

More crop per drop – and more value

SFSA Bangladesh engages in water initiative

Worldwide, farmers need to use water more efficiently. The Syngenta Foundation and partners are involved in a major new initiative in Bangladesh. There are multiple potential benefits.

Much of Bangladesh is known for heavy rainfall and repeated flooding. Parts of the country, however, are water-stressed. They include the Barind Tract in the north-west. Syngenta Foundation for Sustainable Agriculture (SFSA) Bangladesh works in an initiative called *Introducing Water-Efficient Technologies in the Barind Tract*. The work forms part of the Bangladesh Water Multi-Stakeholder Partnership (BWMSP). Its Barind Tract efforts aim to increase the efficiency of water use in local agriculture, reduce groundwater extraction and increase farmers' incomes. Funding comes from the Coca-Cola Foundation.



“The current initiative runs from 2018-20. It will provide important experience and evidence to support a significantly larger intervention in this region”, explains SFSA Bangladesh Director Farhad Zamil. “We hope that will attract support from multilateral development institutions.”

Irrigation dominates – and needs improvement

As Farhad points out, “about 93% of the water used by Bangladesh farmers goes into irrigation”. Most of it is groundwater. Over-extraction poses a serious threat to water resources. “Irrigation efficiency in Barind is the lowest in South Asia”, Farhad continues. “The resulting high production costs make agriculture here uncompetitive”.

Because of population growth and dietary changes, agricultural water demand is expected to increase by almost half over the next ten years. A significant and sustainable improvement in farm productivity is therefore crucial. “More efficient irrigation, other relevant technologies and water management practices can all play a role”, Farhad emphasizes.

The Barind initiative aims to get “More Crop per Drop” and “More Value per Drop”. The environment and some 10,000 farmers stand to gain.

Mango, rice and Farmers’ Hubs

After a comprehensive study of the Barind area and its agriculture, the partners* decided on two main interventions. These Ultra-High-Density (UHD) mango-growing using drip irrigation, and rice paddy cultivation using alternate wetting and drying.



“SFSA Bangladesh has a lot to contribute to the partnership”, Farhad Zamil explains. “This includes technical expertise in water-efficient technology identification, adaptation, demonstration, extension and market linkage facilitation.”

Important though technology is, all the partners know that its mere introduction is not enough. The equipment has to be accessible and affordable, and relevant expertise made widely available. Market linkages and better prices for produce are also essential. “We have

already established the [Farmers’ Hub](#) business model to address such issues”, says Farhad. “Farmers’ Hubs are now playing a key role in the Barind initiative.”

The aim in 2019 is to include 15 new Farmers’ Hubs, rising to 30 by 2020. “We also want to involve at least two companies buying mango and other produce for processing and export”, Farhad adds. SFSA Bangladesh will additionally continue to support capacity-building, identify and test water-efficient technologies and engage with national and international water and agronomy experts.

*[2030 Water Resources Group](#), [Bangladesh Water Partnership](#), the NGO Development Association for Self-reliance, Communication and Health ([DASCOH](#)) and SFSA Bangladesh. The BWMSP work-stream on Agriculture and Water is chaired by a Ministry of Agriculture Secretary.

Results in 2018

- ✓ **2** training modules developed
- ✓ **25** project staff and government extension officers trained as trainers
- ✓ **2,000+** farmers trained
- ✓ **5,000+** farmers learned about water-efficient technologies for mango and rice
- ✓ **30+** early-adopter farmers established UHD mango orchards
- ✓ **3** districts and **6** sub-districts benefited from awareness creation
- ✓ **4** new Farmers’ Hub established and in operation
- ✓ **4,000+** special mango saplings produced for UHD farming
- ✓ **3** local and **1** external ([Jain Irrigation](#)) water technology companies involved