

## AGRA Impact Series



Jimmy Baluku, the chairperson of one of the beneficiary SMEs, Bigando Cooperative located in Kasese district, standing beside a maize cleaner that was received through a matching grant from AGRA.

Landmark Media Consultancy/Joseph Buule.

UGANDA

# Exploiting local fabrication capacities to enhance post-harvest

**Farmers in Eastern Uganda were equipped with the right knowledge that made them increase rice yields per area. The quality of the grain plus the price improved as well.**

Uganda's fertile soils and conducive climate enable the country to grow a variety of staple crops with ease hence making it a food basket for many nations in the great lakes regions. However, due to the chronic meagre knowledge in good agronomic practices, post-harvest technologies and trade systems among farmers plus several other actors along the value chain of the crops, the country has always experienced low productivity and marketability of its crops. The small holder farmers, who are the majority at the production level grow small acreage of crops like beans, maize and rice. Because they do not use improved input innovations like high yielding seeds, pesticides and fertilizers, their yields are normally limited, hence limiting the potential of earning big from agriculture. In a way to upscale their livelihoods, a number of interventions by government and

other development agencies like NGOs and foreign governments of developed nations have been investing in Uganda's agricultural communities and related sectors to increase productivity of the farms. Others have gone beyond to invest in improvement of the crops' quality and marketability within and beyond the country's boundaries.

For example, the Alliance for a green revolution in Africa (AGRA) is implementing a five-year project known as the Partnership for Inclusive Agricultural Transformation in Africa (PIATA) in eleven African countries, Uganda inclusive. The project that was launched in 2017 with the aim of transforming farms from subsistence to sustainable businesses through engaging with private SMEs along the value chains is reaping from its investments. In Uganda, the Competitive



Bridget Mule, the treasurer of one of the beneficiary SMEs, Bigando Cooperative located in Kasese district, displaying a maize cleaner that was received through a matching grant from AGRA. Landmark Media Consultancy/Joseph Buule.

African Rice Initiative in East Africa (CARI-EA) and Regional East African Commodity Trade in Staples Phase II (REACTS II) projects that are being implemented by Kilimo Trust (KT) have transformed not only many farmers' lives but several other businesses linked to marketing of the harvested crops as well as processing the pulses and grains as a way of improving value of the Ugandan crops to comparable regional and international standards. One of such a business was promotion of use of automated post-handling practices to improve the quality of the crops' harvests along the agricultural value chains.

Geoffrey Munyegera is a 37-year old fabricator

of agricultural equipment. He is the founder and CEO of Munyegera Agro-Machinery, a factory located about 120 KM east of Kampala city in the current Mayuge Town Council in Mayuge District. Unlike other manufacturers with sort of training in mechanical engineering or related skills at a tertiary level, Geoffrey did not study beyond ordinary -level (O-level). He dropped out of school because of lack of school fees after losing both of his parents in his late teenage age. Because his father was a welder, Geoffrey took up the profession. "I tried to educate myself but it was so challenging and I could not school beyond the first term of senior four. I went to a welding workshop to get skills in making metallic beds, doors and windows in 2003",



Geoffrey inspecting his workers fixing a forage chopper. Landmark Media Consultancy/Joseph Buule.



A worker at workshop fabricating a frame of an equipment. Landmark Media Consultancy/Joseph Buule.



A display of semi-finished equipment at Geoffrey's workshop. Landmark Media Consultancy/Joseph Buule.



A display of finished equipment at Geoffrey's workshop, just awaiting painting. Landmark Media Consultancy/Joseph Buule.

says Geoffrey. Because of the low pay, Geoffrey quit and decided to be independent in 2004. "After leaving, I transferred to Mayuge, which is about 40Km from my former masters' workshop to avoid competition. At Mayuge, there were few welders and the quality of their metal works was not pleasing. So, I saw an opportunity to grow the business", he adds. Even though he did not have enough capital to begin with, Geoffrey did not let his dream to vanish. "I went to the village and grew two acres of popcorn on a family land. The crop was on a high demand at that time. From the harvests, I was able to buy a welding machine. In 2006, I searched and found a suitable place that I rented to establish a workshop in the centre of Mayuge town. Initially, I started manufacturing metallic doors", he says.

Because Mayuge is one the leading producers of maize in Uganda, Geoffrey noticed that many farmers threshed maize using rudimentary ways like beating which is known to reduce grain quality. Because of the quality work at the workshop, the business expanded the customer base. He was at one time approached by a farmer who wanted to fix a faulty thresher,

which the farmer had imported from Kenya. "The farmer brought a faulty thresher at my workshop for repair. I had to be so innovative to fix the machine and coincidentally, the machine was fixed", narrates Geoffrey. This was an opportunity for Geoffrey to expand his service to the agricultural communities in the area. "I picked interest in the thresher, so I tried thinking of how I would fabricate one. Fortunately, a client tasked me to make one. I made the thresher but its powering mechanism was dependant on a tractor's power take-off point (PTO). This further increased my interest in the new adventure. After knowing that there existed diesel engines that could power the machine, I was able to break through as I made an automobile equipment that needed no tractor to operate," explains Geoffrey.

This was not only seen as a turning point for the youthful fabricator but also for the small scale farmers and SMEs that had waited for affordable mechanised equipment to speed-up production and post-harvest technologies, respectively. Geoffrey adds that after the breakthrough, he used the knowledge to fabricate a number of

**“The increasing clientele increased my revenue and I shifted to a bigger place where I constructed a permanent workshop. I concentrated on agricultural equipment because of the high demand not only in the eastern region, but other regions of Uganda as well.”**

**Geoffrey Munyegera**

CEO, Munyegera Agro-Machinery

**Table 1: Examples of threshers fabricated at the facility, their average prices and capacity**

Category	Description	Lifting type <sup>1</sup>	Pulling type <sup>2</sup>	Automobile type <sup>3</sup>
<b>Bean</b>				
	Price	UGX 2,500,000 (US\$714)	UGX 5,000,000 (US\$1,428)	UGX 7,000,000 (US\$2,000)
	Capacity (kg/h)	200 - 500	500 - 700	1000 - 1300
<b>Maize</b>				
	Price	UGX 2,500,000 (US\$714)	UGX 4,500,000 (US\$1,286)	UGX 6,500,000 (US\$1,857)
	Capacity(kg/h)	800 - 1000	3000 -3500	3000 -3500
<b>Rice</b>				
	Price	UGX 3,000,000 (US\$857)	UGX 5,000,000 (US\$1,428)	UGX 8,000,000 (US\$2,286)
	Capacity (kg/h)	200 - 500	500 - 700	1000 - 1500

<sup>1</sup> A thresher without wheels. To be shifted, farmers need to lift the equipment from one location to the other.

<sup>2</sup> A thresher with wheels but manual. To be shifted, farmers pull or push the equipment from one location to the other.

<sup>3</sup> A thresher with wheels and a driving system. To be shifted, farmers drive the equipment from one location to the other.



Geoffrey (R) demonstrating how a finished auto-mobile equipment works at the workshop's park yard. Landmark Media Consultancy/Joseph

other equipment like shellers, threshers, millers and planters for various crops like beans, maize, rice, groundnuts. He was also able to fabricate sugar cane squeezers and forage choppers as well. Overtime, he transformed the fabricated agro-equipment to automobile machines that attracted bigger players in the agricultural value chain. “The increasing clientele increased my revenue and I shifted to a bigger place where I constructed a permanent workshop. I concentrated on agricultural equipment because

of the high demand not only in the eastern region, but other regions of Uganda as well”, as explained by Geoffrey.

Geoffrey was not aware of activities of KT and other supporting agencies in Uganda by then. “All along, I was working independently and I served individual farmers who could travel all the way from western and northern parts of the country”, says Geoffrey. He further narrates that he was not aware how his work had done a



Geoffrey guiding his workers on how to load and handle the equipment while on transit.  
Landmark Media Consultancy/Joseph Buule.



Emmanuel, one of the clients for the workshop purchased two equipment, a forage chopper and a maize mill at UGX 4,500,000 (US\$1,286) and UGX 5,500,000(US\$1,571), respectively.  
Landmark Media Consultancy/Joseph Buule.



A team of workers loading a purchased equipment (forage chopper) to be delivered at a farm belonging to Emmanuel.  
Landmark Media Consultancy/Joseph Buule.



Joyce and a co-worker drilling a metallic board to be fixed in a maize mill. From the work, she can earn between UGX 7,500 (US\$2.14) to 10,000 (US\$2.86).  
Landmark Media Consultancy/Joseph Buule.

recognisable impact in the farming communities not until influential players in the agricultural sector started visiting his work shop. “Because they were promoting local fabricators in the country, officials from SESAKAWA visited my workshop in 2013. They were impressed by the works and thereafter sponsored me and my entire team for a week’s training at Busitema University. We were trained in quality welding. We were then given purchase orders to make automobile machines. Another agency known as USAID also recognised our work and through its project ‘feed the future’, the workshop was given more deals,” says Geoffrey. Unfortunately, after a few years, the USAID project ended in 2018.

Coincidentally in the same period, AGRA had funded KT and one the field officials, Henry

Mawanda, who had previously worked with USAID connected Geoffrey to the REACTS II and CARI-EA projects. “An association with KT brought more customers under the CARI and REACTS projects. So far, I have several equipment. The proceeds have enabled me to expand my workshop space from 7,000 to 17,000 square feet. In the three years, I have also build permanent structures like a wall fence and offices. My turnover has increased from UGX 200,000,000 (US\$57,143) ever since the USAID project closed to UGX 600,000,000 (US\$171,429). This is because KT has connected me to a wider clientele. For example, KT has connected me to other organisations like Heifer International and Equator Seeds as well as to SMEs like Area Cooperative Societies working under the CARI-EA and REACTS II projects”, as explained by Geoffrey. It’s worthy



noting that because the CARI-EA and REACTS II projects are promoting use of mechanisation to improve quality and trade of rice, beans/maize, respectively, Geoffrey is yet to register more success. For example, more than 30 cooperatives and SMEs which produce and trade beans and maize are united under the Network of Producers and Exporters in Uganda under the REACTS project. As well, the CARI project has organised several farmers, traders and processors under regional consortia, which all aim at fronting mechanisation as a way to increase grain volumes and quality.

Actually, it is hard to visit the workshop without finding a client picking an order. Emmanuel Waiswa, a farmer in his late 50s was found at work shop picking a grass chopper and maize mill, which he had ordered for two weeks ago. “I knew Geoffrey at the agricultural show two years ago. Because I was impressed by the quality of the equipment at the exhibition, I decided to buy from him. I bought a chopper at UGX 4,500,000 (US\$1,286) and a mill at UGX 5,500,000(US\$1,571),” says the farmer.

Geoffrey explains more other achievements he got from associating with KT. “I thank KT for enabling me increase my success. I am constructing a home worth UGX 200,000,000

(US\$57,143). I was also able to exhibit my work at national exhibitions where KT facilitated the transport and accommodation. They also always facilitate me to repair the faulty equipment as well as training the operators of the equipment wherever the clients are in the country. I have been able to employ more people at the workshop. So far, I employ 22 (5 female) workers compared to the 15 workers three years ago. Some can earn more than UGX 1,000,000 (US\$285) per month during the busy seasons”, says Geoffrey.

Joyce Sumba, is 28 years old and a single mother of four. She has spent two years at the workshop earning a daily wage of between UGX 7,500 (US\$2.14) to 10,000 (US\$2.86) and this has enabled her to support her family. Also, Bashir Muyalure who has spent seven years working at the workshop narrates that he has seen the business grow in the recent year, which has led to increase in the workers’ wage. “After KT’s support, my pay was increased by over 30% because of the increasing customers. We used to fabricate ten machines in a month. But currently, we do close to 100 machines,” says Bashir.

US\$1 = UGX 3,500