Case Study in using the DCED Standard
Maize production in Bangladesh with Katalyst\(^1\)

This case profiles a programme which is advanced in its work towards the Standard. The case outlines Katalyst’s experience with each component of the Standard, providing examples of how results measurement has improved programme management. It also includes a detailed measurement plan.

Part 1: Overview of Katalyst’s Experience with the Standard

Description of the Programme: Katalyst is a multi-donor market development programme in Bangladesh. Katalyst is currently active in the maize, vegetable, fish, prawn, furniture, jute, tourism and potato industries. In its first phase (2003-2008), Katalyst estimates that its interventions led to the creation of around 200,000 jobs and increased the income of 700,000 farmers and small businesses. In its second phase (2008-2013), Katalyst aims to boost the income and competitiveness of 2.3 million farmers and small businesses.\(^2\)

How Katalyst Became Involved with the Standard: Katalyst staff were actively involved in the development of the DCED Standard. Katalyst was among the first programmes to complete a mock audit. Aly Miehlbradt, who conducted the mock audit, later worked with the Katalyst team to design a Monitoring & Evaluation Manual in August 2008. The manual is intended to harmonise measurement tools and processes across the entire programme.

Aiming to reach more people during its second phase of operation, Katalyst made major revisions to its intervention strategies. Seventeen ‘Comprehensive Sector Strategies’ were finalised, each supported by their sector and intervention results chains. Katalyst then revised its M&E Manual to reflect its changes in implementation. In October 2010, Katalyst completed its second mock audit. Staff are now planning for a full audit in 2011.

Cost of Working towards Compliance with the Standard: Results measurement forms an important part of programme management at Katalyst. Money spent on results measurement is therefore not recorded as a separate item. According to one estimate, around 10% of the programme’s budget is spent on results measurement.

Lessons Learnt: Katalyst employs M&E specialists. Initially, each M&E specialist held a different function (one prepared intervention reports, another prepared results chains, etc.) However, the team found that results measurement was best done by having a holistic picture of what is

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\(^1\) We thank Markus Kupper, Wafa Hafiz and Muaz Jalil for all of their assistance in preparing this case study.

happening in the market, rather than scattered information by working in few things. Thus instead of carrying out one individual function and being involved in all sectors, each M&E specialist was reassigned to work with implementation teams in specific sectors. Katalyst’s results measurement experts now work closer with implementation staff, supporting them in designing and carrying out their M&E activities. While previously each M&E specialist needed to know something about all the markets Katalyst engages with, they can now focus their attention on one.

Katalyst’s M&E specialists, known collectively as the Monitoring and Results Measurement (MRM) team, regularly train programme staff and co-facilitators on results measurement. The MRM team also undertakes thematic studies on topics such as poverty analysis, labour mobility, and the link between additional income and job creation.

Preparing for a mock audit has helped Katalyst to better organise its ‘paper trail’, and to ensure that staff use a common approach to results measurement.

Part 2: Katalyst’s Work towards each Component of the Standard

1. **Articulating the Results Chains:** Results chains are drafted at the start of each intervention. Each intervention’s results chain is drafted by the people responsible for implementing the intervention. They are supported by Katalyst’s M&E specialists. Katalyst staff also draw results chains showing all the programme’s interventions in a given sector.

   Katalyst team members have found that drafting results chains helps them to clarify how they should intervene in their target market.

   Staff regularly use the results chains to explain the story behind their interventions. They also use the results chains in internal meetings, to track their work. Where Katalyst jointly implements an intervention, it trains its partners in how to draw results chains. This helps to ensure consistency across Katalyst’s interventions.

   When drawing their results chains, staff outline any assumptions behind the expected changes. For example, where the aim is to boost farmers’ yields by encouraging retailers to pass on useful information to the farmers, it may be assumed that these farmers actually apply the information they receive. Assumptions are checked as the intervention progresses. If the assumptions don’t hold true or differ, changes are made to the results chains.

   *Figure 1* shows the results chain for a joint intervention by Katalyst and Winrock International. The intervention aims to improve maize farmers’ productivity by facilitating their access to good quality inputs and information about these inputs. Katalyst and Winrock assist input companies to train dealers and retailers on the use and safety aspects of pesticides and fertiliser, and in the selection of appropriate seeds.
Figure 1: Results chain for Katalyst and Winrock International’s intervention to improve input supply in the maize value chain
2. **Defining Indicators of Change:** Katalyst sets both qualitative and quantitative indicators for each box in its results chains. Katalyst reports against two universal impact indicators: ‘outreach’ and ‘additional income generated.’ At first, Katalyst staff also reported the number of additional jobs that their programme helps to create. However, experience has shown that more jobs are safe-guarded in the sectors that Katalyst works in, than are created. Katalyst now measures job creation only in those sectors where its activities are likely to lead to job creation.

Using results chains has helped programme staff to narrow down the range of indicators they use. As the results chains are regularly updated, they present a clear picture of the programme’s impact. With this in mind, staff have revised Katalyst’s logframe to keep it in line with the results chains.

When staff make projections for quantitative indicators, they record any relevant calculations. This allows others to understand how projections were made. Field experience is vital to making good projections. Projections are verified during impact assessment.

The table below shows the calculations behind some assumptions made at the purpose level of the results chain shown in Figure 1.

<table>
<thead>
<tr>
<th>Figures</th>
<th>Details</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>27%</td>
<td>Increased production than existing</td>
<td>Current yield=5.5 MT/ha Mainland benchmark=8.5 MT/ha Expected yield = 7 MT/ha (in between current and mainland benchmark)</td>
</tr>
</tbody>
</table>
| $268.97\(^3\) | Increase in profit per acre per farmer | **Assumption:**  
Each farmer = 1 acre  
**Existing Farmer:**  
Existing yield = 55 mound\(^4\)/acre  
Production cost per acre=$169 /acre  
Existing profit= $(55*7.03 - 169) = 217.65 dollars/farmer/acre  
27% increase in yield= 15 mound per acre per farmer  
Revenue increase = 15mound*$7.03 = $105.45  
Increase in cost (for better seed and fertilizers and other inputs) = $28.11  
Profit increase = $77.34  
**New Farmer:**  
New farmers will experience yield increase 25% lower than existing farmers, i.e. 11.25 mound yield increase per acre.  
Profit= $(66.25*7.03-196.77) = $268.97 |

Key: MT = megaton ha = hectare

\(^3\) All monetary figures were originally quoted in Bangladeshi Taka. They have been converted here into US$ for the purpose of illustration. At the time of writing, 1 Taka = US$ 0.014.

\(^4\) One mound = 40 kilograms.
In line with the Standard, Katalyst makes projections of its results up to two years after the end of an intervention.

3. **Measuring Changes in Indicators**: Before the start of an intervention, Katalyst collects baseline information from both primary and secondary sources.

All results chains are accompanied by a measurement plan (see Annex 1). Measurement plans outline the methodology that will be used to collect data.

Sector teams work together with results measurement specialists during the actual measuring of results. This way, both gain practical and technical expertise.

Using a fairly small sample size, Katalyst often uses in-depth interviews to assess its impact. This enables staff to better understand how much their work has benefited the target group. Findings are verified using shorter validation surveys. Once the results have been validated, the project staff and M&E specialists meet to discuss them. Together they update the relevant results chain to include the new information they have gathered.

4. **Measuring Attributable Change**: Katalyst aims to measure attribution by:

- Verifying changes at each level of the results chain, starting with the results of programme activities. This helps to demonstrate that changes at the goal level are caused by changes that happened due to Katalyst’s activities.

- Comparing, for each intervention, beneficiaries’ performance before Katalyst intervenes with beneficiaries’ performance after the intervention. Katalyst sometimes monitors control groups (a sample of people with similar socio-economic backgrounds to Katalyst’s beneficiaries, but who are unaffected by the programme). This allows Katalyst to see how its interventions have changed what would have otherwise happened. Staff measure the difference in performance between programme beneficiaries and the control group. The difference between the two groups is the programme’s impact.

Katalyst also keeps track of relevant interventions by other programmes and by the government, to prevent duplication of effort and to avoid taking credit for changes caused by other programmes.

5. **Capturing Wider Changes in the System or Market**: Katalyst measures two types of systemic change: changes in commercial partners’ business models, and ‘copying in’. For example, in the maize intervention discussed earlier, Katalyst would monitor whether an input company which Katalyst has partnered with later conducts similar training with its own budget. To capture ‘copying in’, Katalyst would also monitor whether retailers and distributors of other companies which it hasn’t partnered with adopt similar practices, benefiting more farmers.

6. **Tracking Programme Cost**: All programme-related costs are tracked. Programme costs are disaggregated by sector. These costs are tracked for internal use only.
7. **Reporting Results**: Katalyst uses Intervention Plans to report its results. Intervention Plans include the story of the intervention, results chains and the measurement plan together with its associated calculations. Katalyst also maintains a programme-wide impact sheet, which managers use to monitor each intervention’s impact, to adjust for overlap and to report on gender impact.

8. **Managing the System for Results Measurement**: Katalyst’s results measurement process is outlined in its M&E manual. Katalyst frequently provides orientation to new staff and new co-facilitators on its results measurement system.

   Katalyst holds quarterly sector meetings. These involve the team responsible for carrying out interventions the sector under review, their associated results measurement specialists, the sector Group Manager/Director, members of cross sector teams, the Group Manager for Gender, Environment and Social Responsibility, and the Katalyst General Manager. During these meetings staff ensure that the results chains are properly updated and discuss new strategies based on recent findings.

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5 ‘Cross sector teams’ work in those sectors which provide a service to, or influence, other sectors in which Katalyst works. Seeds and fertiliser are two examples of cross sectors; they influence sectors such as vegetables and maize.
## Annex 1: Measurement Plan

<table>
<thead>
<tr>
<th>Results Chain</th>
<th>Questions</th>
<th>Indicators</th>
<th>How?</th>
<th>Who?</th>
<th>When?</th>
<th>What do we have</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Goal</strong></td>
<td>Additional income</td>
<td>How much has income increased?</td>
<td>Amount of income increased</td>
<td>In depth interviews</td>
<td>WI Team and M&amp;E team</td>
<td>Dec-12</td>
</tr>
<tr>
<td></td>
<td>Additional employment generated</td>
<td>How many new jobs have been generated?</td>
<td># of jobs generated</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Purpose</strong></td>
<td>Increase in profit</td>
<td>How much have profits gone up?</td>
<td>Change in profits</td>
<td>In depth interviews, validation survey</td>
<td>WI Team and M&amp;E team</td>
<td>Jul-11</td>
</tr>
<tr>
<td></td>
<td>Increase in profit</td>
<td>How much have profits gone up?</td>
<td>Change in profits</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Increase in yield</td>
<td>What is the change in average yield of crops using better seeds and techniques?</td>
<td>Average yield of the farmers outside contract farming</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Increase in yield</td>
<td>What is the change in average yield of crops using better seeds and techniques?</td>
<td>Average yield of the farmers under contract farming</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Outcomes</strong></td>
<td>Other farmers start cultivating maize, or cultivate maize properly</td>
<td>How many other farmers? Who influenced them to switch?</td>
<td># of farmers outside formal contract farming</td>
<td>Famers number, Observation</td>
<td>WI Team and K Mkt team</td>
<td>Jan-11</td>
</tr>
<tr>
<td></td>
<td>Farmers use quality inputs and proper cultivation techniques.</td>
<td>What is the quality of input directly and by result of demo firms</td>
<td>Amount of yield compared to previous years</td>
<td>Farmers list, observation</td>
<td></td>
<td>May-10</td>
</tr>
</tbody>
</table>
Due to input companies performing well, other companies show interest in establishing their distribution network in char areas and build up their capacity to provide information.

Distributors, retailers and agrovets become capable of providing appropriate information and quality seeds to the char farmers.

<p>| Activity Result | Information provided to distributors, retailers and agrovets. | Have the farmers meetings and field days taken place? How many? | List of participants in farmers' meetings and field days | Training report | WI Market team and M&amp;E | Feb-10 | Dec-09 | Dec-09 | Dec-09 |</p>
<table>
<thead>
<tr>
<th>Activities</th>
<th>Where, when and how many demoplots have been established?</th>
<th>How many field days have been observed?</th>
<th>List of trainings conducted</th>
<th>Training report</th>
<th>team</th>
<th>Apr-10</th>
<th>Trained channel members</th>
</tr>
</thead>
<tbody>
<tr>
<td>Training conducted by CP, KBP</td>
<td>Where, when and how many demoplots have been established?</td>
<td>How many field days have been observed?</td>
<td>List of trainings conducted</td>
<td># of farmers received training</td>
<td>Training report</td>
<td>team</td>
<td>Apr-10</td>
</tr>
<tr>
<td>Assistance in conducting training module, given to the input supplier, to the distributors, retailers and agrovets (02)(07/09)</td>
<td>How many training courses have been conducted?</td>
<td>Where and when?</td>
<td>Who was trained?</td>
<td>List of training modules developed and provided</td>
<td>Observation</td>
<td>Dec-09</td>
<td>training module</td>
</tr>
<tr>
<td>Assist in preparing training module</td>
<td>Has the training module been prepared?</td>
<td>Training module</td>
<td>Observation</td>
<td>Oct-09</td>
<td>training module</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Input companies select distributors, retailers and potential actors to expand their distribution network up to char areas</td>
<td>Which distributors, retailers and potential actors have been chosen by the input companies?</td>
<td>Name and number of distributors, retailers and actors</td>
<td>List of names and addresses of distributors, retailers and actors from the company</td>
<td>Oct-09</td>
<td>List of names and address of the distributor, retailers and actors from the company</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Identification of Interested input selling company</td>
<td>Which companies have been chosen to work with?</td>
<td># of input selling companies chosen with name and address</td>
<td>Contract record</td>
<td>Jun-09</td>
<td>Contract record</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>