Bangfish Policy Brief

Upgrading pangas and tilapia value chains in Bangladesh

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Wild catches of fish are stagnating and to ensure food security in many developing countries a new way of providing fish have emerge to meet the increasing demand for fish. Aquaculture is the fastest growing animal protein food producing sector in the world. 73.8 million tons of fish were produced in 2014, which is an increase of over 60 % in just 10 years (FAO, 2016). The production is dominated by Asian countries with China as a leading producer. Aquaculture production in Bangladesh is dominated by four species: Indian carp, silver carp, tilapia and pangasius.

Tilapia and pangasius farming has expanded rapidly over the past decade and has been an important part of the so called 'Blue Revolution' in Bangladesh. The domestic demand for tilapia and pangasius is high especially among lower income groups. The price is relatively low compared to other fish in Bangladesh and is called "the fish of the poor".

To promote green growth in the Bangladesh aquaculture sector of pangas and tilapia the project 'Upgrading pangas and tilapia value chains in Bangladesh' (BANGFISH) has been established with the support of DANIDA. The project will provide knowledge on how to increase production in a sustainable way. The main aim is to provide farmers with knowledge on how to improve farm production through better farming practices taking environmental issues, such as fish- and water quality, into account and exploit the market potential for farmed fish by enhancing value chains functioning. The project is led by University of Copenhagen in close cooperation with Patuakhali Science and Technology University and The Bangladesh Agricultural University (BAU).

The work on production and environment is based on an interview schedule where data is collection from 600 farms to be able to evaluate farm practices and how they can improve. Also the effects of managerial practices on productivity and profitability differentials for pangas and tilapia farms of varying scales of operations and tenure system is being investigated to improve the knowledge base on how managerial activities affect the economic performance of different scales of pangas and tilapia farms in Bangladesh.

The farm level analyses also include an investigation of farm productivity, efficiency and production risk related to managerial practices. Based on this knowledge recommendation for best practice in pangas and tilapia in Bangladesh should be established. Furthermore, constraints to input factors use on different types and scales of farms related to existing tenure system and institutional setup should be examined.

When the farm data is collected a leaflet has been handed to the farmers containing information on "best practice" regarding stocking density and feeding of tilapia and pangasius.

The information should help farmers making the right production decisions regarding input use to improve yield and reduce cost. The aim is to examine the economic effects of internal farm measures to improve water quality related to input factor use (best practice). Furthermore, the influence of external factors, such as, general water quality, flooding, soil, temperature and spreading of diseases should also be examined.

Finally, the existing policy provisions to regulate environmental externalities affecting farm production and productivity should be examined. Depended on the type and the effect of the externalities identified a recommendation on how existing regulation or new regulatory measures could improve pangas and tilapia in Bangladesh will be examined.

Data has been collected in 2016 and a new data collection for 2017 will begin in May. From these data environmental risk and efficiency of pangas and tilapia farmers can be measured and investment analysis can be done.