

# Incredible fish harvest using Biofloc technology

SHYKH SERAJ

The most advanced fish farming technology, Biofloc (BFT) has created opinions and lots of discussions among the fish farmers and entrepreneurs across the country. You would probably recall one of my articles on The Daily Star, titled 'Modern fish farming technologies shaping the cultivation,' published on July 25, 2019. And a recent one, 'Yard turns into modern fish farm,' published on October 3, 2019 on the same reputed daily. You have also seen documentaries on this topic on Hridoye Mati O Manush. Besides, millions of people have watched the episodes on social media, particularly on YouTube and Facebook. It gave me a tremendous boost to work and create awareness on BFT. Everyone was so concerned about the production. A few days back, I went back again to visit Zahirul Haque and Mustafizur Rahman's yard fish farm at Ballavdi village in Narayanganj's Arahazur upazila. You have already seen and read about these two innovative young entrepreneurs. After hard work on BFT, they were ready to yield the best out of this low-cost fish farming technology. Generally, I go out filming early



Shykh Seraj among others looks on as fish, cultivated with the help of Biofloc technology, is being collected at a farm at Ballavdi, Narayanganj.

in the morning and the journey towards Ballavdi started at 3:00am. By 4:00am I reached the village. They had spread the fingerlings in their water tanks back in September, when I last came here and now it was time to harvest. This is the first-ever harvest from Biofloc fish farm. Many people have come to visit Zahirul and Mustafizur's Biofloc fish farm. They were also eager to see what's inside those tanks, set on the yard. Everyone wants to see the result of their hard work and what BFT has to offer for the future fish farming. Some other entrepreneurs were present there to see how the two young men have done. The day was the ultimate one where people would witness the truth behind the Biofloc magic. For the kind reminder of the readers, Zahirul and Mustafizur have 12 water tanks on their yard and

expect four harvests a year. They were ready to harvest from one tank. Each tank has 17,500 litres of water and different reservoirs have different varieties of fish. The tank that was ready to be harvested was of mixed variety of fishes. Although, there were more telapias, but, they also had koi, kalibaush, pangash, rui and other varieties. They started clearing water from the tank. The water released to a nearby pond as there was still fish feed inside the tank. Mustafizur and Zahirul were saying they expect to harvest at least 700 kilogram to 750 kilogram of fish from one tank. This seems really surprising to hear as it's a very new experience for the fish farming sector in Bangladesh. It seemed to me that this little reservoir is not just a money bank, rather it's a gold mine. As I have said earlier, so many

people have come here to witness this epic moment. They were having great fun around the water tanks. I have never seen this before. People love catching fish from rivers and ponds but watching people catch fish from a water tank on a yard really amazed me. This was a lifetime experience for me. Banker, students and service holders -- so many people from all walks of life were there. They were all waiting to see the result. A local fish trader named Abul Kashem was there too to buy fish from these entrepreneurs. Kashem told me the size and colour of the fish here are totally different and attractive. He fixed a rate of Tk 110 for each kilogram with the entrepreneurs. The fishes were visible in the water tank as the sun was rising from the eastern sky. In the mild wintery

weather I could see lots of fishes in the tank. Mustafizur and Zahirul started netting fish from the tank. It was really wonderful to observe. A silent revolution was taking place at the village. They were using plastic crates to weigh 10 kilogram fish each time. People were really eager to see the final amount of fish harvested from the tank. It was a day for both Zahirul and Mustafizur and something they really waited for the past couple of months. It was a day of great contentment. The fishes were weighed and then sent to the wholesale truck. Finally from one tank these two entrepreneurs could harvest 600 kilogram of mixed variety fishes. In four months, the production isn't as expected, said the entrepreneurs. They also explained about why they couldn't get their

expected production. As they didn't go for hybrid telapia, that's why they didn't get larger sizes. But the two young entrepreneurs were happy at the end of the harvest. Let me brief you again about the cost and profit scenario according to Mustafizur and Zahirul. Each tank costs a maximum of Tk 45,000 (USD 531.386). There is aerator, generator and a blower. In total, the cost of construction is around Tk 4.5 lakh (USD 5313.42) and some more for feed and fingerlings for the 12 tanks. Each tank will serve for five years with 20 harvests, four harvests a year. They sold fishes worth Tk 67,100 (from a single tank and one harvest) and earned profit of Tk 22,100. Dear readers, according to the Department of Fisheries, per hectare fish production from ponds is 4,851 kilogram, which means around 20 kilogram per decimal. Here, they got 600 kilogram from half decimal which clearly shows the immense growth and harvest rate of Biofloc. The entrepreneurs say this is 30 percent higher than the usual production from ponds, using traditional fish farming technology. Technology is itself a magic. When a new technology comes, it shows great aspects. But, it's necessary to fetch the real opportunities of that very technology. BFT hasn't only shown great hope in fish farming, it also indicates that we could secure the top position in fish export using BFT. What we need now is, BFT should be run through proper scientific and technological application. And when it's a matter of scientific application, we need to be patient, industrious, and our fish farmers should get the proper training. These key requirements must be met to achieve great success through BFT, otherwise, things will be ruined. We must concentrate on these new technologies and explore more to achieve something even bigger in the fish farming sector. Moreover, the government should analyse and monitor the quality of the protein and keep an eye on the pros and cons of the Biofloc produced fishes. For this, our farmers need proper guidance, research and awareness from the government, researchers and media.

Shykh Seraj is Bangladesh's pioneer development journalist. He received country's two highest civilian honours, Swadhinata Puroshkar and Ekushey Padak, respectively. He is an Ashoka and Bangla Academy Fellow. He also received highest award for agricultural journalism from the United Nations, FAO A.H. Boerma Award, Gusi Peace Prize (Philippines) and many other prestigious accolades at home and abroad. At Channel i, he's the Founder Director and Head of News. He's also Director and Host of Channel i's popular agro-documentary, Hridoye Mati O Manush.

# MP Bazar on govt land!

AHMED HUMAYUN KABIR TOPU, back from Nagarbari

Encroachers, backed by former lawmaker of Pabna-2 constituency, grabbed a portion of Jamuna river land along with riverbank properties owned by various government departments in Pabna's Bera upazila to set up a market. The market, locally known as MP Bazar, on approximately five acres of land was established after being initiated by former lawmaker Khandaker Azizul Haque Arzu by filling land with sand along the Jamuna river in the now-obsolete Nagarbari ferry terminal area in Pura Varanga union, informed the encroachers, who bought plots there. Visiting the area, this correspondent found construction of the brick-walled, tin-roofed shop houses in progress on sand-filled land along the river shore, where a six to eight feet high dyke wall has been built. The shop-owners said, 163 shops have been erected in the newly built market but they do not have any document to support their possession for which they paid the lawmaker's men between Tk 1 lakh to Tk 1.25 lakh for each 20 feet by 32 feet plot. Mohammad Mostafa, owner of Anis Enterprise, told The Daily Star that he obtained possession of a plot in MP Bazar by paying Tk 1.25 lakh in three installments to then lawmaker's men and constructed a semi-pucca building this year by spending Tk 5 lakh. When asked if he received any money receipt or document showing his possession, he replied in the negative saying, "We invested in the property placing our trust on the ex-lawmaker." Another plot-owner Moslem Uddin, a general supplies trader, said the lawmaker prepared vast area of land beside the river by filling it up with sand and erecting a brick wall along the water to establish the market. "Since he spent a huge sum of money in

preparing the market area, we paid him the cost," claimed Moslem, who paid Tk 1 lakh for his plot, and said, he does not care about land documents. The 50-year-old businessman insisted that the market was built on the same land, where another market named Nolkhola Bazar in the Nagarbari Ghat area used to exist. Since the former lawmaker helped re-establish the market, shop-owners are now calling it MP Bazar, he added. Chairman of Pura Varanga Union Parishad Mohammad Rafikullah too claimed that the new market was built on the same location of Nolkhola Bazar, which had brisk business when the Nagarbari Ferry Terminal was in operation. The terminal, once an important gateway to the northern districts, became obsolete after the opening of the Jamuna Bridge in 1998. "In 1985-86 erosion by the Jamuna river caused the Nagarbari Ghat to shift and Nalkhola Bazar was washed away. After that, a shoal appeared in the river. Today 1.57 acres land of Nolkhola Bazar still exists and the newly built market is located on that land and the ferry terminal area. This land is not part of the river," claimed the chairman. Contacted, former MP Khandaker Azizul Haque Arzu also claimed that the market was not built by grabbing river land. It stands in the same place as 'Mothurapur Haat', a village market that was eroded away by the Jamuna a century ago, he said. "When the river changed its course, the land reappeared and the present market was built in that place," he claimed, asserting that the river was two kilometres from the market area. The former lawmaker dodged the question when asked if he took permission from any government body before establishing the market in the Nagarbari Ghat area as he does not own that land.

He also denied taking money from the plot-owners and said a committee was formed to handle the matter. "To obtain possession for one plot each, shopkeeper paid Tk 97,000 of which Tk 96, 200 was used for preparing the land by filling it up with sand and building a guide bank (the dyke wall) for the market while Tk 800 was used for electricity connection to the shops," he said. Bera Upazila Nirbahi Officer (UNO) Asif Anam Siddique said the market was constructed illegally on government property without taking legal permission from the government. "The market is obviously located on government property. Most of the property is river land, while the ferry terminal area including the haat periphery originally belonged to Roads and High Ways Department (RHD)," said the UNO. He said public announcement about eviction of illegal occupiers were made through loudspeakers and steps will be taken after discussing the matter with all concerned authorities. While the announcement caused the shop-owners of MP Bazar worry about losing their investment, Pabna Deputy Commissioner (DC) Kabir Mahamud assured that they will not go for any quick actions since several government departments are involved in this. "After discussing with RHD, Water Development Board (WDB) and other concern authorities we will go for eviction drive," said the DC, adding that the government is strict about recovering river land and other government properties. Pabna RHD Executive Engineer Samiron Roy said a highway of the department existed in the area when the Nagarbari Ghat was operative. He said, a large portion of the market is located on RHD property and they already informed higher authorities, seeking eviction by the magistrate.



Anwara Begum, who came to draw the pension of her late husband, fell ill at one stage and had to lie on a bench in front of the office of district accounts officer for a while.

## Old pensioners suffer

Pensioners, who retired from their jobs in July this year, began to receive their allowances directly in their bank accounts

OUR CORRESPONDENT, Tangail

The elderly pensioners in Tangail are faced with immense sufferings every month as they have to wait long hours in queues to collect their allowances. Come the start of every month, and they rush to the office of the District Accounts Officer (DAO), which is not equipped to handle the huge gathering of retired government officials. With a lack of seating arrangements, shade for comfort or enough restrooms, the aged pensioners, who are often accompanied by family as they are unable to walk or commute on their own, suffer for long hours. According to the DAO, there are around 5,500 pensioners in Tangail Sadar upazila. During a recent visit to the office, this correspondent saw at least a hundred pensioners waiting for their turn. The queue began at the pension wing on the ground floor of the Collectorate Building and continued outside to the porch and office grounds. Several pensioners said they not only have to wait at the office for the advice slip, but also later at the bank to collect the money. Anwara Begum, 82, of Bajitpur village in Tangail Sadar upazila, comes to draw the pension of her late husband every month. She began feeling ill at one point and had to lie on a bench in front of the office for a while. Anwara said, her husband, who worked at the Public Health Office, died many years ago and since then she has been collecting the money like this.

"Now I cannot move without the help of others due to old-age complications. But what can I do? I need the money to make ends meet, especially to buy medicines." A pensioner, wishing anonymity, said, "It would greatly benefit us if the money was directly sent to our bank accounts." Shahanoor Islam, president of Tangail district unit of Bangladesh Probin Hitoishi Sangha, said it is not acceptable that the pensioners should suffer as such. "Not only in the district headquarters, but the situation is the same at the upazila level." It would greatly help them if an online system was introduced for them, he added. When contacted, Abu Rusud Al Abbas, district accounts officer in Tangail, said the new pensioners, who retired from their jobs since July 2019, began receiving their pensions directly in their accounts upon retiring. In addition, the previous pensioners will be able to enjoy this online facility within a couple of months as it is currently being processed, he assured. Admitting to the sufferings of the pensioners, the accounts officer said the problems arise when the pensioners come all at once to collect the money within the first three days of the month, he said. "But no matter how many people gather here, everyone goes home with the pension money." "We give pension till the 20th of every month, and the queue is not so long after the initial few days of the month," he added.



MARKET ON OCCUPIED RIVER LAND: This market, locally known as MP Bazar, is being set up after occupying five acres of government-owned land on the Jamuna river in Pabna's Bera upazila.