

INNOVATIVE **FARMER**



"Shariful Islam is a shrimp farmer from Mehendinagar village, Shyamnagar Upazila of Satkhira District, involved in traditional shrimp farming for the last 10 years. His grandfather and father used to cultivate rice. His elder brother started shrimp cultivation in the 80s as rice productivity was falling due to salinization in the area and shrimp offered better profits.

Shariful has 3.3 acres of ghers (ponds) with water depth of 1.5 feet where he cultivates black tiger shrimp (bagda), generating an annual income of

around BDT 25,000 (US \$290). He says most of his shrimp usually die at "finger size." He became interested in receiving SAFETI technical guidance and attended all three modules of the training. In 0.18 acres of his land, he increased the depth to 4.5 feet, installed blue net around the gher, stocked 4,000 post larvae (PL) from the Desh-Bangla SPF hatchery on March 17, 2019, and followed the SAFETI protocols. Four months later, on July 17, he harvested 137 kg of shrimp (equivalent to 1880 kg/ha). He had invested BDT 35,000 (US \$400) and although the market price had fallen to only BDT 550/kg at the time of harvest, he made a profit of BDT 40,350 (almost US \$470).

Shariful said he was delighted with this result. "I think now that water depth is very essential for shrimp cultivation. Secondly, feeding regularly is very important for the growth and nutrition of shrimp. The people of this area are cultivating shrimp for the last 50-60 years depending on natural feed, but they no longer get good results. Since 2017 most of the intensive farms in this area have been losing their crop, so I was not confident initially, but after receiving SAFETI's trainings I took the risk for investing. SAFETI's staff were always very helpful with technical guidance and information. I never believed that this huge production was possible. I went also to the SAFETI training for intensive farmers and learned that though Bangladesh has

vast areas of suitable land for shrimp and prawn farming, our productivity is very low. After following SAFETI's farming technology now I believe that much better production is possible."

During the production, he faced some problems. The shrimp stopped growing as he had stocked too many for his gher area. He realized that the shrimp were facing oxygen deficiency. In such cases, farmers usually transfer some shrimp to another gher — but he did something innovative. There is no electricity connection in his area and aerators are very expensive, so he used a water pump which he had bought long ago for transferring water to his gher and made a pipe with holes in it to fit to the outlet. Then he used this to pump water from his gher and back again, aerating it at the same time. This increased oxygen levels and helped the shrimp to survive. He also adapted a technology from the intensive farmers, building a shrimp "toilet" using a concrete slab and ring in the middle of the gher. Waste materials collect in this and he cleans it out once or twice a week, helping maintain water quality.

There are still some shrimp in the gher, and Shariful added more PL to produce a second crop. He has some fallow land that he is planning to use next season. He will increase the present gher size to about 66 decimals and follow SAFETI technology next year.

Shariful Islam was awarded "Best Shrimp Farmer" of Satkhira district by the Department of Fisheries during National Fish Week 2019 for his excellence in shrimp farming.

"Initially when I stared cultivation this year following SAFETI technology, everything seemed very difficult," Shariful said. "But after one season, I become more confident." The neighboring farmers and the other 20 farmers of his group came to see the harvest. "Everyone was surprised to see the harvest," Shariful said. "Everyone is now thinking to follow the SAFETI technology as the production in traditional farming is very low."



Shariful's innovative aerator



