent was visiting Saidpur town, known for the largest rail workshop in the country, information on personal hygiene and coronavirus awareness was being announced through loud speakers set up on vehicles that were plying the streets of the town.

Delwar Hossain, a factory owner in Chowmuhoni area, said, “I have ten electric sewing machines in my factory and I can make 3,000 to 3,500 masks per day. It costs about Tk 13 to Tk 14 to make each mask and I sell each for Tk 20 to

wholesale buyers.”

Another small tailoring factory owner in Shahid Atiar colony area, Mohammad Hanif, said while making masks at an affordable price is a good public service at a time of crisis, the makers are also earning good profits from high volume of sales.

Wholesale buyers from Rangpur, Dinajpur, Nilphamari, Thakurgaon and Panchagarh are making advance payments and thronging the factories every day to pick up their deliveries, he added.

Mask trader Abdul Hannan who is based in Nilphamari town, said the masks made in Saidpur factories are good in quality and at the same time, those are affordable. “I can make Tk 10 profit from each mask I sell.”

Praising the factory owners in Saidpur, Munshipara area resident Dulal Hossain said it has been a good gesture on the factory owners’ part that they stopped production of regular garment items and started making affordable face masks.

Saidpur Small Garment Factory Owners’ Association President Akhtar Hossain Khan said they were happy to be able to be a part of the nation’s efforts in containing the virus and the profit has been an added bonus.



A man displays finished face masks made at a tailoring factory in Chowmuhoni area of Saidpur town. PHOTO: STAR



Prospects and challenges in crab cultivation: Policy perspectives

Zunaed Rabbani, CEO, The Right Kind and AIRN and the moderator of the session
About 300,000 people are directly involved with crab collection, production and export. The number would be higher, if people who are indirectly involved were included. After shrimp, crab is the second most exported crustacean. Crabs worth nearly 43 million dollars have been exported. There is demand for crabs all year long globally, and Bangladesh tries to fulfil this demand.

Behanu Moreda, Acting Country Director, CARE Bangladesh
It is important to discuss production marketing, and cross-cutting issues, such as gender, and how we look at the system as a whole. I welcome all professors, government officials, donors, private actors, colleagues from CARE, and the media to be part of this discussion.

Md Gias Uddin Talukder, Senior Team Leader, Shomoshti Project
Based on regional context, Shomoshti Project deals with specific sub-sectoral agriculture and livestock value chains. There are cross-cutting issues such as access to financial services, health services, micro health insurance, and gender.

There are no other private sector crab hatcheries in Bangladesh, and so we are trying to collaborate with NGF hatchery to train nurseries and producers. In areas where we intervene, such as Sakhira and Khulna, producers involved in our value chain have experienced increased income.

Sohel Ibn Ali, Senior Programme Manager, Swiss Agency for Development and Cooperation (SDC), Embassy of Switzerland
Since crab cultivation is not a big commercial venture, it can be done in small areas, with little capital. Findings from a cost-benefit analysis of the crab sector show that investment in the crab sector brings in more profit than other agricultural sectors.

Halting the practice of catching crabs from open sources, or bringing the entire practice under control, will prevent harm to the environment. A multi-stakeholder approach can be taken in developing the crab sector, by involving NGOs, private sector, and educational institutions.

Dr Md Golam Sarower, Professor, Fisheries and Marine Resource Technology Discipline, Khulna University
Mud crabs are important crustacean resources for commercial fisheries and aquaculture since they are less susceptible to disease, can be easily transported either alive, dead, or without water, and have millions of eggs per crab. They have an international market, but there is an inconsistent supply of crabs, and a weak domestic market.

All physiological indicators from the Khulna University research showed that there was no significant statistical difference, even in nutritional composition, between hatchery-produced crabs and wild crabs. This will help eliminate the misconception of crab farmers that hatchery-produced crabs are not good in terms of growth and survivability.

Dr Muhammad Yousuf Ali, Professor, Fisheries and Marine Resource Technology Discipline, Khulna University
Crab harvesters put intense pressure on nature by catching crabs indiscriminately. Banning (cultivation) in peak breeding season is required for safe spawning and migration of mud crabs. Our research concludes that the breeding season is between February to April and the peak breeding season is between March and April for mud crabs. However, as the number of fully matured crabs starts increasing from mid-February, it must be included in the peak breeding season. We recommend the ban period should be mid-February to mid-March if it is for two months, or just February if it is one month.

Md Jahidul Kabir, Conservator of Forests, Forest Department
In 2016, we had a funding project of GIZ through which we collaborated with Fishery Research Institute, where we did some hatchery development work on a trial basis in collaboration with



CARE Bangladesh in association with The Daily Star organised a roundtable titled “Prospects and challenges in crab cultivation: Policy perspectives” on February 19, 2020. Here we publish a summary of the discussion.

Paikgacha Fishery Research Institute. However, it did not achieve complete success. After that there were recommendations for further study related to the issue and the requirement of private sector involvement. If the fishery department, the private sector, and the Forest Ministry work collaboratively then the natural conservation of crabs according to the ministry’s mandate can be possible.

Mahabub Alam, Co-ordinator, Nowabentki Gonomukhi Foundation
In the Sundarbans alone, 76 lakh cages are laid out while of these, 20 lakh are untenanted because of inadequate supply of crabs. About one lakh year are small- to large-scale harvesters of five to twenty-five thousand kilograms of crabs. Whereas, according to NGE last year alone produced 3.5 lakh of crabs -- which is less than one percent. The demand can be fulfilled by increasing supply by almost twenty to even fifty times. Now, our sector has been crippled by the fear of coronavirus. The farmers who had invested in crab cultivation will not get any returns. Thus, the demand side must be looked into. This is not in the hands of the private sector; it must be discussed at the policy level.

Gazi Abul Kashem, Chairman, Bangladesh Live and Chilled Food Exporters Association (BLCFEA)
China has heavy demands during January and February due to Chinese New Year. But during that time, we face exporter restrictions and quantity limitations such as the NOC issued by the Forest Ministry, according to which, no company can export more than eight to ten tonnes at that time.

In 100 kilograms of crabs, about three to four kilograms are virgin third-gender crabs that are not being defined. We need a way to include, identify and diagnose them during export.

Md Mahfuz Ashraf, Private Sector Adviser, SHOUHARDO III, CARE Bangladesh
Not only is the process of crab cultivation relatively easy, but it also gives greater profits comparatively along with good demand and prices. This sector can also work towards women’s empowerment as many women are already involved in this field; it creates income opportunities for them, and involves them in the decision-making process. We need to bring them forward,

provide them with necessary training and advice regarding entrepreneurship to attain the SDGs.

Aung Tun Aye, Aquatic Animal Nutrition (Consultant), Agro Solution
Approximately three kilograms of fish feeds are required to produce around one kilogram of crabs, the cost of which is very high and therefore cost of feed is an issue. Secondly, nutritional balance inclusive of vitamins, minerals, etc., is important. However, the survival rate of crabs is falling since these are not provided as supplements for their immunity development. Our feed machines work at a minimum of 10 tonnes per hour, commercial feed production will not be possible for this small market size.

Shahadat Ali Khan, CEO, Bangladesh Frozen Foods Exporters Association (BFEEA)
The mangrove forest in the Sundarbans is a highly suitable environment for crabs. Many other organisms are also part of this ecology, and depend on one another for survival. Sheela crabs and crab hatcheries need more focus as their use will lead to sustainable production of crabs without hampering the balance within the environment.

Md Anamul Haque, Senior Marketing Manager, Spectra Hexa Feeds Ltd. - Mega Feed
Commercial feed is not yet available in the Bangladeshi market due to insufficient demand. Therefore, relevant organisations should promote the use of feed in farms. Natural cultivation can be time-consuming: use of feeds can decrease cultivation time. This will increase production, which will, in turn, raise exports. A solid report is required on how much feed is needed for crab cultivation.

Md Bashirul-Al-Mamun, Divisional Forest Officer, Sundarban West Forest Division, Khulna
The Fish Feed and Animal Feed Act contains no guidelines regarding crab feed. Therefore, a guideline can be introduced in the policy act for crabs, shrimps, prawns and other types of fish. A specialised crab feed could be created using existing technology. A study conducted by WorldFish on crabs (2013-

2014) found that the breeding season is changing, so hatchery techniques need to change accordingly.

Md Musharof Hossain, PKSE AGM (P)
The growth and performance of crabs in hatchery sources are 40 to 45 percent higher than those of wild sources, making hatchery sources more effective and profitable. One of our targets is to establish small hatcheries at family levels. The challenge here is that people working at operational levels at hatcheries must learn the work by staying at hatcheries for at least three to four months prior to joining.

Syed Tarikul Islam, Executive Director, ACLAB
We are depleting our natural resources for development and livelihood. We are not mindful of the effects of this on the environment or biodiversity.

Bringing the crab sector into the limelight and engaging more people or organisations in this field is crucial. The sector can be developed by providing incentives and technical assistance to those involved. We can also focus on implementing more comprehensive policies which can have long-term impacts.

Sajeda Yasmin, RPM--Shomoshti Project, CARE Bangladesh
If brood stock management can be done properly, the supply of crabs will increase and their survival rate will also rise. There is also scope for better disease management. Those who are fattening hatchery crabs are repeatedly creating demand.

Rajib Ghosh, District Co-ordinator, EcoFish-II, WorldFish
In the Cox’s Bazar zone, our organisation included fishers and started cage culture and pen culture in crab cultivation. Because of beneficiary involvement and enhanced production in those areas, farmers have an alternative income source.

Md Bashirul-Al-Mamun, Divisional Forest Officer, Sundarban West Forest Division, Khulna
The National Fisheries Policy, 1998 must be updated and revised. The definition of crab in the law is not actually of *Scylla serrata*, but of *Scylla olivacea*.

Two policy issues must be addressed: 1) crab export policy; 2) Integrated Resource Management Plan. This plan will expire this year, and so must be updated, or else legal complexities will arise. Laws for crab cultivation should be formed to address the size limit issue, especially in exports.

Mohammad Belayet Hossen, Divisional Forest Officer, Sundarban East Forest Division, Bagerhat
Out of 242 crab farms registered in the Sundarbans-Fulban barrier, 158 have shut down their businesses due to unavailability of wild crabs. Depending on wild crabs is therefore no longer sustainable.

When breeding season begins, the fishermen break the laws of the forest ministry or commit theft just to capture crabs. This is because they can sell the crabs for double the price during breeding season. Businesses should stop buying crabs during the breeding period.

Md Shamim Haider, DD (Shrimp), Department of Fisheries
Many people have converted their shrimp enclosures into crab enclosures because crab cultivation is much less risky and can be established with little investment. Therefore, this is profitable for marginal cultivators.

Dr Muhammad Abdur Rouf, Professor, Khulna University
The crab sector can be divided into two parts: wild and culture. The lifecycle of crabs must be considered when we talk about the wild sub-sector. Their mating and breeding happen in the open ocean, which does not fall under the jurisdiction of the Sundarbans area. The mother comes to the Sundarbans to give birth to crabs. These mothers cannot be harvested, since doing so would be a big loss.