MUSIKA

INPUT MARKET INCLUSIVENESS

Through the last mile distribution model

CASE STUDY

Funded by

SWEDEN

CONTENTS

MUSIKA'S DEVELOPMENT APPROACH

Musika is a Zambian non-profit company with a mandate to stimulate and support private sector investment in the Zambian agricultural and rural markets with a specific focus on the lower end of these markets. The organisation works primarily with those corporate entities in the agricultural industry that are committed to engaging the rural poor as their clients, suppliers and consumers.

Utilising its wide networks in and knowledge of the Zambian agricultural market, Musika identifies opportunities for investment and innovation with commercial partners and then supports the testing and developing of those opportunities through technical advisory services and targeted, time-bound 'catalytic' financial subsidy to mitigate the risk of making initial investments in new geographies, new business models or new technologies.

INPUT MARKET CHALLENGES

In the agriculture input market, Musika's investment objective was to improve the functionality of productivity enhancing agricultural input markets for smallholder farmers through developing the capacities of private agricultural retail firms in the seed, agrochemical, crop nutrition and equipment sectors and industry associations.
Access to agriculture inputs by the rural farmers has for years been a difficult endeavour. Farmers have for long persevered the challenges of prohibitive costs associated with transporting inputs from central business centres, influx of fake seed on the market which resulted in low productivity, the need to promote the adoption of hybrid seed to counter the use of recycled seed and the lack of extension services. In addition to this is the low levels of effective investment in the smallholder agricultural subsector with strong investment in the agricultural input market for the commercial farming sector, and heavy hand of government investment through the Farmer Input Support Program (FISP).

THE INTERVENTION

In the process of executing its duties of building value added commercial relations between farmers and private sector players, Musika's strategy targeted incorporating smallholder easy access to improved inputs and extension services. With a target of 250,000 farmers accessing improved inputs, Musika stimulated smallholders' access to agricultural inputs by buying down initial investment risk for the private sector players to invest in the rural communities. The aim of the intervention was to ensure that every rural farmer has equal chance and opportunity to access improved agricultural inputs coupled with extension services. The intervention was coined the *'last mile' distribution model.*

Musika's main investment was facilitating rural farmers' access to improved agricultural inputs. The main investment in the 'last mile' distribution model was the distribution of 20t foot containers as sales and distribution points for agricultural inputs in remote areas of rural Zambia. The container model meant direct engagement of input firms' agents and rural communities as well as provision of high-quality inputs to the door steps of rural farmers. Musika's support and operation decision has since inception been guided by the return on investment principle. This entails ensuring that every investment has cost share by the private sector players (Clients). Thereby, ensuring sustainability, expansion and value addition to the rural communities or beneficiaries. This includes among others technological transfer, provision of extension services, trainings and demonstration. All this is meant to ensure that investments are sustainable and market actors participate on an informed basis.

A case in point is Seedco. Musika supported Seedco with 20 motorbikes to facilitate easy access of agricultural inputs. Coupled with extension services in the farming communities, demand for improved inputs was overwhelming and the container become a new standard that input firms adopted to serve the rural areas i.e. inputs delivered on time and closer to the farming communities bundled with information provision. This meant guaranteed original seed supplied and reduced transaction costs in both time required to get to central business centres and costs of transportation.

At the close of the intervention in 2017 a total of 411,386 farmers were accessing improved inputs with a total Musika investment of USD3,040,678, direct financial support of USD1,960,798 and Technical Advisory Support of USD1,079,880. A total of USD6,517,498 was invested in the input market by private sector players.

INPUT MARKET KEY HIGHLIGHTS

With Musika intervention trying to address the challenges in the market, there has been notable increase in the uptake of improved seed. The engagement of rural local agro dealers has given rural communities an opportunity to access not only inputs but also extension services closer.

Seedco negotiated with other market players to offer bundled products and services such as fertilizers, vet drugs, herbicides among others. This initiative was to ensure that all products and services rural communities may need in their farming activities are found in one location.

"

The container has brought benefits to the farming communities. Not only do they stock seed inputs but has also included livestock products and other farming agri inputs and services- Currently when our livestock are attacked by diseases the containers provide the vet drugs and the extension services needed. Additionally, during planting season farmers can easily get additional seed within the communities at a shorter distance if they run out of seed while in the process of planting.

Winford Ngandu
Seedco Container Agent and Farmer in Chief Chikanta chiefdom, Southern Province

We used to suffer accessing inputs, we always had to travel to town to buy seed- spending ZMW60 on transport. Additional to cost of transport, we also were victims of scrupulous businessmen who in many cases sold us fake seed at very high prices. We are glad that our leader the chief engaged and allowed Seedco to bring the containers closer to the communities. This has positively impacted on our production and productivity.

Laurent Hanongo
Farmer, Choma

Musika helped us bring markets for farming inputs closer to the farmers. I am happy I am able to help farmers especially women access inputs because when I empower women, they also empower other women.

Mutinta Mwiinga
Agrodealer, Mukonchi Village

In the mechanisation service market, the removal of VAT on tractors above 90HP had an impact on the uptake of mechanisation equipment by smallholder farmers. Currently, rural farmers are taking up mechanisation services (both personal and hired). Musika’s support to a finance leasing company, Agleasco, and Saro partnership, an agricultural equipment supplier, has been beneficial to smallholder farmers. Particularly, there has been an increase in the uptake of mechanisation services in rural communities to an extent of some farmers buying/leasing personal equipment. The two-wheel tractors are one such mechanisation input that has been promoted.

Additionally, due to the changing dynamic of the market, agricultural technology input firms have continued to diversify into more products. From being centred around machinery and mechanisation- there has been a shift to a variety of machinery that are on demand at different seasons of the year. This has also resulted in farmers diversifying their production. The shift from crop to livestock farming has led technology input firms to diversify- For example one of Musika partner firms Saro Agro Services has ventured in livestock and aquaculture equipment such as feed mixers, pelleting machinery as opposed to mechanisation equipment that was stocked before.

IMPACT – LAST MILE DISTRIBUTION

At the end of the agricultural seed input intervention in 2017, a total of 411,386 farmers were accessing improved agricultural inputs across Zambia. With over 2179 access points established across the country, over US$1 million private sector capital was invested in the input market.

INTERVENTION SUSTAINABILITY

Previously, the rural market was very unattractive for the private sector players in the seed input market, especially with heavy government involvement through the FISP. With Musika's risk buy down investment in the 'last mile' distribution, the rural untapped markets have been exposed and private sector players have opened up to investing in rural markets.

In 2015, Seedco, one of Musika's first partners in the input market invested in additional 25 motorbikes, beyond Musika's support, to enhance provision of extension services as part of the company's expansion strategy to almost every rural part of Zambia. With Musika's initial investment, the company's expansion was informed by the market interactions with the rural communities as well as identification of production potential in the rural communities. Seeing this success, many input firms have adopted the container model and have since invested their own resources in expanding their businesses.

The model has been innovated to incorporate more than one firm to operate the container, like is the case in Chief Chikanta's chiefdom in Kalomo district, where private players have formed synergies to offer bundled products and services in the containers that were provided to Seedco. This has significantly contributed to the sustainability of the model as the containers are in use throughout the year by the different parties. During the planting season, they are used as input stores for seed, fertilizers and also serve as access points for livestock products and services as well as aggregation points for agricultural output during the off-planting season. As such there are currently a number of agricultural input suppliers spotted around the rural communities.

Input firms have further invested in training and building capacities of rural agro-dealers to manage the containers within their communities. In the case of Seedco, the firm invested in building the capacities of local agrodealer shops to act as stockist of the inputs while at the same time offering bundled products and services. Market players have since spread their investment national wide. Through this investment Seedco prides in being the 40% market shareholder of the country's seed input market.

In like manner, the technical and financial support Musika invested in the mechanisation service market has resulted in increased uptake of mechanisation services among small holder farmers. Initially agricultural technologies were centred around Lusaka, Central and Southern Provinces mainly because of the presence of commercial farmers and easy accessibility to the inputs through the well-connected road network. Musika's investment in the market stimulated private players to expand their presence in rural markets and to invent technologies for the rural markets. Firms like Saro Agriservices who initially operated in Southern and Central have since expanded to Eastern and North Western Provinces. New access points have been opened stocking a wide range of technologies. The adoption of small technologies suitable for the smallholder farmers has contributed to private sector players' ability to innovate and meet market demands. Technologies such as shellers and irrigation systems are among those that have kept the market players afloat, serving the smallholder communities.

MARKET SYSTEMS CHANGES EXPERIENCED

Looking back at the 10 years of intervening in the *'last mile'* distribution indicates a substantial change among smallholder farmers' perception and responsiveness to hybrid seed and adoption of agricultural technologies. Changes have been experienced at industry, firm and farmer levels. The rural smallholder farming communities have embraced mechanisation.

There are a number of changes experienced in the input market since Musika's intervention. The government through the Ministry of Agriculture has continued to supplement and support private sector investment in the rural communities through strengthening human and financial resource allocation to serve rural communities. The private sector companies on the other hand are still motivated to continue the investments in the input market as rural communities provide majority of their customer base.

Market players have independently formed strategic alliances to effectively serve the small holder markets, for example, in the mechanisation input, Saro has signed agreements with financial institutions to offer the products and implements on flexible lease.

There has been an increase in the number of input market firms establishing access points in the rural communities using both the container model and local agro dealer capacity building. There has also been increased and improved innovation among some players, for example in mechanisation, private sector players have devised simple and user-friendly machinery to meet the rural community's needs.

To be competitive in the seed market, market players have continued to be innovative and creative mainly based on feedback from both the rural consumers and authorities that be. Private sector has invested in rural community engagement to stay afloat and offer the right products and services.

At community/ beneficiary level, there has been quite a number of shifts observed. Farmers have begun to diversify their farming from crop to livestock. For example, in Chikanta village located in Kalomo district of Southern Province, farmers attest to the fact that the presence of the Seedco containers plus other products and services being offered at the container such as availability of livestock products and services, has given confidence to the community that their needs for livestock farming are well catered for.

The shift from mono agriculture to diversifying has been an opportunity for the mechanisation private sector providers. Saro, one of Musika's partners has invested in small technologies to cater for the diverse needs of the farmers. Currently equipment such as feed mixers, pelleting machines, shellers, among others, are being stocked and sold more compared to the earlier years.

Similarly the seed input market has experienced increase in sales since the adoption of the 'last mile' distribution model. Rural communities demanding improved inputs has provided grounds for input firms to provide hybrid seeds. Farmers are moving from being dependant on the government input support program as access to hybrid seed has been eased. The rise in sales indicators for input firms provides a basis for this argument. This is mainly validated by the increase in sales that the private sector firms are experiencing.

IMPLEMENTATION CHALLENGES

To effectively penetrate any market and break even in business, direct contact with the beneficiaries to build awareness and understanding of the product or technology is key. This however demands huge investment both financial and human resource, ultimately increasing the cost of doing business with the rural markets and is one of the challenges that limit the deeper reach in achieving more effective *'last mile'* delivery of products and services. However, Musika's investment in the inputs market eased this challenge by buying down the risk of private sector investment in rural communities through provision of mobility and storage for some players to stimulate the market.

Additionally, the lack of trained and motivated government manpower, who are employed, incentivised and accountable for providing extension, have limited mobility and inadequate customised information relevant to the needs of the farmer and promote a change in mind-set. Agricultural offices or information centres are usually at the district level, which are located miles away from the beneficiaries. The greatest challenge was the information gap between the extension workers and farmers. The provision of motorbikes and engagement of private sector extension staff to enhance extension service provision, eased this challenge and provided the rural communities access to improved services coupled with information.

To curb the information gap, private sector has invested in building capacities of local agro-dealers to provide improved products and services. For example, Seedco has taken a further step to engage agro dealers as stockists and distributors of inputs.

For private firms in agricultural technologies, the Exchange rate has been one of the major challenges. Rise in the exchange rate has continued to have a negative impact on the cost of the machinery, and this rise in exchange rate ultimately trickles down to the farmer as a consumer. Furthermore, manufactures of agricultural technologies are limited because most of the agricultural inputs components are imported and this raises the cost of production. The solution around this challenge has been for manufacturing firms to innovate and improvise with the resources available to reduce the cost of the equipment for the local/ rural farmers. SARO one of the main players in the agtech input market and Musika partner has been very instrumental in ensuring that technologies are affordable and tailored to the needs of the rural communities.

LESSONS LEARNT

- Strengthening the agro-dealer networks to sustain the system – for the system to be sustainable, local or internal capacities of market players need to be built. The *'last mile'* distribution model rellies greatly on a sustainable local agro dealer network. As such input suppliers need to strengthen the local agro dealer networks as these are the points of access in the local communities for the inputs and agronomic information.
- There is need to be self-sustaining as an industry (input market) in order for the

production/provision of the goods and services to be affordable. This is because importation of raw materials increases the cost of production. On the other hand, most of the technologies being promoted are affected too by the exchange rate fluctuations because of the fact that Zambia does not produce everything locally. Therefore, strengthening our local internal capacities to fabricate the technologies will be the ultimate solution to affordable technologies for the smallscale farmers as well as producing local raw materials for inputs such as fertilizers.

RECOMMENDATIONS

- A deliberate policy must be put in place where companies must be allowed for fertilizer production in the country. Setting up fertilizer plants in Zambia can help reduce the cost of production within the country
- There is need for a stable policy environment e.g. Government introduced - eFISP but before the industry could fully adjust to it, Government decided to abandon the programme. The programme saw many private input companies investing in the rural market and most of them have since shut operations.
- Increased investment in technology such as the stock management system could result in strengthened and mutually beneficial relationships between primary supplies and intermediaries.

REFERENCES

http://www.new-ag.info/en/pov/views.

https://www.gatsby.org.uk/africa/programmes/research-how-can-we-help-farmers-access-quality-advice-and-inputs

https://www.gatsby.org.uk/uploads/africa/reports/pdf/2019-gatsby-last-mile-distribution-study.pdf

https://www.semanticscholar.org/paper/The-last-mile(s)-in-modern-input-distribution%3A-from-Minten-Koro/a0eff79b793c5fa4d08d1dec5b3a79bf2db76460#paper-header

http://ebrary.ifpri.org/utils/getfile/collection/p15738coll2/id/127490/filename/127701.pdf

https://beamexchange.org/uploads/filer_public/82/38/8238f85b-6830-4073-b115-321d6fdb569e/ftf_inova_-_last_mile_input_distribution_info_sheet_-_final_compressed.pdf

http://www.daily-mail.co.zm/agricultural-marketing-input-distribution/

https://www.kenyamarkets.org/case-studies/

Tel: +260 211 251371
Cell: +260 969 250 355
Website: www.musika.org.zm