EFFICIENT IRRIGATION TECHNOLOGY IS LIKELY TO OVERHAUL TRADITIONAL PUMPS IN KESHABPUR, JESSORE

"An intense promotional campaign will help to sell 800 AFPs in this upazila only," says Rasel.

FIRST PERSON

AQUACULTURE IRRIGATION CHANGING PACE

Md. Delowar Hossain (Rasel), 38, in front of his AFPs stored for next season

Since entering into fish production in Keshobpur, Jessore, in 2007 Md. Delowar Hossain’s (Rasel) output of fresh and saltwater fish has been growing each year. Rasel’s fish enclosures cover around 200 hectares of land where his operations have been running with 25 traditional centrifugal low-lift pumps.

Rasel visited the RFL showroom to see the company’s new product, the Axial Flow Pump (AFP) after getting an invitation from field officers of the USAID funded Cereal Systems Initiative for South Asia Mechanization and Irrigation (CSISA-MI) project, part of President Obama’s Feed the Future (FtF) Initiative. Through a public-private
partnership between the Government of Bangladesh and RFL facilitated by CSISA-MI. AFPs have been introduced into Bangladesh as a new surface water irrigation technology for agriculture. Now fish enclosure owners are starting to realize the potential of AFPs for their operations.

Rasel was impressed by the design of the AFP and bought four 5-inch diameter AFPs. Through personal trials, Rasel discovered that he is able to run the four AFPs with only one 12 horsepower engine, compared to only one in the case of his centrifugal pumps (he used the other side of the pulley of each AFP to attach and run the next one). This innovation means that Rasel can save around BDT 250 (US $3) for each hour that he uses the fuel efficient AFPs instead of the centrifugal pumps. Last season Rasel did not need to hire any additional pumps other than the ones he owns. This has reduced his overhead costs as he could save money on pump hiring fees, operator’s fees and fuel costs.

Rasel has seen positive changes in the conditions of his workers. Using AFPs they have now less operational problems as well as using the centrifugal pumps. "If workers have to go to the fish enclosures in middle of night to get into waist deep water to check pumps, they suffer because of the chilling winter season, but with AFPs these operational problems have decreased and they are more beneficial for workers."

Rasel leases the land for his fish enclosures from paddy famers. Part of this agreement is that land will be dewatered for planting paddy seedlings by December each year. Using centrifugal pumps to meet this deadline has caused problems for Rasel due to the pumps comparatively low volume water discharge and more frequent operational problems. This year Rasel is planning to use the AFPs in his fish enclosures to benefit both his workers and paddy farmers.

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In the next season, Rasel expects to increase his enclosures by nearly 15 hectares and is excited about using AFPs to assist in this extension. Already, two other fish enclosure owners in the area have begun using AFPs, and Rasel envisions a large scale overhaul of traditional pumps in favor of the more efficient AFPs in this fish producing district.