

Making 'last mile' distribution of high-quality seed work for smallholder farmers

One initiative of the Katalyst programme in Bangladesh

SLIDE 1: Overview



**Seeds of change
Bangladesh**

How Katalyst enabled half a million small farmers to step up vegetable production

Interventions
Innovations in seed packaging, access to critical information via mobile seed vendors

System Change
Poor farmers' access to quality seeds becomes the new normal

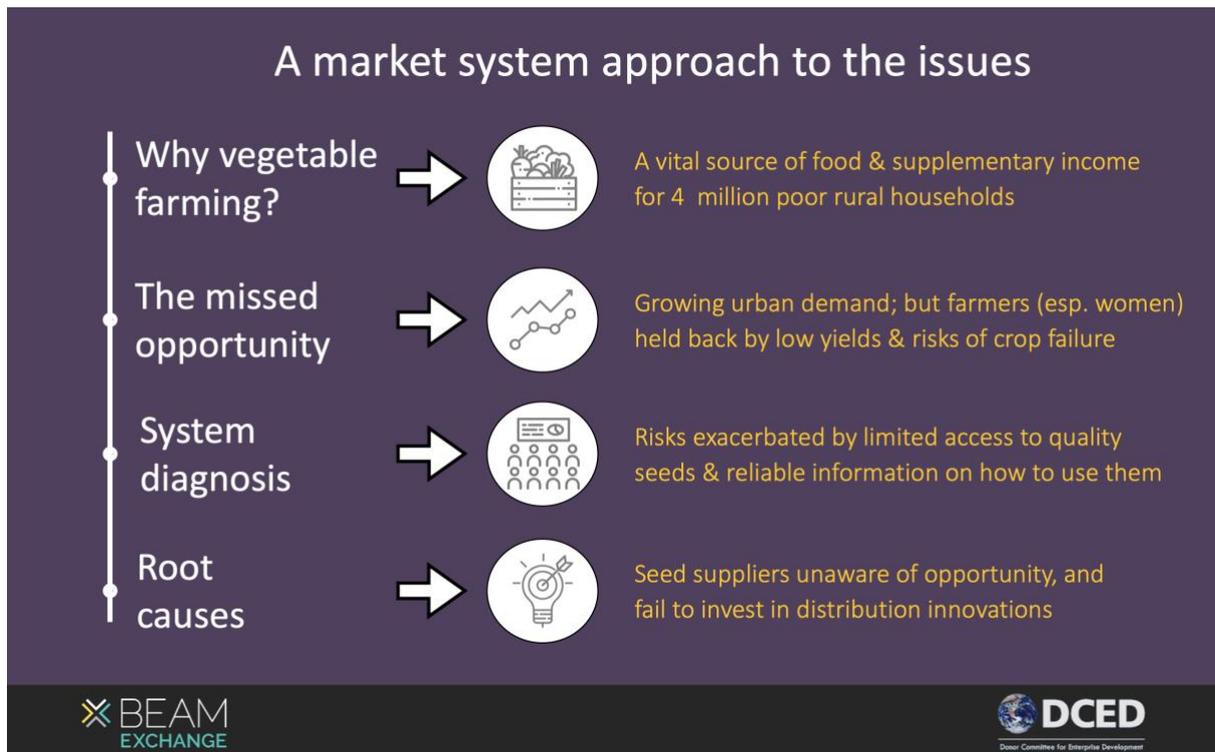
Impact
Income and nutritional benefits for millions living in rural poverty

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- This presentation tells the story of a successful initiative by the Katalyst programme in Bangladesh, between 2008 and 2013.
- The initiative overcame last-mile distribution hurdles for vegetable seeds, enabling at least half a million small-holder farmers (many women) to step up vegetable production.
- It involved innovations in seed packaging and access to critical information via mobile seed vendors; driven by engagement with seed supplier companies.
- These changes were taken up at such a large scale that access to quality seeds, and good advice about how to use them, become the 'new normal' for Bangladeshi small-holder farmers.
- The results were income and nutritional benefits for millions of people living in rural poverty.

SLIDE 2: The market systems perspective



Katalyst chose to work on issues in vegetable production because:

1. vegetable production is an important source of food and supplementary income for four million rural households (including a least a million with women the main cultivators).
2. smaller farmers were missing out on the opportunity to increase their incomes through supplying vegetables to rapidly growing urban markets.
3. Increased vegetable consumption would also have wider nutritional benefits.

Traditionally, farmers with little land grew vegetables on micro-plots for own consumption (homestead gardening). Women in particular did not go to markets to buy inputs or sell produce. This meant little access to information and advice about quality seeds and how to use them. Yields were low (half that in comparable Indian districts).

In 2008, the Ministry of Agriculture estimated that less than one-in-five Bangladeshi farmers were using reliable high-yielding vegetable seed varieties. As a result, few were able to take advantage of growing demand for vegetables in urban areas where increased prosperity is changing food habits.

Katalyst's analysis of the **market system for vegetable seed** revealed that quality seed distributors and retailers were only established in towns and major markets. Smaller and more remote farmers and homestead gardeners instead buy from travelling seed vendors in small local markets or at the farm gate. These vendors mostly sold inferior, unpacked seed (less likely to germinate, more disease prone and with lower yields). In addition, when small

farmers sought out quality seeds found that the regular sized seed packets were far too large for their small-scale cultivation needs.

Few (ten out of 100 large seed supply firms) had a good reputation for supplying quality seeds. Those that did focused their marketing efforts on larger, commercial farmers in the established vegetable production districts.

The underlying reason for this was a failure to recognise the potential of smaller farmers as reliable customers, and an unwillingness to take risks to recruit them. Hence no strategy or investment plan to reach them.

SLIDE 3: Interventions that catalysed innovation and behaviour change

MSD interventions that catalysed innovation & behaviour change



Integration of mobile seed vendors
Seed suppliers offered incentives for informal vendors, to draw them into a formal distribution system

Formalising training for vendors
Suppliers trained vendors to provide technical information to poor farmers

Seed package innovation
Tamper-proof mini-packs assured farmers of high quality seeds at a price they can afford



Katalyst developed a vision for lasting change with widespread impact. It centred on engaging the major seed supply companies to develop a better system for distributing good quality seeds to small farmers and homestead gardeners.

This required three significant business innovations, launched through various partnerships that evolved between 2009 and 2012 as Katalyst learned more about the seed market system.

1. Integration of mobile seed vendors

In order to get seed suppliers on board, Katalyst needed to demonstrate that smaller farmers could become valuable customers without huge investments in marketing.

Its first important deal in 2009 was with a large reputable seed company. Lal Teer Seeds agreed to incorporate mobile vendors into their formal distribution channels, by offering them discounted prices. Katalyst covered a proportion of the business risk.

2. Formalising training for vendors

Katalyst knew that good yields for farmers required access to reliable information as well as seeds. It designed and arranged initial training for the first group of 50 mobile seed vendors. As their success in reaching new customers (5,000 within 2 years) became obvious, Lal Teer took on full responsibility for training new groups. They were quickly copied by other seed companies.

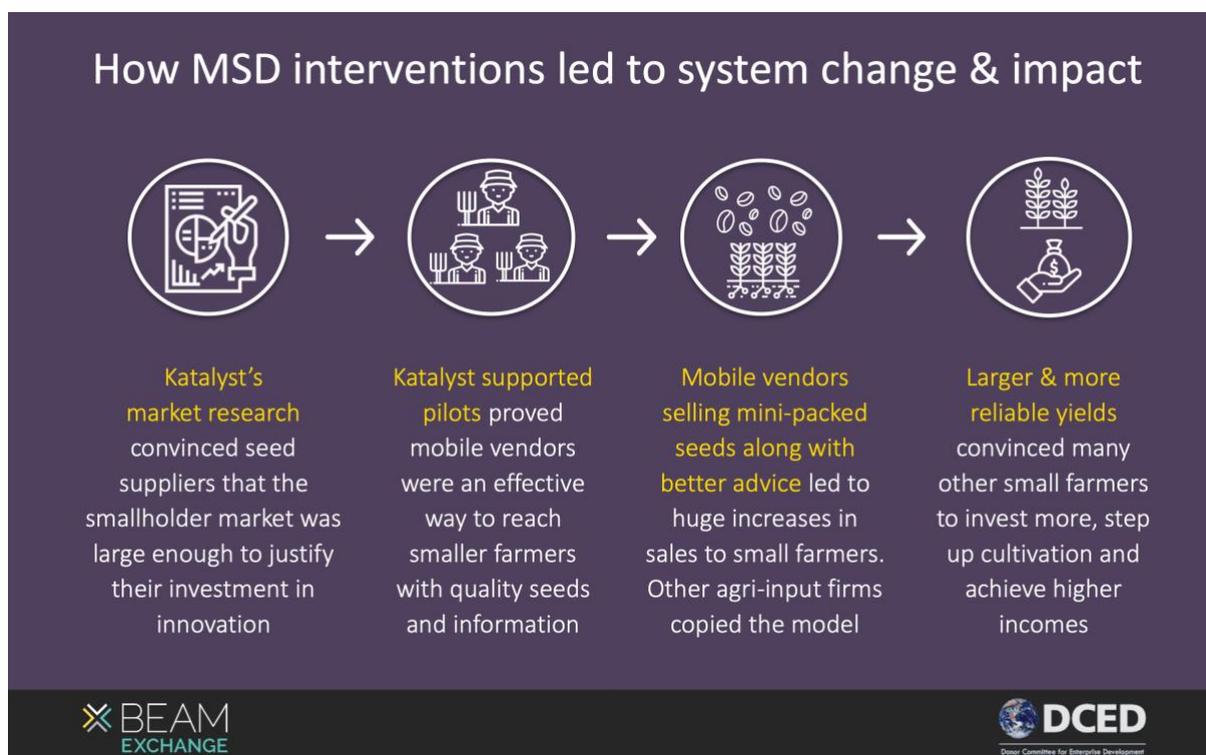
3. Seed pack innovation

Conventional packs (typically containing enough seed for 1000 m²) are too large for small farmers. Vendors would open packets and re-sell contents in smaller quantities. This was bad for assuring seed quality and threatened brand reputation.

In 2010 Katalyst partnered with two companies (Lal Teer and A R Mallik) to design, develop and test tamper-proof mini-packs (containing enough seed for just 150 m²).

The companies then made 35 varieties of hybrid and open pollinated quality-assured seeds affordable to poor farmers. Katalyst helped develop attractive packaging and promotional materials.

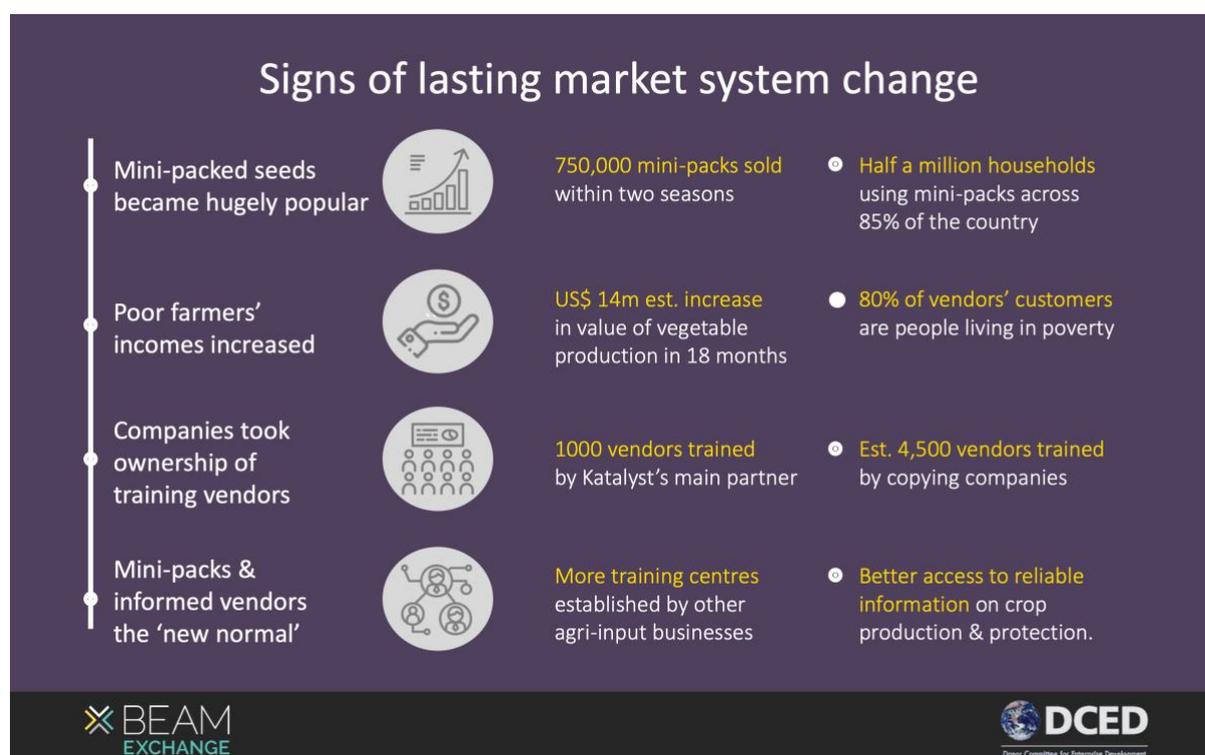
SLIDE 4: The logic of how Katalyst's MSD interventions led to systemic change and impact



Katalyst's theory of change in this MSD approach involved the following logic:

- A. Katalyst's market research and negotiations convinced at least one major seed supplier that the smallholder market had enough potential to justify their investment in distribution innovation.
- B. Support for training and inclusion of mobile vendors in formal distribution channels proved an effective way to reach smaller farmers with quality seeds and information. Other companies started to adopt this vendor model. Then Katalyst helped companies introduce mini-packs for seeds to make them more relevant and affordable to smaller farmers especially women.
- C. Sales to small farmers soared thanks to availability of mini-packed seeds along with better advice from trained mobile vendors. Other agri-input firms adopted the mini-pack technology.
- D. Better yields and higher returns achieved by early adopters of mini-packed seeds convinced increasingly large numbers of small farmers to step up vegetable cultivation and invest more to achieve higher incomes.

SLIDE 5: Indicators that showed lasting market system change & impact



Mini-packed seeds became hugely popular

Sales of mini-packed seeds far exceeded seed company's expectations.

- Three quarters of a million were sold in the first year (200,000 in early season, 550,000 in late season).
- Mini-packs were being distributed across 55 (out of 64) districts within two years.
- By 2012, the total number of households using mini-packed seeds had grown to 460,000.

Poor farmers' incomes increased

A comparative study of 500 farmers using / not using quality seeds over 3 seasons showed that:

- 80% of households buying mini-packed seeds were living in poverty (<USD 2.5/day)
- Incomes of individual farmers rose by USD 17 per season on average, and 90% had nutritional benefits from increased consumption of vegetables
- Aggregate income of poor farmers increased by USD 14 million in just 18 months

Companies took ownership of the training function

- Lal Teer invested in training more than 1,000 vendors to reach farmers in remote locations such as small riverine islands called chars.

- This led other companies to following suit. They started adopting strategies to produce, package, and market vegetable seed mini-packet (including poaching competitors' staff)
- By 2018, it is estimated 4,500 mobile vendors were part of seed companies' distribution networks (reaching over half a million farmers).

Mini-packs and informed vendors are the new normal

- The Katalyst-inspired 'last-mile' distribution model is now mainstream in Bangladesh. Companies are using the same formula to make other agro-inputs accessible to small and remote farmers (e.g. crop protection)
- It has also become 'normal' for companies to invest in training small retailers (including in remote locations). Syngenta branched out to set up a rural training centre to train their distributors and retailers. Hundreds of thousands of farmers have benefitted from retailers becoming a more reliable source of knowledge on disease control.

SLIDE 6: Extra background information about Katalyst

Katalyst (Phase II) in context



A multi-sectoral MSD programme funded by DFID, SDC, CIDA & the Netherlands.

Economic sectors
Vegetables, maize, potatoes, jute, fisheries, agri-inputs, furniture, ICTs.

Budget
\$ 53m over five years (2008 – 2013)

Impact
Estimated benefits for 2.3m farmers & small businesses
Income increases of US\$ 296 m

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Katalyst was one of first MSD programmes to translate the ‘making markets work for the poor’ concept into a functional approach. By its end it had increased the income of millions of poor women and men in rural and urban areas of Bangladesh.

Katalyst pioneered a flat organisational structure in which young business graduates work together to analyse market dynamics and work out new business models. It advocated a strong entrepreneurial ethos - to grasp pro-poor market opportunities as they occur instead of sticking to a planned delivery model.

Due to its success. Katalyst was implemented for three consecutive phases:

Phase I 2003 - 2008

Budget: CHF 26 million (approximately USD 27 million at 2018 rates)

Funders: Swiss Agency for Development and Cooperation (SDC)
United Kingdom’s Department for International Development (DFID)
Swedish International Development Cooperation Agency (SIDA)

Implementers: Swisscontact and GIZ International Services

Achievements:

- helped create around 200,000 full-time equivalent jobs
- benefited 700,000 farmers and small businesses, by increasing their access to better:
 - services, technology, inputs, representation

Phase II 2008 - 2013

Built on the success of Phase I to reach more poor women and men by using the market development approach, but added a stronger focus on mitigating environmental, social and gender-related issues.

Budget: CHF 51 million (approximately USD 53 million USD at 2018 rates)

Funders: Swiss Agency for Development and Cooperation (SDC)
United Kingdom's Department for International Development (DFID)
Canadian International Development Agency (CIDA),
Embassy of the Kingdom of the Netherlands (EKN)

Implementer: Swisscontact

Achievements:

- impacted around 2.36 million farmers and small businesses
- increased their income by around USD 295 million.

Phase III 2013 - 2018

In Phase III Katalyst built on Phase II to further expand its outreach. It also focused on sharing what it had learnt with the private and public sector.

Budget: CHF 32 million (approximately USD 32 million at 2018 rates)

Funders: Swiss Agency for Development and Cooperation (SDC)
United Kingdom's Department for International Development (DFID)
Danish International Development Agency (DANIDA)

Implementer: Swisscontact

Achievements (results of all 3 phases):

- benefited 4.75 million farmers and small businesses
- beneficiaries see an income increase of USD 724 million

References

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