

Measuring Sustainability – The case of Kenya Markets Trust in Kenya

Synopsis

Development programs aim to create changes that continue to bring benefits to their target population beyond the project period. Those changes, therefore, must be sustainable and thus the likely sustainability needs to be assessed. This case describes how Kenya Markets Trust in their Kenya Markets Assistance Programme measured sustainability of an innovative business model in one of their interventions in the agricultural inputs sector.

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This case describes how the program has addressed a typical challenge in results measurement. The aim of the case is to provide insights that will be useful to other practitioners facing a similar challenge. The author does not represent the DCED, nor do the views expressed in the case necessarily reflect the views of the DCED.

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1. Measuring sustainability

Development programs aim to create changes that continue to bring benefits to their target population beyond the project period. Those changes therefore must be sustainable and therefore the likely sustainability needs to be assessed.

Most market development programs aim to support pro-poor growth by introducing more inclusive business models. These innovative business models are by definition new to the country, new to the sector or new for the partners. Market development programs assist their partners to build their capacity to implement a new business model and thus offer new services, new products or access to new markets. Business models only work if both parties, the provider and the receiver, have an incentive to continue.

Obtaining insight into the performance of the business model early on in the intervention is crucial. Non-performing business models will not create long lasting impact for the target beneficiaries. Well functioning business models increase the likelihood of other market players copying the business model, thus reaching scale.

This case describes how the Kenya Markets Assistance Programme measured sustainability of an innovative business model in one of their interventions in the agricultural inputs sector. It shows how they used the findings to determine the next steps for this intervention, and how it informed them in designing other interventions. The methods to assess sustainability are applicable to other private sector development programs too.

2. The Kenya Markets Assistance Programme

[Kenya Markets Trust \(KMT\)](#), together with its institutional partner [Adam Smith International \(ASI\)](#), implements the Kenya Markets Assistance Programme (MAP), a five year program that runs from August 2012 to June 2017. The program is funded by the UK Department for International Development (DFID), the Gatsby Charitable Foundation (GCF) and The Embassy of the Kingdom of the Netherlands (EKN). Its budget is around GBP 21 million. Close to 60 staff members are employed by KMT and its co-facilitators. These co-facilitators, [SNV Kenya](#), [Agri Experience](#), [Technoserve](#) and [Mercy Corps](#), have significant and specialized experiences in the selected areas and sectors. The KMT aims to increase the incomes and resilience of some 150,000 households and create some 100,000 jobs.

The KMT works with existing public and private stakeholders to increase income and jobs among target beneficiaries by improving the functioning of the market systems on which they rely. Using this market systems development approach, the KMT aims to reduce poverty among farmers and pastoralists in rural areas and in arid and semi-arid areas in Kenya. The current MAP portfolio consists of interventions in the water, dairy, agricultural inputs, seeds and livestock sectors.

To learn more about the program, view a [power point presentation](#).

Introducing the agricultural inputs sector

The rural agricultural inputs sector is characterized by many fragmented layers. All players aim to extract a maximum margin per item rather than drive their profitability by increasing

turnover and reducing margins per item. As a result, inefficiencies in the supply chains are huge. Smallholders have limited access to inputs. They are either not available at all, or are too expensive. Information about the inputs, and how to use them, is also hardly available. Agro-dealers and input-retailers don't provide advice. They have insufficient inventory management skills, poor product displays, inadequate working capital and little agronomic knowledge.



Albert Kimetu, the owner of Alkim inputs retail shop, provides information to farmer Willy Lang.

The KMT aims to facilitate a shift in agro-dealers' business practices to a customer-oriented strategy. If agro-dealers would service rural farmers better, agro-dealers would be able to increase their turnover, and consequently improve their overall profitability. Agro-dealers should be focusing on growth by selling more to more farmers and also by retaining their customers.

The KMT intervenes through several interventions and partners, one of which is described below. More information on the agricultural inputs market is available [here](#).

Introducing the input retailers' intervention

The KMT supports agro-dealers to develop new business models. The KMT assists agro-dealers to establish links with other service providers to be able to offer other services as well, such as spraying services. The KMT also supports agro-dealers to improve their marketing, by introducing village promotions, innovative marketing campaigns and testing customer loyalty programs. Agro-dealers are also supported by the KMT to improve existing and develop new distribution channels, and to improve their business practices by improving inventory management as well as financial management skills. The intervention logic is reflected in the [Results Chain](#).



Magos agrodealer farm technicians in full safety gear providing spraying services to the farmers.

The KMT supports a handful of agro-dealers, but each one of them has a bigger number of input-retailers through which they distribute their inputs and services.

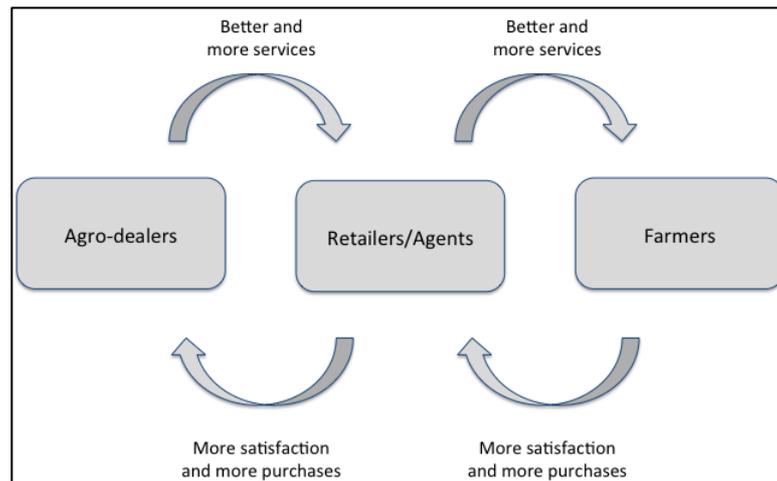


Fig.1 Business model

These improvements enable the agro-dealers to increase their sales and reduce their costs. Their profitability will increase, and they will be able to grow. Their retailers and agents will also benefit from increased customer satisfaction and sales. Farmers will be able to purchase and use more quality inputs and services. That will increase the farmers' productivity and enable them to earn a better income.

3. Defining indicators to measure sustainability

Sustainability indicators focus on the ability, profitability and perception of the business partner and its customers.

Crucial in the intervention are the satisfaction of the agro-dealer and its retailers (suppliers) and the satisfaction of the farmers (customers). If one of them is not satisfied, it threatens the continuation of the business model.

Quantitative indicators give a good indication about whether or not the business model works. An increase in sales by the agro-dealer/retailer and an increase in the number of farmers that buy more inputs and services suggest that both parties are satisfied with the new business model. However, increased turnover does not always imply that both are satisfied.

The farmer might buy more now, but that could be the result of a lack of alternatives. It doesn't imply (s)he will keep procuring in the future. If the purchased inputs do not lead to a satisfactory productivity increase, the farmer will no longer buy these inputs.

The agro-dealer/retailer has invested substantially, has taken risks and has accepted lower margins. This should not only lead to increased turnover, but also to increased profitability. If better services do not lead to better returns, the agro-dealer/retailer will no longer offer these better products and services.

Information on profitability is very useful. But programs find it hard to obtain profitability figures because these are sensitive and confidential. Changes in profitability are also not always that easy to attribute to the new business model only. Many factors are influencing

growth and profitability. Farmers who increase productivity by using new products and services are likely to continue, but many other factors influence their decision too. In order to judge if both parties intend to continue using the introduced business model, one needs to investigate more.

Experience shows that qualitative assessments are a valuable tool to measure the perception of the business partners: are they satisfied, are they likely to continue? These qualitative assessments are also useful to gain insight on likely sustainability when quantitative indicators take some time to manifest themselves. In the case of KMT, if agro-dealers are satisfied and state that they will continue, this is a first sign that the business model is sustainable. Their perception, combined with the recorded growth (increased sales, increased customers), suggest that the innovative business model is likely to be sustainable.

Agro-dealers making additional investments to expand the business model to other regions confirm the earlier captured 'willingness to continue'. The new business model has become their driver for growth. When other agro-dealers start copying the business model, or copy elements of it, this is another sign that the introduced business model is indeed sustainable.

The KMT always includes indicators to cover three aspects of the likely sustainability of the business model: the ability, the profitability and the perception of the business partner and its customers. The KMT therefore has identified the following indicators to measure sustainability for this intervention as also reflected in their [measurement plan](#):

To measure sustainability of the business model on the supply side:

- number of agro-dealers and retailers reporting satisfaction with returns;
- satisfaction of agro-dealers and retailers with customer-focused business model;
- number of agro-dealers investing in expanding customer-focused business model;
- the investments by agro-dealers in expanding the customer-focused sales model.

To measure sustainability of the business model on the demand side:

- number of small-holder farmers purchasing quality inputs;
- number of small-holder farmers purchasing services;
- satisfaction of small-holder farmers with the products and services provided.

In the more detailed research plans for the impact assessments, more indicators were elaborated that help to assess likely sustainability. These included, amongst others, the sales, the sales volumes, the number of clients, sales volumes per client, and the costs and prices of the inputs and services.

4. Measuring sustainability in practice

The KMT uses three main mechanisms for monitoring likely sustainability: performance tracker sheets, site visits and dipstick assessments. These monitoring mechanisms provide early information to the KMT on the performance and likely sustainability of the business model and signs of benefits for farmers. Once it is likely that the business model is probably sustainable and a significant number of farmers has benefited, the KMT conducts a more extensive impact assessment. This section focuses on the KMT's monitoring mechanisms and how they helped the KMT to assess likely sustainability at a relatively early stage of the intervention.

Performance tracker sheets

The sector analysis also revealed that agro-dealers had limited insight into their actual business performance. The KMT assisted them in improving their financial management skills, and introduced '[performance tracker sheets](#)' to the agro-dealers that enabled them to keep track of sales and clients. This gave them basic management information.

However it also gave the KMT team the basic data it needed to assess the results of its interventions, such as the total sales, the sales volumes, the number of customers, the turnover per retailer and others. The performance tracker sheets were collected on a quarterly basis by the KMT intervention team often combined with site visits.

Site visits

The KMT team visited the agro-dealers and their retailers frequently. These visits created opportunities to observe changes and to have in-depth discussions.



Mrs. Salome Wambui, an agronomist, assists a customer after remodeling the shop at a retailer of Farmshop.

The KMT team looked at the storage of agricultural inputs to see if inventory management was improving. They observed interactions with customers to see if information on how to use inputs was being provided and if customers appeared interested in and pleased with the information provided.

The KMT also discussed progress with the agro-dealers. These discussions covered topics related to sustainability, such as the agro-dealers' satisfaction with various aspects of the business model, their plans for expanding the business model and any recent customer feedback they had received.

This assisted the KMT intervention manager to understand the likelihood of success of the new business model, or lack of it. During the quarterly review meetings, where the KMT management team reviewed its interventions and sectors, the intervention manager presented the findings. These data provided an important input for the KMT management to discuss and assess if the intervention needed to be adjusted, if the business model appeared sustainable, and if the projected impact was likely to be achieved.

Dipstick assessments

The KMT assesses early signs of impact through rapid assessment reports or 'dipstick-assessments' using mixed methods. The 'dipstick' is a term used by the KMT to differentiate these early impact assessments from the more extensive impact assessments that are conducted later to gauge more accurately larger-scale results and generate sufficient data for reporting results credibly to the donors.

Dipstick assessments are solid research, yet often sampling is purposive and usually with smaller sampling sizes. They are designed to answer the main question: what changes are likely to have occurred and how can we learn from them. This helps the KMT to make management decisions, to adjust the intervention, to upscale the intervention, or to develop other interventions.

One year after the start of the intervention, the KMT undertook their first dipstick assessment for this intervention using mixed methods described below.

- A survey with selected agro-dealer customers (i.e. farmers) to capture quantitative data. The KMT worked with five agro-dealers, yet two of them had started to apply the business models much later. KMT therefore opted to sample farmers from the three agro-dealers that had been applying for some time. These agro-dealers were operational in three different regions. The KMT sampled 30 respondents from the clients' list of each agro-dealer and interviewed some 90 respondents in total. The sampling was done in such a manner that only farmers that had actually made use of the new products and services were included in the sample.
- Focus Group Discussions (FGD) were held with the clients of the supported agro-dealers (i.e. farmers). This helped the KMT to understand the reasons for those reported changes, or the lack of it. The KMT selected a limited number of farmers from the thirty (30) farmers already interviewed from each agro-dealer and in total organized three FGDs with farmers.
- In-depth interviews were held with the three agro-dealers and retailers to explore changes in the business practices of the agro-dealer, including management, marketing and promotional practices. Interviews were held with the owners and the management of the agro-dealers, and their retailers or agents.

The dipstick assessment is summarized in this [PowerPoint presentation](#).

Findings

The performance tracker sheets, site visits and the dipstick assessment enabled the KMT to assess the likely sustainability of the business model at an early stage.

The dipstick survey showed an increase in purchases as well as an increase in information on how to use the inputs.

Performance against indicators on increased purchase and use of inputs and services²

Selected indicators	Question area	Findings
Change in farming practice	3.1 improved crop husbandry; What, if anything, are farmers doing differently in the production of the crops? Why?	Approximately 23% increase in purchase of fertilizer and 23% increase in seed purchase.
Increased purchase of inputs	3.2 farmers claiming to purchase inputs from KMT supported agro-dealers? What are the inputs?	<i>Over 90% of the farmers claim to purchase inputs from agro-dealer supported by KMT. This is a 20% increase from previous season. The 20% are farmers who were either buying from other agro-dealers or not buying at all.</i>
Purchase of new services and products		

² Source: Inputs dipstick assessment report 2014

<p>3.3 Whether purchased inputs from KMT supported agro-dealers in recent planting season? What they did with the inputs and the result?</p>	<p>The new service that farmers had not used before with the highest mentions was soil testing. 75% are aware of soil testing services being offered by agro-dealers</p>
<p>3.4 farmers claiming to have purchased new product or service from agro-dealers in last planting season? How they become aware of the new products/service?</p>	<p>80% cite promotions and field days by KMT-supported agro-dealer as the source of information about new services and products.</p>

Focus Group Discussions revealed that many farmers believe that significant investment in the right inputs is required for them to increase productivity and quality of the produce. They also stated that a lot of advice had been provided to them by the agro-dealer and their retailers, but that the challenge for the farmers still remains the costs of these inputs. There was however a willingness among farmers to pay more for inputs because of the higher returns produced by those inputs.



Victoria Mweni Muteti and Jackline Mwende Mwania harvest sorghum after applying proper farm inputs.

Most farmers are very likely to remain loyal to the agro-dealers and their retailers based on their confidence in the quality and effectiveness of inputs and services provided by them. The customer-oriented approach adopted by the agro-dealers has thus increased the farmers' confidence in the agro-dealers.

Performance against indicator on customer satisfaction³

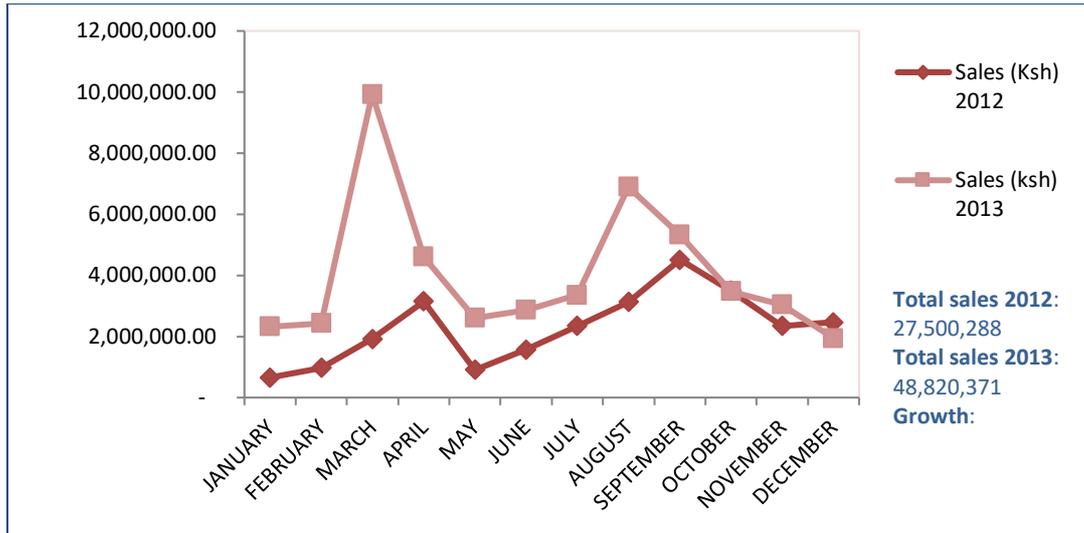
Selected indicators	Question area	Findings
Customer satisfaction,	4.1 Farmers confidence that the inputs/services purchased are the right ones.	45% 'strongly agree' they are 'confident that they are buying the correct input and services supply' when they buy from agro-dealer.
Utilization of services,	4.2 How confident farmers feel about the fact that they know how to use the inputs properly. 4.3 How satisfied farmers are with extension services offered by the KMT supported agro- dealers?	44% 'strongly agree' that on overall they are 'satisfied with the service' provided by agro-dealer

The performance tracker sheets gave insights into the performance of the agro-dealers, such as the ability to compare sales between two seasons. This helped the KMT to analyze and discuss changes with the agro-dealers.

Agro dealer performance 2012-2013. ⁴

³ Source: Inputs dipstick assessment report 2014

⁴ Graph is made anonymous to respect confidentiality



In-depth interviews with agro-dealers and their retailers provided valuable insights.

- The agro-dealers and their retailers have experienced an increase in sales, and qualitative information gathered indicated that this was likely linked to the changed practices.
- The inventory system has helped them to minimize stock-outs since they are able to better manage stock levels, as well as forecast and budget more accurately.
- All the three agro-dealers have adopted ICT-based customer management systems. They use this platform to register their customers and track repeat sales. This has helped them to understand their customers' needs and to offer personalized customer services. They state that this has increased their customer base.
- Shop re-modeling has increased trust among the farmers. Farmers can spend time to read about the products, see the expiry date and be assured they have bought the right input. This, according to the agro-dealers, has increased the number of customers.
- Promotions have directly been linked to increase in sales due to increased customer outreach. One agro-dealer reports an increase in customers as a result of promotions. Another agro-dealer claims to have realized an increase in sales as a result of promotions and other marketing activities.
- Building agent networks was a new concept to the agro-dealers, but there has been positive progress that has led them to reaching more farmers. One agro-dealer claims to have seen an increase in its customer base as a result of engaging agents.⁵

[Read the story](#) of Margaret Atieno, a beneficiary farmer, and how the KMT intervention has helped her or [watch the video](#).

5. Benefits of measuring sustainability

The findings provided the KMT with sufficient information to assess the sustainability of the business model, to make adjustments, and to develop upscaling interventions.

⁵ Names and numbers are not presented to respect confidentiality

Farmers were satisfied with the improved input and service provision, and appear to become repeat customers. The agro-dealers and their retailers perceived the new business model as advantageous to them. The KMT was able to link increased productivity to the increased availability of inputs and additional information on how to use them.

The business model appears to be sustainable. Sustainability indicators focus on the ability, profitability and perception of the business partner and its customers. The KMT confirmed that the agro-dealers, their retailers and the farmers are able to operate the new business model, to benefit from it and to perceive these benefits.

The KMT also learned that the costs of the inputs have not (yet) decreased, and that not all services were used. The KMT needs to investigate the causes, likely to be a combination of costs and awareness, and to determine how to address them. The KMT also needs to re-think how to ensure that increased efficiency leads to lower input prices for farmers.

There have been signs that agro-dealers adapt elements of the business models without support by the KMT, such as organizing more and different forms of village promotions. Agro-dealers have not yet made bigger investments to expand the business model to other areas. This will need to be monitored by the KMT in the coming years.

If the focus had not been on the sustainability of the business model, the KMT would not have obtained such an in-depth understanding. The increase in sales was considerable, but in itself this did not confirm the sustainability; the perception of the business partners was critical as well. The same applies to the increased purchases by the farmers: their satisfaction and potential loyalty is equally essential.

The KMT team concluded that, with the likelihood of sustainability of the introduced business model, they should look for opportunities to increase outreach. Using the demonstrated results of the business model as it is operated by the five agro-dealers, the KMT investigated upscaling opportunities. The KMT has started persuading other agro-dealers to invest in customer-focused business models. It was only able to do so by demonstrating the sustainability of the introduced business model. The KMT also used the information that they gathered on the increase of sales and customer satisfaction to show ICT, training and marketing firms the business potential for providing services to the agro-dealers.



A satisfied farmer exits Farmshop.

The analyses revealed that farmers intend to continue to buy the new products and services. However, the farmers do mention that the continuing high prices hamper this. Consequently, the KMT is seeking opportunities to develop new value chain finance products and services.

The KMT managers made the following comments about the importance of measuring the sustainability of the business models.

- *'Putting the sustainability of the business model in the center automatically leads to staff being more focused on achieving sustainable results'.*
- *'Measuring sustainability helps to portray clearly the long-term business model. A sound business model helps to motivate other potential partners, which leads to more crowding in, reaching more scale'.*
- *'Without measuring sustainability, it is impossible to predict anything on long-term impact levels'.*

[Listen to Khaled Khan and Susan Maina](#) from the KMT team who discuss the benefits of measuring sustainability.

6. Annexes

- 1 [KMT presentation DCED Seminar 2014](#)
- 2 [Inputs sector](#)
- 3 [Results chain](#)
- 4 [Measurement plan](#)
- 5 [Performance tracker sheets](#)
- 6 [PowerPoint presentation of dipstick survey](#)
- 7 [Farmer's impact story](#)
- 8 [Sustainability Audio Clip](#)