



Business Innovations for Resilient and Efficient Farming

 SWT Tanners Limited

Towards a Self-Reliant Rice Sector: Expanding production and processing of quality local rice in Uganda.

Context

Consumer demand outweighs domestic rice production

Rice is one of Uganda's fastest growing cash crops due to a steady increase in household consumption over the past decade. However, while domestic production is increasing, the production deficit is around 200,000 MT and some consumer demand continues to be met by imports.

The Government of Uganda is pursuing greater self-sufficiency in the rice sector, building the national industry and moving away from a reliance on imports.

SWT Tanners (SWT) is the leading rice processor and distributor in Uganda and, until recently, imported all of its rice from Pakistan. The company is now adding Ugandan varieties to its product lines, focusing on sourcing, producing and milling higher quality lowland rice grown in Eastern Uganda.

To do this, SWT is working to source quality seed, increase lowland rice production areas and establish an outgrowers scheme. SWT's investment in local rice varieties supports efforts to increase the self-sufficiency of Uganda's rice industry.

SWT Tanners Ltd



SWT's shift from solely importing rice to sourcing and selling Ugandan rice varieties requires a significant investment and a long-term strategy, but it offers the company an opportunity to diversify and support the national rice sector strategy.

For SWT to produce lowland rice varieties in Eastern Uganda, it must establish or improve the rice production process. The first significant investment was a multi-stage milling facility with the capacity to mill 200 MT of rice per day. Multi-stage mills allow for a number of different processing steps, producing cleaner, white rice. This was followed by the purchase of more than 5,000 acres of land in 2019 on which to establish a nucleus farm.

Although SWT currently buys paddy from local farmers through agents, it is in the process of establishing an outgrower scheme to work with farmer groups within a 40km radius of the nucleus farm. Through this initiative, SWT aims to source 5,000MT of paddy annually from local farmers.

Farmers



Rice farmers from Eastern Uganda stand to benefit from the higher quality rice paddy that can be grown in the region. However, yields are often low and quality sub-optimal due to limited access to clean seed, inadequate water supply or poor water management and poor cultivation practices.

At the processing stage farmers predominantly rely on local single-stage mills. Single stage mills apply only one step to remove husk and bran from paddy to produce white rice. This single step versus the multiple steps used in multi-stage mills results in rice lower quality rice.

SWT's outgrower scheme will involve 398 farmer groups, representing 5,900 local farmers. These farmer groups and their members will be supported with affordable ploughing options, seed, access to credit and technical advice and information updates through extension workers.

Challenges

Multiple steps to improving rice quantities and quality

SWT Tanners Ltd



There has been very little investment to date in aspects of the rice industry in Eastern Uganda. As a result, a lowland seed industry is only just beginning to emerge, single-stage milling remains the norm and supporting physical infrastructure such as roads and flood irrigation schemes are lacking.

Since establishing its multi-stage rice milling facility, SWT can purchase greater volumes of paddy from Northern Uganda where farms tend to be larger and paddy is stored and sold in bulk, but the quality tends to be poor. Consumer demand for quality aromatic varieties grown in Eastern Uganda is high, but production volumes are low.

Securing land in Eastern Uganda for SWT's nucleus farm took time and, once suitable land was found, an access road and flood irrigation system needed to be built.

To establish an outgrower scheme, SWT must build relationships with local farmer groups and encourage greater organisation and trust within and between farmer groups. Organised input and output channels are needed to support farmers to grow paddy to the standard and timelines required by SWT.

Farmers



SWT's outgrower scheme offers farmers an opportunity to improve the quality and quantity of rice paddy and the potential to increase incomes. However, farmers must move away from a low-investment, low-input approach to one that requires high quality seed and more structured and standardised

cultivation, harvesting and drying practices. Farmers must also break ties with local single-stage mills.

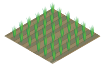
Single stage mills produce poor quality processed rice that can appear dirty and contain stones, and the recovery rates are lower than multi-stage mills. Single-stage milled rice therefore attracts lower prices. However, many rice farmers secure credit from their local single-stage mill prior to planting, and then pay the loan back with a portion of the harvested paddy they bring to the mill for processing. Moving away from this arrangement, while financially beneficial, can pose risks to farmers who rely on this access to credit prior to planting each season.

SWT's quality standards pose challenges for farmers. Farmers will need to grow paddy from uniform quality seed and follow SWT's cultivation, harvest and post-harvest handling requirements.

Farmers will need to meet these quality standards every season to remain active within the outgrower scheme. This level of organisation is not yet evident among farmer groups.

Solutions

Investing in change to increase and improve domestic production



To produce the planned volume of lowland rice varieties, the rice paddy production area must be significantly expanded. SWT identified land for a 5,000 acre nucleus farm in Eastern Uganda and worked with REACH-Uganda to have the land surveyed and an irrigation plan developed.



An access road was needed to connect the nucleus farm to the main Mbale-Moroto road. SWT and REACH-Uganda worked together to arrange the construction of 5.2km of access road, which has also provided local farmers with better access to markets and essential services.



The nucleus farm needed electricity and water connections, including a flood irrigation scheme to provide year-round access to water. SWT partnered with REACH-Uganda to manage the construction of the irrigation scheme, with 500 acres of land initially connected and development ongoing.



Transport costs can be expensive for farmers. SWT procured a truck which will be used to collect paddy directly from farmers participating in the outgrower scheme.



A drying facility on the nucleus farm will support farmers to dry their paddy correctly prior to milling. This will benefit SWT as it can better control rice quality. Farmers will benefit through less broken rice and higher output. Husks removed during the milling process will power the dryer.



SWT has established relationships with local farmer groups. REACH-Uganda supported SWT to identify farmer groups and facilitated introductions. REACH-Uganda will support relevant agriculture standards training for farmer groups.



REACH-Uganda will support SWT to further enhance farmer group relationships and ensure quality technical information and support is provided. Two SWT extension workers will be recruited on a cost-share basis and provided with motorcycles to ensure they can travel and meet with farmer groups.



REACH-Uganda is supporting the development of a rice seed industry in Eastern Uganda and has linked SWT with Kibimba Limited, Uganda's largest rice estate producing seed. SWT purchased an initial 8MT of certified lowland rice seed from Kibimba which is capable of planting 800 acres of land.



REACH-Uganda and SWT are exploring a farmer credit option through the Microfinance Support Centre. This would provide farmers an e-credit option and reduce the reliance on single-stage mills.



SWT will explore a digital payments platform in order to ease payments to farmers, build their financial profiles and increase their credit standing with formal financial institutions.



Results

Achieved and expected



Program investment

REACH-Uganda
USD 335,000



Private investment to be leveraged

SWT Tanners
USD 5,701,494



Value of increased sales

SWT Tanners
USD 5,028,785
by 2021
USD 11,088,472
by 2023



Total additional income for rice farmers

USD 193,750
by 2021
USD 412,970
by 2023



SWT identifies and purchases 5,422 acres of land for nucleus farm in 2019.



5.2 km access road completed in April 2020, connecting the nucleus farm warehouse facility and local farmers to the main road.



Flood irrigation system in place at nucleus farm, supporting 500 acres of paddy production in 2020, to be expanded to 5,000 acres by 2024.



Farm facilities and equipment in place, including drying facility.



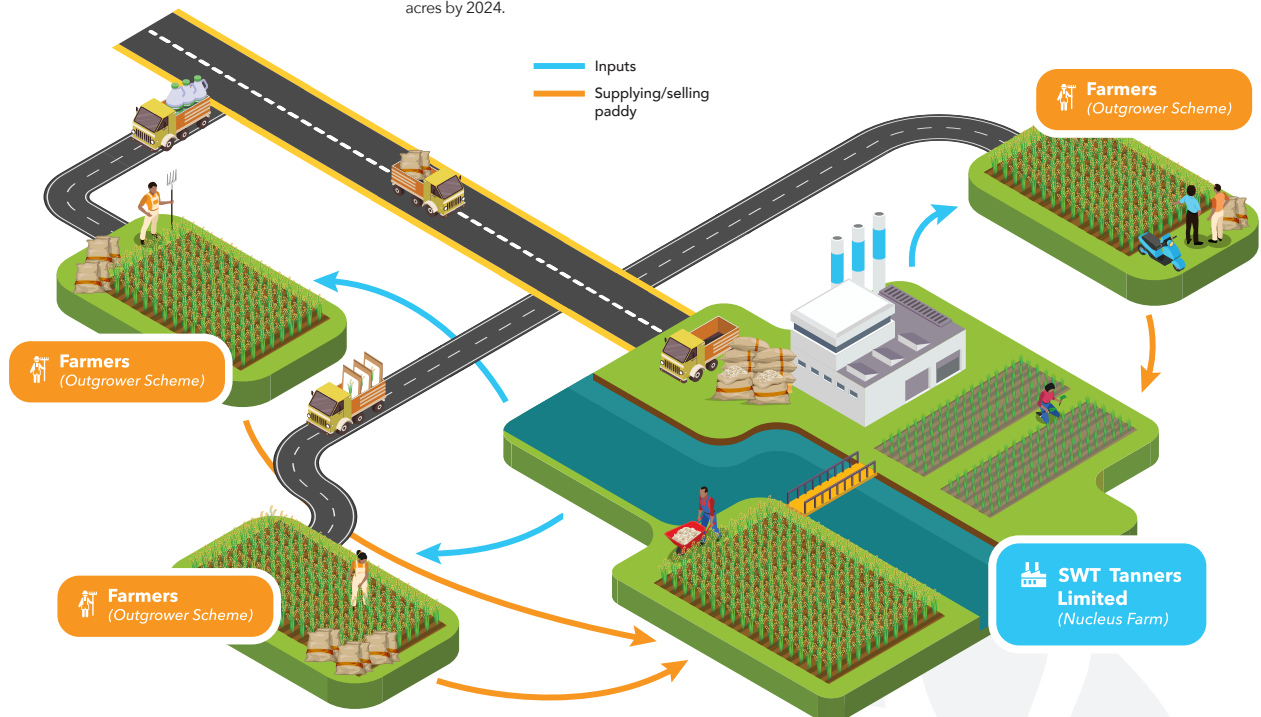
Two extension workers employed in 2020 and provided with transport.



Introductions made to farmer groups and relationships established.



585 new full-time jobs to be created by 2023.



4,515 farmers supplying paddy to SWT via agents in 2020.



Farmer groups organise themselves and join SWT outgrower scheme.



Farmer groups provided with access to inputs, including clean seed and potentially credit.



5,970 farmers from 398 farmer groups expected to be supplying paddy directly to SWT by 2023.



Farmers selling paddy directly to SWT rather than single-stage mills can expect to increase their annual incomes, on average, by USD 87.

REACH-Uganda is funded by the Embassy of the Netherlands and implemented by IFDC, with technical support from Cardno Emerging Markets.