

Learning from smallholder farmer contributions to seed multiplication and food security in Zimbabwe

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This case is one of a series specifically prepared by SNV and local partners for the “Seas of Change” event, taking place in The Hague, 11-13 April 2012. The cases cover a range of commodities and approaches in value chain development across Africa, Asia and Latin America. They usually include several of the following elements: strengthening of producer organisations, productivity improvement and value addition, business development services, inclusive business ventures, contract farming, marketing arrangements and improved chain financing. The work has been done with local entrepreneurs, NGOs and government bodies. Among the international collaborative partners are: IFAD, FAO, EU, USAID, DANIDA, Helvetas and IDB. For an overview of these SNV cases please see www.snvworld.org/en/sectors/agriculture

Key features

In Zimbabwe, contract farming for seed production has traditionally been the domain of commercial farmers due to the high levels of care necessary in production and perceived high risks associated with contracting small holder farmers. With limited supply and market options, medium-sized seed company Agriseeds sought to use smallholder farmers as a production base and approached SNV to facilitate the development of a workable smallholder out-grower model. The co-operation of Agriseeds with smallholder farmers was very successful for both parties: the farmers increased their incomes significantly from US\$250 per annum to an average of US\$800 per annum, leading to improved quality of life; whereas the company had by 2011 ended up with three years' worth of stock that could be exported. The programme has attracted the interest of other companies, who want to enter into contract schemes with small holder farmers, as they have realised that it is possible for rural farmers to be reliable business partners.

1. Context and background

Zimbabwe's seed industry was adversely affected by the land reform programme, and the country therefore faced a shortage of high quality and affordable seeds. From being the bread basket of the region, Zimbabwe is now a net importer of grains leading to food insecurity especially among poor rural households. Farmers rarely purchase pure seeds, depending instead on retained seeds from their fields which they may have accumulated over many years. The retained seeds are of very poor quality, susceptible to pests and diseases, often leading to hopelessly low yields. Farmers also lack knowledge on water and soil conservation issues. According to a 2009 study by FAO, farmers with limited inputs produced an average 0.7 metric tonne (mt) of maize per hectare, while those provided with full inputs averaged 1.3 mt/ha. This was attributed to both access to inputs and improved access to extension.

The seed industry used to rely on commercial farmers that had access to irrigation and mostly produced hybrid seeds. However, the commercial farming seed market has become largely insignificant and seed producers have had to turn to smallholder producers, both for production and as a target market. Rural farmers prefer OPV seeds which are less demanding in terms of inputs, including water, and can be used for more than one season without a major reduction in productivity as compared to hybrids.

Agriseeds (Pvt) Ltd is a medium-sized seed company with ambitions to expand to become one of Zimbabwe's leading three seed suppliers. Due to the collapse of commercial farming under the land reforms, the company saw an opportunity to diversify its out-grower base to incorporate smallholders into their business model. During the 2009-2010 cropping season Agriseeds, with the help of donor funds for risk sharing, embarked on a programme whose goal was to make farmers food secure and to contribute to national food security through the production of quality, certified and affordable seeds which would then be sold to other farmers throughout the country to grow food for household and aid national food security.

The company contracted 2,200 smallholder farmers in five districts which were mainly located in remote areas, where farming was the main source of income for many households. Women were encouraged to participate since they do most of the farming in these areas. Each farmer was to grow on one hectare of land cow peas (0.2 ha), sorghum (0.2 ha) and groundnuts (0.2 ha) seeds for sale to Agriseed and maize (0.4 ha) for household consumption.

The programme contributed significantly to seed production in the country and this had led to capacity utilisation at Agriseeds' warehouse of 110% by the end of 2009/2010 season, whilst in 2010/11 season the company ended up with three years' worth of seed stock. More importantly, an estimated 100,000 households were able to access quality and more affordable seeds in 2010/11. This should have led to increased food security for at least 600,000 people.

2. Underlying business model

Agriseeds provided farmers with a comprehensive range of embedded services that included inputs, extension, storage facilities, transportation of both inputs and produce and an available market. Each farmer on average received inputs worth US\$400 on credit/per hectare contracted. The company also provided intensive agronomic extension at every stage of production, starting with introducing farmers to conservation farming techniques. To ensure that farmers produce quality seeds, the company deployed a dedicated mobile field based extension service while SNV provided business training to farmers mostly through two trained local capacity builders (LCBs).

Whilst contract farming and embedded services are not new concepts, Agriseeds and SNV realised that they needed to address the issue of limited business understanding at an individual farmer level. Low levels of business understanding negatively affected relations between farmers and

the company; therefore business training was used to close the gap. SNV trained all the farmers on aspects such as budgeting, contract management and record keeping. Once farmers understood the business, they were better able to manage the production process and the contractual relationship. For example, farmers now understand that the use of clean seed is a key success factor to a farming enterprise and they can now calculate their costs and profits. They now understand their contractual obligations.

In addition, there is a growing appreciation among the participating farmers of the need for them to work in cohesive groups and to select exemplary leaders who possess long term vision. The business training is strengthening the contracted farmers' understanding of their own role in making the business partnership with Agriseeds work. There are signs of growing confidence among the participating farmers. Some of them now have enough confidence to negotiate for fair contract arrangements with other companies who wish to contract them for other crops. The farmers are now more aware of the need to understand market requirements before venturing into any agricultural enterprise.

In 2010/2011, a total of 1,457 farmers grew 1,797 hectares of seed crops for the project, and maize for themselves. It was necessary to drop some farmers who did not show a desire to become commercial and also to respond to the serious farmers who requested to be contracted for bigger areas. Contracts were offered for between one and three hectares depending on land and labour availability at a household level. This range in hectares was chosen since farmers indicated that for the business to make sense to them, they had to plant more than one hectare. This was evident in the profits they achieved.

An amount of US\$1,761,261 was injected into the project, of which US\$700,000 was for the input revolving fund, and US\$530,000 was for capacity development support which included extension support and business training, whilst the balance was for capital expenditure. Agriseeds contributed US\$252,880 to the programme, whereas the remainder of the costs were covered by the Australian Agency for Development Co-operation (AusAid), DGIS and HIVOS.

Over the past two years, four districts including some 3,650 farmers have provided a considerable quantity of quality seed production for Agriseeds. Furthermore, the communities have without doubt benefited from the seed production project, and the presence of Agriseeds has made a significantly positive contribution to respective farming operations in the various districts.

3. Evolution of the initiative

During the decade of economic decline, the company had carved a niche market in the NGO sector. Most NGOs bought seed packs from the company for distribution to vulnerable households throughout the country. At the end of the 2011 cropping season, farmers had delivered far more seeds than the company had budgeted for. NGOs operating in the country were also shifting from humanitarian to developmental work. They stopped ordering seed packs for distribution. Thus, the success of the programme, combined with the end of its NGO market for the 2011 seed stocks, curtailed the need for the company to continue with the seed project.

The project has been good for the company in that it had a guaranteed market in the form of NGOs. The NGOs are now giving input vouchers instead of seed packs, so Agriseeds now has to compete for sales with the rest of the seed producers. For a small company like Agriseeds, the project has had a hugely positive impact especially in terms of profiling, as thousands of people attended its annual field days and demonstration plots for learning. Its products are now well known on the market and the company is in a position to compete. The company confirmed that it managed to dispose of all the stock it had accumulated by the end of December 2011.

Agriseeds will continue with a similar programme but for grain/commercial crops, especially focusing on groundnuts. The company has secured export markets for groundnuts, and would like to maintain the relationship with good performers. Farmers were already growing groundnuts and were

struggling to market them on their own as they were not producing for a specific market. This shift in focus to groundnuts thus has great potential for the farmers as well.

This model has opportunities for up-scaling in two ways. Firstly, more companies are now interested in getting support to contract rural farmers to produce various food crops, including high value horticultural crops for the export market. Secondly, many farmers in local communities have copied the good agronomic practices from their contracted neighbours. Non-contracted farmers were free to come and learn from the company's demonstration plots as well as learning during the field days. This has had a positive impact on their production.

However, the model also had to face some major challenges:

- Side selling¹ of the contracted crop to other buyers or marketing through peer farmer accounts, seed retention and outright refusal to repay loans by some contracted farmers did occur. With no effective 'punishment' for previous defaulters, the risk of increased defaulters was evident. One way that companies are dealing with this problem is to get group members to guarantee each other, for example in a group of ten farmers; each farmer would be liable if any one of their group members defaults. Another way is to use the traditional court system, usually used by chiefs to resolve disputes in the villages. If one is found guilty of side selling they could be compelled to dispose of assets such as livestock in order to settle their debt.
- There were cases of contaminated seed, and pinpointing the cause of contamination was difficult. Contamination could have occurred from the previous production, or it happened where a farmer included another variety from his own production or friends, to boost their delivery and payment. On the other hand, contamination could also have occurred as seeds were packed in the company warehouse.
- Despite an overall good quantity of seed production, Agriseeds has no guaranteed NGO market now and will have to compete with the bigger players. However seed production companies have recently succeeded in lobbying the government to export seed and this does present an opportunity for the company to continue with seed production should they wish to do so. However, despite the announcements, it might actually take longer for exports to begin, due to the stringent requirements for handling seed, especially across borders.

4. Impact

This programme has, to a large extent, achieved its objectives. It successfully mobilised farmers to grow maize for household food security and produce certified seed in the designated crops and managed to achieve 95% food security for participating households in the five districts. Many farmers who were in the programme did end up with surplus maize that they could sell. Smallholder farmers increased their incomes significantly from US\$250 per annum to an average of US\$800 per annum, leading to improved quality of life. A lot of farmers reported that they purchased assets such as livestock, farming implements and household goods. Others started some small businesses like poultry and trading in order to diversify their sources of income. Many more families are now able to send their children to school (Project evaluation 2010).

Average incomes from crop sales increased significantly between 2009 and 2010, due to higher yields and premium prices paid for seed crops. In 2009 before the project, average income from crop sales stood at about US\$198 whereas after the project, it was up by over 270% at US\$739 per year. The training strengthened the contracted farmers' understanding of their own role in

¹ For example, if a neighbour has cleared her loan, a neighbour who has not yet cleared their loan instead gives the one who has cleared their debt to deliver his crop to the company and gets immediate cash payment, thus avoiding loan repayments. Farmers only start receiving cash when they have delivered enough crops to clear the input loan.

making the business partnership with Agriseeds work. They now value the role being played by Agriseeds in the contracting arrangement.

The programme has contributed significantly to seed production in the country and in 2010 this led to increased capacity utilisation at Agriseeds' warehouse to 110%. More importantly, the company had by 2011 ended up with three years' worth of stock that could be exported. Neighbouring farmers are copying the best practices from the participating farmers. Demonstration plots established by the company were open to everyone. Field days were held in each province and more than 4,000 people learned a lot from the extension team and participating farmers.

The programme has attracted the interest of other companies, who want to enter into contract schemes with small holder farmers. Companies have realised that it is possible for rural farmers to be reliable business partners, which might result in profitable collaboration for both actors in the future. At present, SNV Zimbabwe is working in partnership with twenty such companies in livestock, horticulture, plantation-crops and agro inputs distribution.

5. What are the key implications for scaling inclusive business?

The key success factors for the programme include the following: The integration of food security through the maize component, which was a major motivation to farmers; the provision of a full package of inputs; a dedicated mobile field based extension service; and the premium prices paid for seed crops. For the company, contracting smallholder farmers provided a good opportunity to diversify and boost its sources of supply. Previously, the company used to rely on commercial farmers most of whom were now out of business. These successes were reached through several mechanisms.

Firstly, there are huge differences in terms of business acumen between the small holder farmers and companies; especially in understanding the business of farming. It was important to address these issues of business attitudes at an individual level, so for the farmers to effectively participate in the inclusive value chains. This was achieved by business training, through which farmers were better able to manage the production process and the contractual relationship. In addition, it strengthened farmers' understanding of their own role in making the business partnerships with Agriseeds work.

Due to the usual mistrust between farmers and contracting companies, relationship building was an important feature of the capacity development programme. Through regular field visits, SNV was able to interact with farmers and collect information that the company would use to improve the programme. There are signs of growing confidence among the participating farmers. Some of them now have the confidence to negotiate for fair contract arrangements with other companies in future. Farmers are also now aware of the need to understand market requirements before venturing into any agricultural enterprise.

The project reached high levels of out-scaling due to the fact that field days were open for all, including those farmers not participating in the project. Many farmers profited from their learned skills by an increase in production. This was also positive for Agriseeds in terms of profiling themselves amongst farmers, they established a good reputation. Another way of out-scaling that took place was that other companies got interested in the model.

The project also faced some major challenges. Firstly, there were problems with side marketing and loan defaults, since there was no effective 'punishment' system in place. This is an important problem for the company, because it endangers their positive returns as they invest in the training of farmers. To solve these issues, future contracts might not be extended to individual farmers, but instead a key farmer, who will, in turn, sub-contract reliable colleagues to fulfil such a contract. This concept may be more productive and less costly in extension support. A further development of the idea above could be where a private enterprise offers a contract price for a certain product, leaving the procurement of inputs, growing of the crop and preparation for sale, entirely in a farming community, with no private sector input or production costs. This could not work for seed production, where inspection and isolation is needed, but for commodity crops it will work.

Lastly, the programme was so successful that Agriseeds had difficulties with finding markets for their improved seed production. For the sustainability of the programme and in order to maintain the scale reached through such a programme, this is an important issue and should be taken into account by a business already at the beginning of the programme. Agriseeds will hopefully be able to profit from improved policies on the export of seeds, but processes that enable these exports are taking longer than expected.