

Exploring blue economy, water and livelihoods in Bangladesh

Concept note to explore collaboration

Over the last 40 years, Bangladesh has made tremendous progress in feeding an increasing population. While in the 1970s the population was 75 million, and the rice production 10 MT, now the population is about 160 million and the rice production over 30 MT. In the meantime, the fisheries sector has an important role in agriculture sector as well, with a share in GDP of about 4%, engaging more than 14.5 million people (1.2 in freshwater and 0.3 in marine fisheries) on full time and part time basis in the fisheries and aquaculture value chain, which equals 10% of the population and providing about 60% of animal protein intake (FAO, World Bank).

For the country as a whole, the challenge of feeding the increasing population with a decreasing agricultural area is combined with the challenge of facing climate change and nutrition and dietary changes. Insight in the total food system is increasingly important, and various government, private sector and academic partners are joining forces to address this complexity of challenges. The steps forward towards a middle income country also entails that development cooperation is expected to decline. Instead, it is expected that the private sector of the country will enhance its knowledge related collaboration with various organizations in the world. Public-Private-Partnerships are increasingly used to facilitate developments in value chains.

In fisheries and aquaculture, there is a knowledge gap with regard to the land use changes related to fisheries and aquaculture. Salinization, fresh water floods (caused by extremes in rainfall), and coastal ecosystem downgrading have severe pressures on the aquacultural opportunities. Some aquaculture/shrimp culture activities are considered non sustainable, due to a.o. lack of zoning, disease pressure, and lack of ecosystem considerations. Blue economy aspects, where waste of one sector feeds into another, seems promising and maybe further explored. Also it is not known how maritime resources may be used to a wider extend for fisheries and aquaculture in a sustainable manner, taking climate change into account. The incorporation of these different values the coastal system brings is under exploited.

The Bangladesh Shrimp and Fisheries Foundation (BSFF) is primarily a non-profit research and advocacy organization (<http://shrimpfoundation.org/> in the fisheries and aquaculture sector. Their members are government and non-government, local and international. They are interested to explore collaboration with Wageningen UR as an international well reputed knowledge organization in the field of live sciences. Currently, Wageningen UR works together with various partners in Bangladesh, on water and food related issues (www.wur.nl/region/bangladesh). These include, among others, active collaboration in the EKN-funded Safal project and in a Dutch NWO-funded project on the use of mangroves for climate-smart aquaculture (to be launched end of 2017), both of which coordinated by Solidaridad. As well as the Ecobas project nearby Kutubdia Island (Chowdurry, 2015-present). Current knowledge application shows that adequate mangrove management, and enforcement and utilisation of the ecosystem functions, provides improved perspectives for coastal sea food production on a long term.

An exploratory visit could provide further insight in possible research cooperation between WUR and BSFF on blue economy with particular emphasis on aquaculture and specially shrimp farming in the coastal areas of Bangladesh and sustainability of fisheries and deep sea fishing in the Bay of Bengal. The exploration would focus on the embedment of potential climate prove aquaculture concept, with a focus on circular economy, intertidal ecosystem enhancement and facilitation for coastal protection, and sea food production.

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Website:

<http://www.wur.nl/region/Bangladesh.htm>
<http://shrimpfoundation.org/>

Reports:

Blue Economy, Gunter Pauli