

# CASE STUDY

## AGRIVISION

**Investment year:** 2012

**Sector:** Agribusiness

**Instrument:** Equity

**Deal type:** Expansion

**Ownership:** 24%

**Committed amount per 31.12.15:**

USD 24 million



## A STAPLE FOOD PRODUCER IN ZAMBIA

The government of Zambia has identified agriculture as a priority sector for achieving economic development and reducing poverty. Agrivision – a Norfund investee company – is helping to increase national food production by utilising modern farming methods and new technologies.

### ZAMBIA'S PRIORITIES IN AGRICULTURE<sup>3</sup>

- Expand the area planted through the development of farm blocks
- Promote crop diversification
- Increase the area under irrigation
- Promote agricultural mechanisation and the use of ICT
- Expand extension services
- Promote improved seed varieties
- Improve access to finance
- Increase private sector participation

In Zambia, agriculture is a sector of particular importance to the state's strategic efforts to promote economic growth, achieve food security, and reduce poverty. In 2013, the sector accounted for approximately 20 percent of Zambia's gross domestic product and employed more than 60 percent of the country's labour force, making it the main source of income and employment for the majority of Zambians<sup>1</sup>.

Performance in the sector, however, is mixed and productivity is low. Maize, for example, is the staple food of Zambia and holds a central position in Zambia's agricultural political economy. Most smallholder farmers grow the crop and the country is self-sufficient in terms of production. But productivity is low and poverty remains common in rural areas, despite the massive subsidies flowing

to the sector. Currently, subsidies for maize input (such as seeds) and output (purchases of maize above market rates) absorb over half of the nation's agricultural budget at the expense of other key agriculture drivers such as rural infrastructure, research and development, and extension services<sup>2</sup>.

There are success stories: wheat production has grown from almost zero in the early 1970s, to more than 300,000 tonnes in 2015. Zambia is now able to supply all local demand and export wheat to neighbouring countries, and employment has been created at various levels of the value chain<sup>4</sup>.

Overall, though, agriculture in Zambia is underperforming. Productivity in maize, wheat, and soya production could be increased significantly. The Zambian government sees the current failures as due partly

to the fact that the sector has not effectively utilised “research and development, farm mechanisation, science and technology and information and communications technologies (ICT) to increase yields and maximise the comparative advantage of different areas of the country”<sup>5</sup>. Unpredictable agricultural trade policies, government interventions in maize markets, and unreliable power supplies have also deterred productivity-raising investments by farmers. Many investors perceive the risks of investing in Zambia’s agriculture as being too high<sup>6</sup>.

Change is needed: Zambia’s National Agriculture Policy calls for structural transformation<sup>7</sup>. There is a need, it argues, for greater private sector participation in farm production, processing, and trade. Zambia has the potential to both increase productivity and to become a major food exporter to Eastern and Southern Africa.

### NORFUND’S INVESTMENT IN AGRIVISION

Agrivision Africa is a vertically integrated agribusiness company operating in local and regional markets.

Established in 2009, the company’s operations began with the purchase of a farm with 210 ha under irrigation. Agrivision rapidly developed the farm and increased the area under irrigation to 1,565 ha. This caught the interest of the South African investment company Zeder, which invested in Agrivision in 2011.

2011 was also the year in which Norfund decided to invest in the agribusiness. Agrivision fitted well with our new agribusiness strategy, and our initial assessment of the company identified a number of positive development effects. MIGA, the political risk insurance arm of the World Bank Group, undertook an extensive environmental and social due diligence of Agrivision in 2010, and found it to be broadly in compliance with IFC standards. In September 2011, Norfund’s Board of Directors approved the first equity investment in Agrivision of USD 10 million.

### AGRIVISION’S CONTRIBUTION TO DEVELOPMENT

Agrivision’s potential for increasing food production, supporting job creation, and promoting rural development fitted well with the Zambian government’s strategic priorities. The fact that Agrivision was interested in expanding its operations into processing activities which would benefit the company as well as surrounding smallholders was also seen positively by the Norfund project team.

#### Producing food for regional markets

Equity investments from Norfund and Zeder have enabled Agrivision’s expansion to continue. The company has acquired other underperforming large-scale farms in Zambia’s Copperbelt Province, and now has 6,347 ha under cultivation. Agrivision has become a key regional staple food producer, supplying food to the Copperbelt Province in Zambia, and the Katanga Province in the Democratic Republic of Congo.

Conservation farming methods and modern technology are central to Agrivision’s operations and have helped to increase its wheat, maize, and soya bean production. The practice of minimum tillage helps the company to limit soil erosion and improve the fertility of the soil. With the help of Normalized Difference Vegetation Index (NDVI) images from a satellite-based positioning system, Agrivision is monitoring its crops and tailoring its water and fertiliser usage to specific conditions in different areas of the farms. Agrivision’s farms now produce approximately 10 percent of Zambia’s annual wheat consumption.

Like other operators in the sector, Agrivision faces challenges with power outages. At the Somawhe farm in north eastern Zambia, pumping stations are needed to shift water from the main reservoir via long canals to the agricultural fields. When power is unavailable, the pumping stations and pivots stop working, water in the canals is wasted, and not enough reaches the fields. To mitigate these problems, Agrivision is examining options such as the installation of solar panels



Agrivision has more than 500 permanent employees.

### AGRIVISION’S FARMS PRODUCE 10 PERCENT OF ZAMBIA’S ANNUAL WHEAT CONSUMPTION



<sup>1</sup> Rasmussen *et al.* (2014)

<sup>2</sup> Chapoto *et al.* (2015)

<sup>3</sup> Republic of Zambia (2014) and Republic of Zambia (2013)

<sup>4</sup> Mulikelela (2015)

<sup>5</sup> Republic of Zambia (2014, p. 8)

<sup>6</sup> World Bank (2014)

<sup>7</sup> Republic of Zambia (2013)

### THE KATUBA SCHOOL PROJECT

The education sector in Zambia is characterised by staff shortages, the uneven distribution of staff between rural and urban areas, shortages of educational materials, and a lack of classrooms. Agrivision has responded to these challenges by supporting the refurbishment and extension of Katuba School, located 8 kilometers from the company's farm in Mkushi.

This project was designed to improve access to quality education for children in the local community, including family members of employees who work at Agrivision's Mkushi farm. The project has supported the construction of classrooms, staff houses and latrines, and provided improved water facilities. A playground has also been built. Eight additional teachers were allocated to the school by Zambia's Ministry of Education as a result of this expansion, and the number of pupils has increased by 28 percent.

In addition to upgrading the school, Agrivision provides a school bus which transports children living at the farm safely and securely to school. Previously, the children walked a combined distance of 16 kilometres to and from the school every day.

and the construction of a new dam to capture and recycle water lost from the canals.

#### Ensuring the availability of quality staple food

In 2013, Agrivision acquired Mpongwe Milling in Kitwe, a plant with an annual production capacity of 60,000 tonnes of milled maize, and 16,000 tonnes of milled wheat. The mill plays an important role in ensuring the availability of staple food in local and regional markets: wheat processed here is for national consumption and export, and the maize is primarily for national markets. It is especially important for poorer households, many of which have low household food stocks and are highly dependent on staple food markets<sup>8</sup>. By developing a pre-mixed product for baking white bread, the plant is also helping to diversify the range of products available in the region.

Modern laboratory equipment at the mill enables staff to undertake thorough assessments to ensure the consistent quality of its raw materials and its finished goods. Currently, the plant is being audited for ISO 22000 certification of the company's food safety management. Achieving this status will increase the attractiveness of its products still further.

#### Providing market access for smallholders

Mpongwe Milling sources most of its maize from smallholder maize farmers. Purchasing is done at the farm gate, and through intermediaries, such as the Zambian Food Reserve Agency. In 2015, the mill partnered with the Zambian National Farmers Union (ZNFU) to procure maize from farmers participating in the LIMA credit scheme which provides agricultural input finance from Zanaco Bank to smallholder farmers. When crops are harvested, farmers deliver their produce to ZNFU and receive payments after the union sells the maize. Previously, maize could remain in storage for weeks before it was sold (a similar problem affects farmers selling produce to Zambia's Food Reserve Agency)<sup>9</sup>. But the agreement with Mpongwe Milling provides

ZNFU with a ready market for maize and is substantially reducing payment delays. Smallholder farmers are paid by Agrivision within 24 hours.

#### Creating jobs throughout the value chain

By the end of 2015, Agrivision's farms employed a total of 318 permanent staff. A further 289 people were offered temporary employment during the 2015 harvesting season. The farm employees enjoy benefits such as housing, schooling, and coverage for medical expenses.

Mpongwe Milling provides direct employment to another 197 people, and contributes to indirect job creation through its distribution channels. In 2014, the company began selling its maize products through strategically placed container depots, each located near large compounds in the Copperbelt Province. Doing so has enabled consumers to have better access to staple food supplies. Nshima, a staple food in Zambia, is made from maize meal and demand for it is high. After just one year of operation, the mill sells 47 percent of its breakfast meal via 13 depots.

The containers are operated by independent managers, who receive weekly supplies of breakfast meal from the mill. However, the credit risk for these operations is assumed by Mpongwe Mills: the container managers pay only for the products once the first batch is sold.

At full capacity, the mill is able to supply 2,000 bags of breakfast meal per week to the depots. This provides the managers of the containers with a monthly income which is 9 times higher than the average monthly wage in the Copperbelt Province.

Electricity outages continue to impact production and monthly losses of up to 250 production hours have been recorded. The effects of these outages are felt even in the mill's distribution channels because fewer bags can be delivered to the containers. This, in turn, affects the income of the container managers. To counteract such



<sup>8</sup> Famine Early Warning Systems Network (FEWS) (2015)

<sup>9</sup> Burke *et al.* (2010)



**(1)** Mr. Mkiiale opened this container depot in Chिमemwe compound in December 2014. His son, Mr. Mkiiale Jr., operates the container from 07:00 to 19:00 every day, and says he can easily sell 2,000 bags of maize meal per week. **(2)** Agrivision has become a regional staple food producer. **(3)** Mpongwe Milling sources most of its maize from smallholder farmers.



**2**



**3**

problems, the mill has invested in diesel generators and plans to use a further 20 containers once production is secured at a higher level. In total, the expansion will provide income opportunities for 33 container managers.

#### **AGRIVISION: THE WAY FORWARD**

The market for maize, soya and wheat in Zambia and neighbouring countries is large and Agrivision is keen to scale up its operations to meet demand. In 2015, the company raised USD 30 million in equity from IFC, Norfund, and Zeder, and is considering additional opportunities for expanding its operations.

Agrivision is also considering ways to expand its engagement with smallholder

farmers. Options include, for example, providing seeds from Agrivision's farms, the provision of training in conservation agriculture, and negotiating purchase agreements for maize.

For Norfund, Agrivision is a key partner in the realisation of our agribusiness strategy. We plan to continue our support for the company financially, and through board participation and technical assistance.