

Case Study: How Incentive-Based Contract Farming increased the quality and quantity of Kilombero rice

Background To IBCF

With its origins from work with the World Bank in 2008-09, Kadale developed a new approach to contract farming in 2013 that focused on achieving contract compliance through incentives rather than based on contract enforcement. The biggest threat to contract farming schemes is side selling, whereby farmers grow a crop with crop inputs (on credit) and technical help from one buyer, but sell the crop to a competing buyer. At the core of the Incentive Based Contract Farming (IBCF) approach is that farmers have a structural incentive to fulfil their contracts through being offered an increasing package of inputs and incentives in subsequent seasons, if they supply the quality and quantity contracted to the IBCF buyer in the current season for which they have received crop inputs on credit.

This approach was tested and proven during the Malawi Oilseeds Sector Transformation (MOST) Project 2013-18, most notably with a cotton ginner that went from a 15% market share of cotton purchases to 45% in the first year of its IBCF scheme, with over 95% loan recovery. This firm continued to improve its package with additional insurances (funeral expenses cover, drought cover for inputs, fertiliser and additional agro-chemicals on credit, discounts on seed, etc.) ensuring it remained as one of the top buyers. Through securing its supply by investing in its supply chain, this firm was able to keep its ginneries running and operate more efficiently, as well as securing additional export sales.



IBCF does not work for all firms, as the normal route of buying through traders avoids the need to work with smallholders, which is costly and often frustrating. However, IBCF has potential for buyers that need a particular volume, or quality, or variety, or a characteristic (e.g. organic) in the crop they buy. It can enable longer-term, mutually beneficial relationships with smallholders that commonly side-sell their crop for short term gain, but find that as a result they lose access to good quality farm inputs and technical support from the frustrated buyer that supplied these.

PROSPER Markets seeks to extend the IBCF approach to buyers in PROSPER's target districts and to demonstrate it with different crops and in different situations. IBCF can be characterised as an approach that requires tailored design to a particular crop and situation, but also requires an adaptive approach to respond to unanticipated and also emerging issues.

Engagement and Implementation on IBCF with NASFAM

The commercial arm of the National Smallholder Farmers Association of Malawi (NASFAM) identified that the sales of its market leading Kilombero rice, a distinctive aromatic rice grown mainly in Karonga, Northern Malawi, were below expectations. NASFAM's Kilombero rice has long been the preferred choice of Malawians. However, in recent years NASFAM has not been able to source the quantity and quality of Kilombero needed, creating room for its competitors and imported products.



The Kaporo Smallholder Farmers Association (KASFA) is NASFAM's affiliate based in Karonga, the rice producing district reputed to be the best source for Kilombero. The initial engagement with NASFAM and KASFA pre-dated PROSPER, as Kadale Consultants¹ was working with GIZ's More Income and Employment in Rural Areas (MIERA) project prior to PROSPER starting. The initial work was picked up by PROSPER Markets and the collaboration with the MIERA team has continued.

Alongside working with the GIZ/MIERA team, PROSPER Markets signed a 'Partnership Agreement' with NASFAM that outlined roles and responsibilities, covering the technical and financial support from PROSPER Markets and the conditions/obligations relating to this. For NASFAM, this fitted into a broader objective to use IBCF as the approach for sourcing other crops, such as chilies and

groundnut, from other farmer associations with some to be sourced from PROSPER target districts.

Because the approach was new to NASFAM, gaining 'buy-in' by senior management took time. This impinged on the period needed to prepare and communicate the scheme to KASFA members to persuade them to commit to it. From experience, successful IBCF schemes need farmers to fully understand the benefits of being in a scheme and the consequences of not fulfilling the contract.

The NASFAM, GIZ and PROSPER Markets teams worked closely with KASFA management to put the details of the scheme to KASFA's four constituent farmer associations. There was considerable interest in the proposed year one package of certified Kilombero seed and funeral expense insurance, but smallholders were concerned over the commitment deposit required at around 40% of the seed cost. This partly reflected their uncertainty over the quality of the seed, as they were used to receiving recycled seed from KASFA, which was of generally poor quality. Following discussion and negotiation, the package offered to farmers was modified to take account of these concerns, and the seed was offered on more generous credit terms though riskier to KASFA/NASFAM.

Alongside the provision of certified seed was funeral expenses insurance, which makes a substantial contribution to the family in the event of the death of the smallholder. By having a group policy, and an on-the-ground means to verify and pay out within 24-48 hours, the cost is kept low (<\$1/smallholder) with high perceived value for the smallholders with a payout of around \$100. The funeral cover was seen as an attractive part of the package.

801 smallholders² signed the IBCF contract and committed in year one to supply 1 mT of grade A Kilombero and to repay the seed loan. In return, a farmer received 10 kg of certified Kilombero seed

¹ Kadale is managing PROSPER Markets, the markets component of the PROSPER project.

² 52% female, 48% male.



and funeral expense cover for the smallholder for the growing season. The year two offer was for an increased amount of seed and access to useful agro-chemicals, IF the year one contract was fulfilled. Smallholders benefited from agronomy on planting, management and harvesting, including through short mini-films promoted by PROSPER Markets, as a way for agronomic information to be shared more readily and in a visually more effective manner.

Results

The provision of certified seed was intended to increase the yields and improve the quality. Despite several of the production areas suffering flooding, an independent impact assessment³ found a 34% increase in yield for IBCF scheme farmers compared to non-IBCF farmers.

The quality of the crop from using the certified seed was also very clear compared to the non-scheme farmers and something that farmers recognised.

An additional benefit of the IBCF was that NASFAM bought at MK 273/kg⁴ for grade A Kilombero compared to the trader price at season start of MK 233/kg for all grades, a premium of 17%. This reflected the higher quality and its value to NASFAM.

The overall net income gain is calculated at £40 per smallholder based on a one acre (0.4 ha) plot.

Sadly, over the course of the growing season, there were five deaths. KASFA verified and paid out MK 75,000 (about \$100) to each family, resulting in a very positive response by the community to what is always an important ritual for Malawians. Smallholders who were outside the scheme asked to join the IBCF, when they saw the payouts for funerals. The news of the payouts spread through the associations and has stimulated requests by non-IBCF scheme smallholders to join the scheme.

At the start of the buying season, NASFAM provided cash to KASFA for purchasing and managed to secure 206.4 mT of Grade A from certified seed. However, due to cashflow challenges, NASFAM was unable to provide more cash, and while a credit offer was negotiated such that smallholders would get a higher price if they sold to KASFA and waited 60 days to be paid, many smallholders preferred to sell to traders for cash. NASFAM therefore missed the opportunity to buy the contracted volumes.

Lessons

It is clear from the impact assessment, the discussions with farmers, KASFA and NASFAM that despite the delay in commencing, that there have been substantial yield and quality gains resulting in higher net incomes for IBCF smallholders. Confidence has also been rebuilt in the quality of Kilombero seed supplied through KASFA and there is a demand from members both for more seed and to be members of the IBCF.

³ The research used a difference in difference method comparing the IBCF farmers to a control group of non-scheme KASFA smallholders who received the normal package of recycled seed.

⁴ £1:MK 914.46 and \$1: 730:39 on 1st July, TT buy rate, First Capital Bank.

However, the scheme did not deliver all the volume that NASFAM was aiming to buy, even though it was available. That meant that farmers with crop were not able to fulfil their contracts on volume and in some cases with their loans which has created a challenge for year two of the IBCF scheme, because non-fulfilment was partly driven by non-purchase by KASFA/NASFAM.

The PROSPER Markets and GIZ teams discussed the issue of funds with NASFAM for purchasing rice many times, and in a change over previous years, NASFAM made substantial funding available to purchase early. However, an internal decision to re-allocate funds for a temporary use that then took long to unwind, resulted in the planned funds being unavailable for Kilombero purchasing. IBCF is not an easy approach to deliver in challenging environments, and all decisions affecting IBCF have to be consistent with the delivery of the IBCF. **Organisational decisions, driven by other pressures and objectives, beyond the control of the IBCF teams can undermine schemes.**

The lateness of the decision to go ahead with IBCF made the sensitisation, communication and preparations more difficult. It may also have resulted in some smallholders who were not fully screened being giving seed on credit creating an increased credit risk. **Providing enough lead-in time to prepare for an IBCF scheme is important for all parties (management, implementing staff and smallholders) to understand the scheme.**

In a challenging environment, where side selling and non-fulfilment of contracts is the norm, good planning, implementing and adapting is essential. The Kilombero IBCF had many points at which it might not have succeeded, including the effects of flooding and COVID, but the team managed to help KASFA and NASFAM navigate these. **IBCF needs a facilitating team that understands the approach and can think creatively and adaptively to address the inevitable challenges that arise. Related to this, there needs to be internal champions and strong management commitment within the implementing organisation.**

Next Steps

Although the failure to buy all the available crop has muddied the waters, since some farmers fulfilled and others could not, NASFAM/KASFA teams want to proceed along three strands:

1. That consistent access to certified seed is essential to getting the required quality and higher volumes that they want to buy. KASFA members have seen the value of certified seed, and KASFA and NASFAM are making plans for a seed multiplication scheme commencing in 2020 that will provide sufficient volume of seed for KASFA's 4,000 members. There will also be potential to sell to non-members and also to attract them to join KASFA to access the seed. This





will generate profit for KASFA so it can finance its own overheads and provide services to members, such as agronomy support.

2. That a modified IBCF will run in year two that finds a way to reward those that supplied, while recognising that those that did not supply were not necessarily at fault and so should be allowed to remain in the IBCF. This might involve re-starting them with the year one package, while those that fulfilled move to the year two package. This may need rebranding/repackaging to draw a line over the shortfalls in the 2019/20 season.
3. PROSPER Markets will continue to work with NASFAM to see how it can assist NASFAM with its plans for other crops, such as groundnut and chillies, using an IBCF or variants of it.

Conclusion

Addressing the challenges for crop buyers in sourcing the quality and quantities of crops they need for their businesses can be consistent with enabling smallholders to access the inputs they need to grow the crop viably with an attractive market and longer term security. However, the experience with IBCF so far is that this is a complicated process. Buyers and smallholders face pressures to make short term decisions that undermine medium- and longer-term success. Building trust and mutuality takes time, financial investment, adaptability and patience. An effective IBCF scheme can enable both parties to the relationship to benefit.

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