

Promoting Balanced Application of Fertilizers through ICT channels

Intervention Brief: Fertilizer



Background

In its first phase, Katalyst has worked in several crop sectors like maize and vegetables where injudicious use of fertilizers were found to be one of the key constraints that underpinned the lower productivity of the farmers and promoted transacted service for 'balanced' application of fertilizers as a form of 'Fertilizer Recommendation based on Soil Testing'. Although the initial response from the farmers was encouraging, the retention of the services was challenging. Later on *Fertiliser* emerged as a cross-sector component following analysis undertaken in several adjacent agricultural value chain sectors (e.g. maize, vegetables and potato) within the Katalyst portfolio. Findings draw-out a lack of access to quality inputs and information regarding their usage as first-level causes of farmer under-performance in such sectors. The decision to explore fertiliser as a stand-alone sector thus allows a more focused effort on this one dimension of farmer underperformance in existing Katalyst sectors but also allows Katalyst to explore the high scale potential of correcting a market dysfunction in the core area of input supply and application, which has relevance to most agricultural sectors involving land cultivation, including those outside of Katalyst's portfolio.



Soil Resource Development Institute (SRDI) had already published 459 "Upazila Nirdeshika"- a guide book that provides information on fertilizer recommendation for all crops in almost all upazilas in Bangladesh. In 2006, Katalyst partnered with SRDI to produce a more detailed guide with recommendation up to 'mouza' (the smallest administrative unit) level and piloted in a single upazila in Jessore. The service was promoted through input dealers and retailers. Still the Nirdeshika found less user-friendly due to its highly technical content. Hence, Katalyst decided to provide this service through a digital and user-friendly platform and started working with SRDI in this regard from 2008.

Two leading mobile phone operators, Grameenphone and Banglalink are working as channel partners in disseminating information on fertilizer recommendation by offering their respective ICT-enabled platforms i.e. GPCIC (Grameenphone Community Information Centers) and Banglalink Jigyasha 7676, thereby ensuring scale and scope for a formidable public private partnership. Farmers can use either of the platforms to receive precise fertilizer recommendations by providing just five basic pieces of information-- name of the crop, type of land, name of the union, upazila and district. The benefit of the service is twofold- increase in yield and decrease in production cost.

Target Beneficiaries

Primary target for the cross sector is similar to the target beneficiaries of Katalyst's other core sectors. In addition, fertilizer sector also targets the rice growers across Bangladesh as Katalyst has the mandate to bring significant impact beyond Katalyst sectors in the wider economy.

Locations

Currently fertilizer cross sector is working in Greater Jessore and Northwestern districts in Bangladesh. FRS is available in 100 upazilas currently and another 355 upazilas will be available very soon (see the list for the upazilas).

Major activities

Katalyst has supported SRDI to develop a central database covering the entire country (459 upazilas) as the feedstock of the system. Under the pilot phase launched in November 2009, activation program in 30 pilot upazilas has been completed. SRDI is also planning to launch FRS in a total of 455 upazilas by the middle of 2012 where activation program will be started very soon. Simultaneously, to

ensure sustainability, Katalyst is also working with the MoA to mobilise funds to build financial and technical capacity of SRDI, an issue that still remains the core challenge of the FRS intervention along with the capacity building activities for SRDI (e.g. maintenance of the database and web hosting, piloting with Grameenphone and Banglalink) to develop a sustainable mechanism for dissemination.



Synergy

While the Fertilizer team was involved in developing the software, the ICT team worked closely with them to make it accessible and usable through platform like GPCIC and Banglalink 7676-Krishi Jigyasha for higher outreach and benefit.

Key achievements

Still in its pilot phase, around 2500 farmers has been benefited through this intervention. As proven from SRDI studies, the use of fertilizer as recommended by the FRS system will increase the average yield of rice by 20-25 percent and other crops by 10-15 percent. FRS has won the “Best use of IT” award by Bangladesh Association of Software and Information Services (BASIS) in February, 2010.

Way forward

Katalyst will continue supporting SRDI for the development of the software, upgrading and maintenance of the database for all upazilas in Bangladesh and promote it through different state owned dissemination channels. On the otherhand, it will explore all possible mechanisms to ensure sustainability of the service through ICT platforms.

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