TANZANIA SMALLHOLDER SESAME PRODUCTION AND MARKETING PROJECT PHASE II

FINAL REPORT

KINDLY FUNDED BY THE GEORG UND EMILY VON OPEL FOUNDATION
Tanzania Smallholder Sesame Production and Marketing Project
Phase II / 2011 -2014

Farm Africa has been implementing the Sesame Smallholder Production and Marketing Project Phase II in Babati District, Tanzania since November 2011 with funding from the Georg und Emily von Opel Foundation.

The overall goal of the project was to improve food security and increase household incomes of smallholder farmers in the Babati District through improved cultivation and marketing of sesame.

Key Successes

- The most telling endorsement of the success of any project is that other funders are impressed by the impact and want to be part of scaling it up. Comic Relief has been extremely excited by what has been achieved in the project funded by the Georg und Emily von Opel Foundation. Indeed, we are delighted to announce that Comic Relief has recently confirmed a grant of £1 million to extend this project from 920 to 10,000 new farmers each of whom will go on to train five farmers reaching a total of 50,000 farmers and 250,000 family members.

- The project has been hugely successful in moving farmers out of poverty. In the period 2011 to 2014, incomes more than doubled for model farmers (Tsh 647K to 1,330K). Adopter farmers saw an impressive 50% increase over the same period (Tsh 560K to 870K). Over half of the farmers in the project have been able to build a new house with their profits, improving the prospects of their families.

- Total group revenue from sesame has increased by 180% from 2011 to 2015 (based on a sample of 100 farming households).

- The project employed the model farmer approach where 920 champion farmers received in-depth training then went on to train 4,600 adopter farmers. Thus the project reached 5,520 farmers - a total of 28,000 family members.

- The project also tested the impact of using ICT as part of an agricultural training package – the results were extremely exciting showing that training videos loaded onto tablets in structured modules allowed us to reach four times as many farmers for the same cost and that knowledge retention improved for farmers using the tablets.

- The project helped farmers to reduce wastage from 40% to 20% and increase purity from 80% to 98%.
• Producing better quality, cleaner sesame and employing their newly acquired marketing skills meant that farmers saw the per kilo price of their sesame soar by almost 30% from Tsh 1,690/= in 2011 to Tsh 2,150/= in 2014.

• Ensuring continuing access to quality seeds is one of the keys to the long-term viability of this project. Farm Africa has supported seed multiplication farmers to get accreditation for Quality Declared Seeds and to obtain legal registration of a seed production association. Local farmers can now access Quality Declared Seeds for Tsh. 5,500/ kg compared to a cost of Tsh. 7,000/kg from the National Seed Agency.

• In the period 2011 to 2014, the number of hectares of land under sesame has increased from 800 to 2,129 and sesame tonnage has increased from 513 to 2,533. However, whilst the project was successful in helping smallholder farmers to increase their yields from 0.25 tonnes/ha at baseline to 1.0 tonnes/ha at close, a severe period of drought and a major pest outbreak meant that the project did not reach the target yield of 1.5 tonnes/ha.

• Farmer income from value addition products including sesame tea, snacks, jelly, soap, flour and cakes has increased from Tsh 1.6m to an almost incredible Tsh 12.3m.

• As a result of evidence provided to the government, the crop tax has been reduced from Tsh 3,000 per bag to Tsh 2,000 per bag, contributing to improved profitability.

• Farm Africa trained local agro-dealers to provide better services to sesame farmers. Nearly 9,000 farmers are now using these agro-dealers regularly to access better quality inputs, further strengthening the wider local economy.

• 95% of farmers surveyed believed that the benefits of the project would continue after the project was phased out for the following reasons -
  - Increased profits being accessed by farmers
  - Local affordable access to quality declared seeds with higher yields
  - Active involvement of the Babati District Council who will continue to support the farmers with extension services
Project context

The project was based in Babati District, an area of 5,608 square kilometres, divided into 4 divisions, 21 wards and 95 villages. The area has two rainy seasons; short rains from October to December and long rains from February to May. 25% of the total land is arable and on average each household owns 2 – 3 acres. 95% of the population lives in rural areas and depends on agriculture and livestock for their livelihood.

Farm Africa’s project was implemented in 23 villages in Mbugwe Division, working with 920 farmers (40 per village) who received in-depth training as model farmers and then went to train a further five adopter farmers. The project thus reached a total of 5,520 farmers.

Research showed that sesame is a good crop for the region as it is drought tolerant, requiring much less water than other crops such as corn or cotton and there is a buoyant local and international market. Farmers in the region had been growing low value traditional brown sesame seeds as they were not able to access the better quality white seeds – the nearest source of improved seeds is 1,000 miles away. These poorer quality seeds typically gave yields of one bag (85kg) per acre. In addition, farmers were selling in small quantities at the farm gate into a glut market so were taken advantage of by unscrupulous traders.

Farm Africa’s project was structured to address these issues - to support farmers in the region to get higher yields of improved quality sesame and at the same time to increase the value of their crop through wastage reduction, aggregation, improved purity levels and value addition.

Specific project activities and results:

- Based on the results of the first phase of the project (which helped farmers to identify the varieties that were best suited to local conditions) farmers were provided with initial supplies of Lindi white and Naliendele quality seeds.
- 11 seed multiplication farmers were trained to produce Quality Declared Seeds (QDS) certified by TOSCI to ensure on-going supply. By the end of the project, 48 acres of seed were planted, producing 11 tonnes of QDS. The plan is to have 57 acres under seed multiplication that will deliver 20 tonnes of quality seeds to supply the local market.
- 920 farmers (490 male and 430 female) received training in Good Agronomic Practices (GAP) including land preparation, planting in rows, regular weeding, application of fertiliser, pest control, inter-cropping and improved harvesting techniques that have led to increased yields, a reduction in wastage (from 40% to 20%) and an improvement in purity (from 80% to 98%).
A key element of the project was the successful formation of a Co-operative society (AMCOS) to help farmers aggregate their produce and negotiate higher price contracts. Farm Africa provided governance, business and financial management training and supported the democratic election of the first board members. This was a hugely important first step in building farmers’ trust in the co-operative. Business training was provided by the Open University of Tanzania and Moshi to ensure that the farmers are linked to this support into the future. The AMCOS has two registered warehouses providing a safe location for farmers to store and aggregate sesame so they can sell when market prices move up. The AMCOS provides a marketing service to local farmers as the co-operative can negotiate long-term, better priced contracts than individual farmers. In order to build trust and kick-start the aggregation, Farm Africa supported the AMCOS to offer farmers a down payment on their sesame at the point of delivery. This is vital as most farmers are in desperate need of cash at the end of the growing season and are tempted to sell for cash at the farm gate. By the end of the project, the AMCOS had signed contracts with 30 Farmer Producer Groups and were collecting 108 tonnes of sesame.

The AMCOS is now firmly established – in 2014 they secured a contract with Bajwa that included an advance of Tsh 300 million and were able to offer farmers a price of Tsh 2500/kg, compared to the offer from middlemen of Tsh 2,100/kg. They are charging management costs so ensuring business sustainability. The co-operative has now held the second round of democratic elections and produced a Strategic Plan and Business Plan.

Local agro-dealers received training in agricultural business and marketing skills to be better able to provide services to farmers (especially advice on fertilisers and pesticides) as well as stocking an improved range of inputs – leading to increased farmer loyalty and more profitable businesses thus improving the local economy.

Towards the end of the project, a manual oil press was trialled as a value add product. 3kgs of sesame produce 1 litre of oil that sells for Tsh 16,000. A further 10 machines have now been distributed.

The project produced a number of education materials (sesame production, seed production, contract farming, co-operative philosophy, warehouse receipt system, and value addition) to support the increased numbers of farmers who are keen to start growing sesame. Recruitment of larger numbers of farmers was done through promoting the benefits of higher quality sesame in newspaper articles and eight radio programmes covering a range of topics such as preparing land for sesame, good planting techniques and on-going care. Two of these radio shows were live with a Q&A session led by our expert crops office, Tumaini Elibariki. As a direct result of the radio programmes, 20 new farmers started to cultivate sesame.
SESAME PRODUCTION AND MARKETING PHASE III

Sesame is Tanzania’s fourth most value export commodity with a national demand of 13 million tonnes and a projected global demand of 250 million tonnes. It is a crop that is well suited to the conditions in the Babati area.

Farm Africa’s Phase II project demonstrated that there is appetite in the local community to learn better agricultural, harvesting and marketing techniques and that by growing improved quality sesame, local farmers can build good businesses and move themselves out of poverty. This documented success has attracted funding from Comic Relief to implement Phase III that introduces a streamlined three way contract model reaching 50,000 farmers.

a. Community entrepreneurs

These entrepreneurs will train the smallholder farmers and aggregate the sesame crop for onward sale to buyers. They will be offered a fixed fee for every kilogramme of a certain quality they deliver to the buyer and are incentivised to support the smallholders both to increase production and quality. The community entrepreneurs will be trained to use tablets as part of their agricultural training for smallholders and will be able to access the modules already successfully trialled in Phase II.

b. Buyers

Farm Africa has sourced three buyers whose combined demand is 1,600 tonnes per harvest and who are keen to identify a reliable supply of quality product. The buyers will work with the community entrepreneurs as this will ease logistical challenges and increase profit margins for all three actors in the chain by eliminating the need for aggregators and transporters.

c. Smallholder farmers

10,000 smallholder farmers will be formed into 200 groups of 50 people. Each group will receive training in business and financial management and will be linked to a community entrepreneur. Each of these smallholder farmers will go on to train five others so that the project will reach 50,000 farmers, a significant scale-up from phase II.
IMAGE GALLERY

Farmers being trained in Good Agricultural Practices

Sesame farmers inspecting their rows of crops for pests
Edna Walele weeding her field of sesame

Building a ‘sesame tree’ to reduce post-harvest losses
Teresia Wilbrod with her Quality Declared Seeds (QDS)

Agro-dealers offering better services to local farmers
Farmer cleaning sesame to improve purity

Bags of sesame being transported to the warehouse
Bags of sesame being stored at one of the warehouses

Sesame farmers win first prize at the Saba Saba agricultural fair
Oil extraction press to produce higher value sesame oil

"We have seen impressive production and income increases for sesame farmers in different villages in Mbugwe division, also, government has opened different research centres for various crops like Naliendele and Lindi, so as to help farmers to increase sesame production and market them better to earn higher prices. I’m happy that all the activities done by Farm Africa in our region provide a real change for our villagers and we can see and measure the impact of them because people have constructed good brick houses with iron sheet roofs, they have food for their families and also enabled to pay for their children’s school fees".
Petronilla Gobi’s original house before she joined the sesame project

Petronilla’s new brick house with tin roof in final stages of construction
CASE STUDIES

HADIJA MAULID

Hadija Maulid is a widow with four children and five grandchildren living in Mbugwe division. She joined Farm Africa’s project as one of the sesame seed multiplication farmers. Hadija is now growing the improved sesame seed variety known as Lindi white. Hadija’s success in increasing her harvest from one bag of sesame to seven led to her selection as the best farm in the district. Her prize of a hoe and knapsack sprayer was presented to her by the Manyara Regional Commissioner, the Hon Elaston Mbwilo.
EDNA WALELE

Ms. Edna Walele is a widow living in Babati District with her one child and two grandchildren. Although she had been growing sesame for some time, she was encouraged to get involved in the Farm Africa project when she became aware of the success of other farmers in the local area. She is now growing the improved Lindi white sesame seed and by applying all the crop management training she has received, she has seen her profits increase over two seasons. With these profits, she has been able to buy a new plot of land and bricks to build a new house with electricity and has also been able to buy two quality goats that have improved the diet of her family and also provided her with assets.
VICTORIA JOHN

Victoria John is married to Philipo Seja and has four children, three in primary school and one in secondary school. In the past, she grew sesame on 3 acres and got only 1½ bags per acre as she lost a lot of the seeds through threshing and winnowing. Since joining the group, she has reduced her post-harvest losses and is able to use the group-owned sieve and tarpaulins to improve the purity of her harvest. She is now growing sesame on 18 acres.
## Spend against Budget

<table>
<thead>
<tr>
<th>Budget Items</th>
<th>Full 3 year budget</th>
<th>Total project spend</th>
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<tbody>
<tr>
<td>Obj 1 : To increase sesame production</td>
<td>70,000</td>
<td>85,447</td>
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<tr>
<td>Obj 2 : To add value to sesame and increase market linkages</td>
<td>56,000</td>
<td>62,115</td>
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<tr>
<td>Obj 3 : To disseminate the sesame marketing model</td>
<td>69,000</td>
<td>67,975</td>
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<td>All salaries for project team and technical advisers and local office costs</td>
<td>260,400</td>
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<tr>
<td>Monitoring and Evaluation</td>
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<td>Administration</td>
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<td><strong>TOTAL</strong></td>
<td><strong>569,100</strong></td>
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