# Community based climate change adaptation for increased water productivity and food security for improved rural livelihoods in the Lower Olifants basin

## MILESTONE 3: Climate Change Adaptation Action Plans (1). Progress report

06/08/2020

# Acknowledgements

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# ABOUT THE PROJECT

Mahlathini Development Foundation (MDF) is a small public benefit non-profit organization consisting of rural development practitioners who specialize in participatory learning and action processes, sustainable natural resource management and low external input farming systems, including a focus on rain water harvesting, conservation agriculture, intensive homestead food production, food security, climate change adaptation micro finance and enterprise development.

MDF designs and implements rural development programmes and training processes providing learning processes for adults all the way from semi- literate farmers to post graduate university level. We work in partnership with government and non-government organisations alike. We are sensitive to and mainstream where possible gender, disability and people living with HIV/AIDs.

Climate variability and climate change (increased temperature, increased variability in rainfall patterns, increased intensity of storms and increased drought) have far reaching effects on the lives and livelihoods of the rural poor. Climate change poses a significant threat to South Africa's water resources, food security, health, infrastructure, ecosystem services and biodiversity.

This project intends to effect processes for community-based climate change adaptation (CB-CCA) for improved livelihoods and resilience for project participants through introduction and implementation of climate resilient agricultural (CRA) practices, building of social agency and stakeholder platforms and support for alternative income generation opportunities.

The Innovation Systems methodological approach for this project focuses on local level learning groups and individual and group experimentation to increase local capacity and agency in building systems for food security and rural livelihoods.

As a first step, a village level assessment of climate change impacts and general natural resource use patterns are done. Secondly, an analysis of adaptive strategies and associated practices provides the platform for implementation of locally derived and prioritized activities and CSA practices. Thirdly, the learning groups provide the organizational platforms for participatory research and monitoring, improved governance and agency and collaborative actions around village level water resource management, rainfed cropping systems, grazing management, village level savings and loan associations and farmer centers for local input provision and marketing.

Research and development assistance's key role will be to create and facilitate innovation platforms for local action in an environment of increasingly fractured social structures, immense economic and survival pressures, and where direct government support to rural dwellers has decreased dramatically over the last decade. Use of the smallholder farmer level decision support system will ensure a locally motivated and owned agenda for action, with potential for transformative adaptation that includes local stakeholders and service providers in the Communities of Practice (CoPs).

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# 1 Executive Summary

## 1.1 Progress for the reporting period

The initial hard lockdown instituted as an emergency measure to curb the spread of COVID-19 had a number of negative impacts on the social and economic security of the villages participating in this programme. Stakeholders in the region pulled together to support the identified struggling households with food parcels, a process that is still ongoing on a biweekly basis. MDF also conducted a social survey for 42 participants across 7 villages, to ascertain the nature and extent of the increased vulnerability in the participating villages.

Broader stakeholder engagement with Government Departments was and still is, severely limited by the extended lockdown restrictions. MDF is participating in civil society responses to this situation. An online webinar outlining progress and successes in community-based climate change adaptation was held under the auspices of AWARD on 17th of June 2020

Engagement with local structures and stakeholders has also been limited as offices have been closed and people have not been undertaking meetings. Community level engagement however has been ongoing throughout the lockdown period, with strict adherence to social distancing and sanitization measures as well as continued information provision and sharing with local participant groups

Adaptation action plans are being developed through smaller group meetings in each of the villages, rather than conducting large community-based workshops.

Learning and mentoring sessions have been conducted in six villages including poultry management, soil fertility, liquid manure, contours, furrows and ridges and winter cover crops, for a total of 112 participants.

Village Savings and Loan Associations (VSLAs) have been given priority during this time as individual savings and small loans are considered to be a crucial safety net for the smallholder farmers. Seven (7) VSLAs have been set up, following introductory workshops in Turkey, Sedawa, Santeng, Willows and Madeira. Six (6) of these groups have already started their saving and loan cycles.

Weekly marketing of organic vegetables has continued in partnership with Hlokomela, who have now set up an online marketing platform, as the farmers' markets have not been allowed to continue and are also buying fresh produce for provision of food parcels to vulnerable households. Twenty-five (25) farmers have sold R19 560 worth of produce during June 2020, including beetroot, spinach, chillies, green beans, kale, tomatoes and sweet potatoes.

A new intern, Thembhani Mabunda has been brought on board as Jessica Mangema discontinued her internship in April 2020.

PARTICIPANTS THIS PERIOD

MAHLATHINI: Erna Kruger, Betty Maimela, Thembhani Mabunda (Intern), Nqe Dlamini, Mazwi Dlamini
CHEMONICS: Sitha Mvumvu, Mayford Manika, Lindela Mketeni and Steve Collins.

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# 2 Project Objectives

## 2.1 Overview of RW Community based CCA Project objectives

GOAL: Increased adaptive capacity and resilience to the impacts of climate change for poor, rural households involved in agriculture.

This goal is aimed specifically at Objectives 3 and 4 as set out in the 2019 Resilient Waters Program APS:

- Objective 3: Strengthened ability of communities and key institutions to adapt to change, particularly the impacts of climate change; and
- Objective 4: Conserved biodiversity and ecosystem services.

OBJECTIVES:

- Reduced vulnerability to climate change by supporting and strengthening collective action, informed adaptation strategies and practices and tenable institutional arrangements at a local level, including all relevant service providers and sectors.
- Increased sustainability and efficiency of CSA systems in the study areas giving specific attention to the value chain, using an IS approach
- Adaptation and scaling out of sustainable CSA systems in selected areas using livelihoods and environmental criteria and
- Building and strengthening of different innovation platforms and networks for financing, awareness and implementation of community level Climate Change Adaptation (CCA)."

# 3 Milestone Description

## 3.1 Definition of milestone and purpose

Milestone descriptions have been developed for the RW CB-CCA project for the period starting January 2020 and ending November 2021.The table below summarises the activities against the present milestone description and budget.

**Table 1: Mahlathini Development Foundation Milestone 3: 01 May to 6 August 2020**

| Payment No. | Milestone Title | Milestone Verification | Target Due Date | Milestone Payment |
|---|---|---|---|---|
| 3 | Visioning and Decision Support (I) Progress report | The grantee will submit to Chemonics a Visioning and Decision Support report detailing the following:<br>i. Number of climate change learning groups formed (at least 9)<br>ii. Local structures and stakeholders engaged<br>iii. Profiles of the five (5) local facilitators/ Climate Change champions engaged.<br>iv. Climate Change Adaptation Action plans.<br>Annexes:<br>i. Attendance Registers from the meetings with local stakeholders<br>ii. Photographs from the meetings with local stakeholders<br><br>The grantee will also submit a progress report outlining progress in all main activities undertaken in the time period; 01 May- 30 | 6 August 2020 | R 264 029.00 |

| | | | | |
|---|---|---|---|---|
| | | July, (including action plans, learning and mentoring, monitoring, reviews and networking) | | |

# 4 Climate Change learning groups

Below is a small map indicating villages where the CCA learning groups are active.

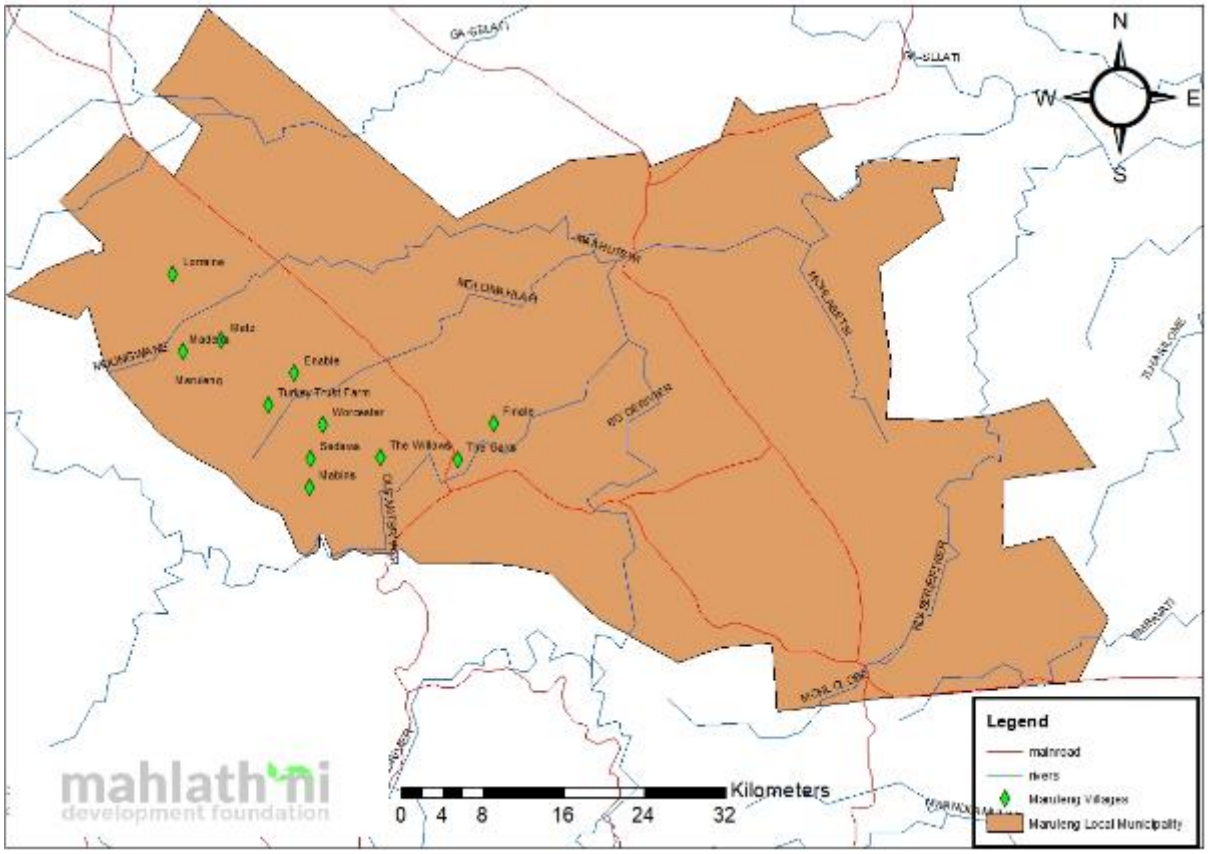


*Figure 1: Map of villages where the CCA learning groups are presently active; July 2020*

## 4.1 Progress with CCA learning groups

Permission was obtained from the Local Municipal and Police offices to conduct small workshops in the villages in May 2020. Police presence in the villages was high and community members also reported any 'gatherings' they came across. This made the learning group participants wary of coming together, even in small groups. The permissions assisted in being able to continue work. The process followed by MDF is to work at individual homesteads and with small very localised groups of participants to continue the learning and implementation in CRA. Attendance at learning and mentoring workshops and planning sessions has thus been much lower and the sessions are repeated for a larger number of small gatherings.

All members who attended meetings were required to wear a mask before entering the premises of the workshop, members were sanitized at the gate before entering and they kept a 1.5m distance throughout the workshop. Each workshop in the respective villages was conducted outside where there was enough space for everyone to keep distance to each other and it started with a prayer before getting into the rationale of the workshop and also ended with one. Pre-packed light meals, including juice, water and fruits were offered to the participants after each workshop.

The seasonal planning workshop for most of the groups have been replaced with ongoing small workshops on specific practices and topics that the groups have been interested to focus on. This is due both to the

difficulty in bringing larger groups of people together (and the inadvisability of this) as well as the feeling from participants to urgently move towards action and production. Planning and review sessions will resume as soon as is practicable.

Some of the training activities, notably the tower gardens, contours and layout of furrows and ridges has had to be postponed due to unavailability of the required materials form the service provider (BUCO hardware), despite them having received payment in early June.

*Table 1:Summary of CCA learning group progress and planned activities: July to November 2020*

| Learning group | CCA planning | Practices to focus on | Progress with activities (end July 2020) | Planned activities (August-November 2020) |
|---|---|---|---|---|
| Turkey 1 and Turkey 2 (40 participants) | Done | Seeding production, processing (chilli, Marula, beetroot and atjar), tower gardens, organic mango production and mango grafting, eco-circles, seed saving, composting, markets, nurseries | - VSLAs for Turkey 1(19) and Turkey 2 (11)<br>-Liquid manure and trench beds workshop and experimentation (24)<br>- Organic mango production training (25)<br>- Organic marketing<br>-Poultry production management workshop and follow-up (8)<br>- Water committee meetings and monitoring of water scheme implementation (18) | - Monthly VSLA meetings<br>- Organic marketing<br>- Tower gardens and eco-circles<br>- Mandala bed and permaculture training |
| Sedawa and Mametja (40 participants) | Done | Liquid manure, natural pest and disease control workshop, shallow trenches, eco-circles, mandala garden, irrigation management, soil conservation (stone lines, check dams, terraces), tower gardens, livestock integration, seed saving review and storage , organic mango training, compost, value adding to crops, example basil pesto, tomato jam | -VSLAs x 2 in Sedawa (19,13)<br>- Water committee meetings and monitoring of water scheme implementation (18)<br>-Organic mango production training (20)<br>- Organic marketing | -Monthly VSLA meetings<br>- Organic marketing<br>- Mandala bed and permaculture training |
| Willows (30 Participants) | Done | Bed design, seed saving, seedling propagation, Conservation agriculture, drip kits, trench beds, mulching, furrows and ridges, banana circles, rainwater harvesting, organic mango production, tower gardens, liquid manure, natural pest and disease control. | -VSLA (13)<br>- Trench bed workshop and follow-up (10)<br>- Poultry production workshop (9)<br>-Organic marketing | - Monthly VSLA meetings<br>- Organic marketing<br>- Tunnel construction (5 participants)<br>- Tower gardens and eco-circles<br>- Mandala bed and permaculture training |
| Finale (9 Participants) | Done | Poultry production, field cropping practices, marketing, | -Poultry production management (5)<br>and Field cropping training (furrows and ridges, contours, winter cover crops (9)<br>- Organic marketing | - Organic marketing |
| Santeng (25 Participants) | Done | Drip irrigation, diversion ditches, greywater management, rainwater harvesting, ridges and furrows, stone bunds, keyhole eds, banana basins, crop rotation, mixed cropping, mulching, conservation agriculture, targeted fertilizer and lime | -VSLA (13)<br>- Soil fertility learning workshop (22)<br>Trench bed workshop and follow-up (11) | - Monthly VSLA meetings<br>- Tunnel construction (8 participants)<br>- Organic marketing |

| | | | | |
|---|---|---|---|---|
| | | application, liquid manure, trench beds, legumes, compost, eco-circles | | |
| Worcester (17 Participants) | Not done | Seedling production, drip irrigation, greywater management, tower gardens, natural pest and disease control, growing herbs, seed saving | - VSLA (13)<br>- Organic mango production training (9)<br>- Trench bed workshop and follow-up (15)<br><br>*Presently activity is limited due to extreme shortage of water* | - Monthly VSLA meetings<br>- Tunnel construction (7 participants) |
| Madeira (30 Participants) | Done | Drip irrigation, mulching, keyhole beds (grey water), furrow and ridges, banana circles, rainwater harvesting, tied ridges, targeted fertilizer and lime applications, liquid manure, trench beds, eco-circles, seed saving | - VSLA (14)<br><br>*Contact limited until early July due to COVID infections in the area* | - Monthly VSLA meetings<br>-Trench bed workshop and follow-up<br>-Tunnel construction (5 participants)<br>-Tower gardens and eco-circles<br>-Organic marketing |
| Lorraine (7 Participants) | Not done | Shade cloth tunnels | *The group is not meeting during the COVID lockdown period - no progress* | |

# 4.2 Selection of Local Facilitators

Local facilitators/ Climate change champions are chosen per village in order to assist MDF field workers with monitoring and locating active farmers in their villages and also to assist the learning group to provide a linkage between the community, MDF and other stakeholders and to support the learning group members in their CRA implementation. They provide advice, do monitoring, provide learning and mentoring support, set up meetings, bring forward issues and suggestions, etc. They need to be well respected and stable members of their community, be active and knowledgeable farmers and be willing to act as the spokesperson for their group. The best champions are those who are passionate about farming and new ideas and enthusiastic about sharing with others. Being literate and able to understand English is considered and advantage, but is not a requirement.
Due to the COVID-19 social distancing requirements, the usual process of individuals volunteering and then being selected by their learning group in a workshop setting has not taken place. Local facilitators have been chosen more informally by their groups and have been individuals who have taken the initiative to lead and organise their learning groups.

There are presently six active local facilitators (LFs). Below a short introduction is provided for each.

## 4.2.1 Christina Thobejane

Christina Thobejane is the local facilitator at Sedawa and Mametja villages. She has been the LF here for almost three years and was chosen as she was active in the community and brought the learning group together. She oversees the farming activities and monitors their gardens. Christina is also a farmer and has enthusiastically implemented most of CRA practices in her garden. She uses her garden as a demonstration site, allowing farmers to come and see how introduced practices are working and assist them to implement them in their own gardens. She has attended local facilitator trainings workshop. She has developed skill in implementation of underground rainwater harvesting tanks, construction of tunnels and drip kits construction, as well as tower gardens construction and has regularly assisted in construction in all the villages. She is a keen seed saver and started a seed saving group and has also been the primary community organiser for the organic marketing system, which includes

also mango production and sale of mangoes to M-Pak. She is also keen to learn from other farmers. Christina has also been centrally involved in coordination of the community efforts around access to water and is a member of the water committee, which managed the funds and construction of boreholes with household reticulation

*Figure 2: Right and Far Right; Christina assisting in tunnel construction both in Mametja and Sedawa and Below left; Christina working with the community on mapping of borehole options and Below Right; Christina managing the farmers market stall for sale of produce of all participants*

Below are a few snapshots of CRA implementation in Christina's garden

*Figure 3: Above Left to Right: Trench bed with mixed cropping and mulching, tower garden, tunnel and underground rainwater harvesting tank.*

## 4.2.2 Moses Mogofe- Willows

Moses Mogofe is the local facilitator at Willows. He was chosen by the local farmers because he knows how to connect farmers in their village and he has been working together with livestock and crop production farmers in the villages for years. He is a member of the dipping committee and has interacted with the Department of Agriculture as a representative of the farmers in the area. He set up the CRA learning group together with other farmers from Willows, because they loved the work they witnessed in other villages. He assists with monitoring and arranging available fresh produce from farmers for the market. He also oversees farmers 'experiments and innovations and reports to MDF.

Moses farms in his homestead and has a cropping field some distance away as well as livestock (20 cattle's and 15 chickens). He has implemented many of the CRA practices, to use them as a guide and encouragement to other farmers in the village.

*Figure 4: Tunnel construction demonstration at Moses Mogofe's homestead that will be used as a demonstration for further tunnel implementation in Willows.*

Below are a few snapshots of Mr Mogofe's garden

*Figure 5: Pictures of Moses Mogofe's garden both inside and outside the tunnel; planting in trench beds and the ridges and furrows system and using drip irrigation for both practices.*

## 4.2.3 Nomsa Mafologela- Santeng

Nomsa Mafologela is the local facilitator for Santeng group. Santeng is one of the new learning groups that are very active. The group consists mostly of women-headed households who are also active in the Community Work Programme; cleaning at schools and helping elderly people that are staying alone.

Nomsa started forming the group after attending the Sedawa learning group meetings and workshops for a while. She then shared the news with afew groups of the farmers in Santeng and they were keen to have the first learning meeting with Mahlathini. The village faces the same challenges of water shortages and extreme climatic conditions.

Nomsa is unemployed and mostly makes money by selling fruit locally. She has been a good local champion, encouraging members to start implementing trench beds practices in their gardens, after implementing her own. For irrigation they collect water from a nearby natural spring in their village.

*Figure 6: Pictures taken from Nomsa's garden. Her garden is 40m x 50m stand that she uses for her farming activities, she also uses water from the natural spring for irrigating. Nomsa also has indigenous chicken and goats, she uses chicken and goat manure in her garden and also feeds her livestock some of the crops, spinach and cabbage leaves.*

## 4.2.4 Pauline Thobejane- Madeira

Pauline Thobejane is a local facilitator for the new learning group at Madeira. Pauline has been farming since she was young. She has looked after her family from her farming income. Most of her production is on a 7ha field in a nearby irrigation scheme, now defunct due to leaking dams and lack of maintenance. This has restricted her to only growing rain fed crops during the summer rainfall season She normally plants maize, cow-peas, ground nuts, Bambara ground nuts, sugar beans and green beans.

Pauline has been responsible for getting farmers together when they had meetings with Department of Agriculture. She was chosen because she is very organized and she helps farmers with organizing meetings with the department and she has all their information.

*Figure 7: Above Left: Pauline is sorting her maize harvest form her 7ha field plot and Above right; A green bean planting in her homestead garden.*

## 4.2.5 Isaac Malatji – Turkey

Isaac Malatji is the local facilitator for Turkey learning group. He started the group about 2 years ago, after seeing Sedawa learning group doing well and he invited Mahlathini and called farmers from the village to attend. The learning group selected him to be the local facilitator as he is good at arranging meetings and represents them well. He also coordinates the organic marketing sales for Turkey and is a very active member of their water committee. He has also continued to introduce the CRA process in new villages and has brought new learning groups on board.

Isaac Malatji used to run a nursery locally and local farmers were buying seedlings from him until he had water challenges and stopped the project. He lost most of his materials through theft in the community. He started farming again in his homestead after meeting with Mahlathini and he also sells his produce through the Hoedspruit organic marketing process. He uses both trench beds and furrows and ridges in his garden.

*Figure 8: Mr Malatji in his vegetable garden, recently planted to spinach, beetroot, onions and cabbage*

## 4.2.6 Naome Manosa – Worcester

Noome Manosa has been chosen by the learning group to be their Local facilitator. She is an upstanding member of her community and active in church groups and in assisting with trying to access water in the village. Naome does rain fed cropping in her homestead, due to the extreme shortage of water in the village and also keeps goats and traditional chickens.

*Figure 9: Above Left to Right: Naome (on the left) in a small meeting organised during lockdown to distribute seed, Naome's maize and pumpkin plantings in her homestead plot and her goat pen.*

# 5 Progress for main activities

## 5.1 Learning and implementation

A number of learning and mentoring sessions were conducted during this period including:

- Poultry production; Willows, Finale and Turkey
- Improved field cropping practices; Finale
- Improved liquid manure; Turkey
- Soil fertility and trench beds; Santeng, Willows, Worcester and
- Organic mango production; Turkey, Worcester, Sedawa, Willows and Santeng

### 5.1.1 Poultry production

*Written by Mazwi Dlamini*

#### 5.1.1.1 Willows workshop

A workshop was held at Mr Silas Malepe's homestead in Willows on the 9th June 2020, with 9 participants. Mr Malepe has recently started broiler production for the first time and the problems he was encountering provided a good learning context in terms of broiler production.

He had bought 300, day old chicks which were delivered by van, where they already were stressed, due to spending too long in an unventilated area without food and water and he placed them first in a corrugated iron enclosure with sawdust. After 4 weeks he had a mortality rate of 33%. He was keen to work on reducing this high mortality rate.

The workshop was held at Malepe's garage with chairs distanced from each other as per regulations. Attendees were sanitized at the door with masks provided for those who didn't have. This follow up workshop was more of a focus group discussion where we touched on certain topics; quality of chicks and feed, cooling and heating, hygiene and vaccines.

From the discussion it came out that farmers believe that chicks they get are not of good quality. Mr Malepe remembers chicks coming in a bakkie with broken fans, he than doubted the quality of the chicks as some grew while others were stunted. Farmers are not happy with African Chicks; the supplier; citing that despite attempts notifying them about problems and worries they couldn't be bothered. What makes it even more difficult is the fact that other suppliers such as National Chicks are far away from them and they end up resorting to local suppliers.

Mr Malepe's timing couldn't be any worse with winter settling in and demanding the need for him to provide heat for his birds. Temperatures drop a lot during the night and the sun takes a while longer to warm the chicken coop putting his birds at risk of dying from the cold. His coop has also got a wide open space at the front which takes away from of the heat he provides and as a result some birds have died. The group advised him to source cover for the front that will retain heat inside the coop keeping his flock warm during the day. Given shorter days as a result of winter, Mr Malepe's birds are also not having enough time to eat as chickens cannot eat in the dark, he was further advised to source light for extended eating hours.

*Figure 10: From left to right poultry farmers during the poultry workshop at Willows with Mazwi and Silas Malepe inside the coop advising farmers and discussing looking at Mr Malepe's coop in terms of providing heatinh and also better sanitation in the coop.*

In the coop quite a number of Mr Malepe's birds didn't look healthy with some sneezing and snorting. We also noticed that the droppings were runny and green indicating diarrhoea of some sort. He then showed us packets of medicines and a vaccination chart that he was supplied at the veterinary clinic. These vaccines and medicines would all prove worthless because of exceptionally poor hygiene. Mr Malepe's chickens were drinking water with filth and droppings in them, feeding on grower pellets with wood chips and droppings which warrantied for the diarrhoea. He was advised that food and water needed to be clean; we emphasized the fact that there was no substitute for good hygiene; even medicines cannot make a different if birds constantly eat and drink their own dirt. His floors were soaking wet with birds eating and walking there, a lot of his birds had developed bumble foot and died of hunger as they couldn't move to the eating and drinking troughs. He was advised to source more sawdust for better, thick bedding and also to raise drinking and eating troughs to the breast height of the birds to avoid contamination. This would be close to enough to making sure his birds are healthier.

*Figure 11: Silas Malepe's coop sawdust was not thick enough to cover the whole coop*

The next discussion that followed was the use of vitamins to boost the health of struggling animals. Vitamins; however; are a supplement as the word suggest whose sole role is to provide what is missing in terms of nutrient content. Here we used an example of a degrading rangeland for cattle where supplements are provided to fill in the gap from nutrients animals are not getting from the rangeland.

It is a different case with poultry as feed is formulated with all nutrients, especially for birds kept in coops and do not wonder around such as free range and traditional chickens for example. Again here we stressed the issue of hygiene, vitamins and medicines can never and will never be a substitute for cleanliness.

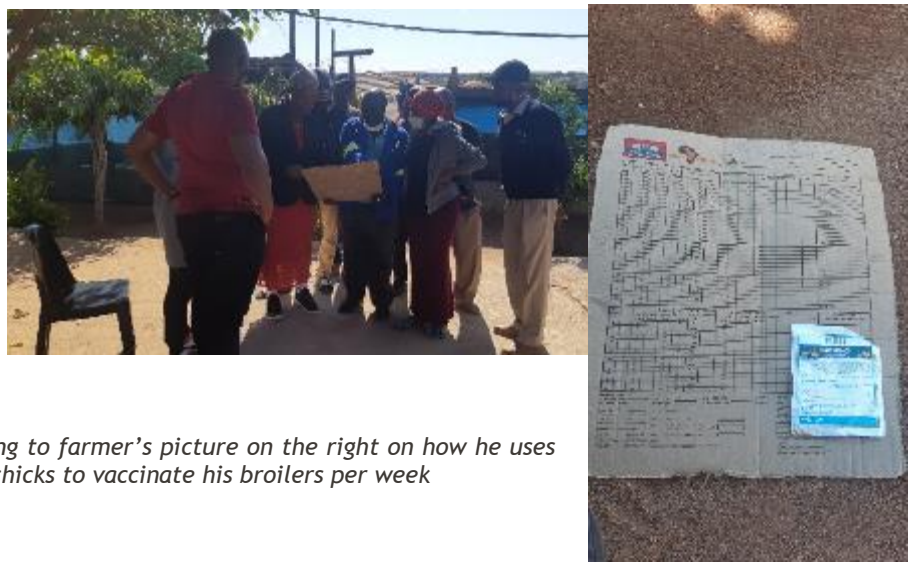

*Figure 12: Silas Malepe is explaining to farmer's picture on the right on how he uses the vaccination guide from Africa chicks to vaccinate his broilers per week*

#### 5.1.1.2 Phedisang follow up

It's almost a year since laying hens were delivered all the way from PMB to the care centre in Turkey. The centre aimed at keeping layers for the sale of eggs that would ease the pressure on the centre waiting on the Department of Social Development for funds. In this way they would be able to build reserves, supply protein and earn an income to keep the centre afloat. The centre has been crucial in providing meals for children from struggling families; ladies at the centre also help scholars with homework.
The centre started with 40 birds that were kept in the chicken hose within the centre. During the first month some birds were struggling with taking out the eggs and would bleed or the egg would be covered with blood and would be moved from the cage to avoid any more complications. Ladies also pointed out that the birds were not eating the pellets and then decided to grind the pellets to make it mash for birds to eat. They buy feed master mash at Tzaneen for R250/50kg. Due to the growing demand for eggs in the locality the

Department of Agriculture donated 30 more birds. The ladies appointed a local handyman to reproduce two cages similar to the one they bought; to add in 60 more birds they bought from ALZU at R 92,00 per bird.

Of the 70 birds that they had they have lost 18 birds in the last year. As the birds did not have any specific symptoms they do not know why they died. They thus now have 52 birds that are still laying eggs.

*Figure 13: Clockwise from Top Left: The newer cages with birds donated lately by the Department of Agriculture and a home- made cage with the brown hens bought recently by the group.*

The community assisted with donating egg trays and they the record both the number of eggs collected in each cage as well as sales generated weekly. A tray of 60 eggs is sold at R85.00 and a tray of 30 at R45.00, R1,50/per egg. They managed to generate an income of R21 965,20 in a year. This income has been used to purchase further hens as well as feed and to pay for construction of more cages. They are also planning to sell the layers when the cycle is done for R50.00 each and will continue with poultry farming as they have not experienced any major complications and the project is going well for them.

*Figure 14: Above Left; The birds brought rom PMB are now showing signs of stress, with loss of feathers and weight. They are reaching the end of their productive cycle. Above Right; Eggs packaged in trays ready for sale.*

## 5.1.2 Improved field cropping

*Written by Mazwi Dlamini and Betty Maimela*

Many of the larger market gardens do not employ the CRA practices introduced, as participants believe these are only applicable for small gardens. A workshop was thus held in Finale to specifically discuss and demonstrate soil and water conservation and soil fertility enhancement practices suitable for production in larger areas.

In Finale is a group that works on a piece of land growing tomatoes, beetroot, onions, spinach and sweet potatoes and also keeping broilers. This group is made of a family; daughters, sons, nephew, aunts, grandparents and father, where everyone works across the commodities that are sold locally. They continuously look to experiment with different practices for improving soil and water conservation. The group has been farming for two years now. Victor Mametja oversees the project. He received permission from the Traditional Authority to take over the then defunct community garden and restored the borehole, to be able to irrigate. He buys electricity from a neighbouring household for the pump. He uses chicken manure from the coop for soil fertility and sometimes also bring in cattle manure.

Practices introduced during the workshop included:

- Measuring contours
- Building 'furrows and ridges' on these contours, but using the method of shallow trenches, where manure and grass are added into the mound as it is being made for increased fertility
- Mulching and
- Green manure cover crops planting a winter cover crop mix of back oats, fodder rye and fodder radish

Contours were marked out using poles, string and a line level; here it was explained that we wanted to find out point where the ground was level and not necessarily straight. The idea behind contours is to mark level lines and thereafter where the furrow is opened fill that with organic matter to make use of their nutrients. These are then closed up, filled with soil and raised (ridges/mounds) to stop water from running down the slope. The 5m areas in between contours can be planted with crops that will be making use of available water, while other crops can be planted along and on top of the mounds to hold the soil together.

*Figure 15: 5m area in between the contours where cover crops and beetroot will be planted*

Given oncoming winter and a fenced field where grazing is not an issue, we identified the potential of sowing in cover crops. Cover crops are grown just before the beginning of winter, making use of late rains and dew to grow and help cover the soil preserving life in the soil, these crops also add a lot of biomass in the soil. Livestock; cattle, goats, donkeys; also benefit a lot from these crops as they can be cut and stored and they regrow for continuous feeding. Come the planting season these die and back and other crops can be sown in within them as well. A demonstration of the Haraka planter (puncher) was done; this handheld implement can be used to sow in seed faster as it opens slots, deposits seed and closes off the planting hole in one go. The group was taken through how to change the different plates for the different sized seeds, its function as well as maintenance.

*Figure 16: Above Left; family members preparing the area for making furrows and ridges, Below Left: Vcvtor making the furrows and mounds after Right: Betty included bone meal and organic matter in the furrows made on contour*

The family appreciated the idea of making contours and areas in between to plant cover crops and have undertaken to follow this process for other parts of their large plot which are fallow during winter and which requires better soil and water management.


*Figure 17: Above: Mazwi setting up the Haraka wheel planter with the correct plates to sow the winter cover crop seeds, And Right: Sowing cover crops with Evans, one of the sons involved in the project and Insert; a bag of cover crops that were used*

Sowing of seeds was done along and between the contour lines, followed by irrigation and mulching using dry grass. Betty will continue monitoring the field and will also go back to assist with making other contours on the side farmers are still preparing when they are done

*Figure 18: Above left; irrigation of the cover crop plots once planted and Right: followed by mulching.*

## 5.1.3 Soil fertility and soil conservation: soil type, soil structure and bed design for Santeng

*Written by Betty Maimela*

The workshop was undertaken over two days, the 25th and 29th of May 2020, for 16 participants

#### 5.1.3.1 INTRODUCTION

The practical workshop took place first where farmers looked into soil fertility and the importance of soil fertility, knowing soil structure and how to design beds using organic matter that builds soil nutrients. The workshop allows farmers to simply understand the type of soil in their garden so it is easier to work in their garden. Farmers are taught to understand and know how the soil works and how to keep your soil fertile and why it is important to enrich their soil.

#### 5.1.3.2 Day 1: Soil enrichment method: Bed design (trench beds)

Day 1 was looking into bed design and bottle test to identify soil proportion. A bottle was filled a third of it with soil, adding water into the bottle until it is almost full, place a lid on and shake it vigorously for a few minutes in order to separate the soil particles. The bottle was left to settle until the next theory workshop.

During lockdown 10 farmers from Santeng encouraged each other to dig trench beds so they can start planting on them as they have seen results from farmers in different villages. Each farmer has done three trench beds in their gardens, collected materials; water, tins, old bones, plastic (if your soils are sandy), dried grass, wood ash, manure and organic matter. Betty and Thembani assisted with collecting chicken manure from neighbouring villages like Willows and Mulalani. Farmers only made one mistake ,mixing topsoil with subsoil and rocks, so they had to source topsoil that can be used and mixed well with chicken manure. Farmers aimed that Betty assist in filling one trench bed for each farmer and they will finish up the two remaining working together.

*Figure 19: Three trench beds each 4.5m length and 1m wide at Florence Mashego's household*

Method used;

1. Together with Betty they first placed a layer of tins at the bottom of the trench to help with aeration and also with supply of some nutrients.

*Figure 20: A trench is filled with a layer of tins and Betty is explaining to farmers why adding tins and what nutrients will tins add to the soil for enrichment.*

2. They filled the trench with a range of organic materials and topsoil.
   - First add dry grass or weeds
   - Secondly. they added green materials, spread evenly inside the trench
   - Added some wood ash
   - Mixed topsoil with chicken manure, then added a layer, stamped on them
   - Watered the mixture and started the process again, now excluding tins until the trench bed is full

*Figure 21: Clockwise from Top: Betty is tamping down a layer of dry grass, after which green leafy material is*

*Figure 22:Left farmers are mixing topsoil with chicken manure Centre: Lethabo Malepe is evenly distributing the soil mixed with chicken manure and Right: is a filled trench bed that has been watered well*

#### 5.1.3.3 DAY 2: Soil fertility, structure and enrichment

During practical demonstrations of one of soil enrichment method using trench bed, bottle test was done to study the soil structure proportion with farmers. Farmers understand that their soil is sandy but understanding the proportions of their soil will make it easier for them to know what kind of sand they are dealing with.

*Figure 23: Right: Taken from Maanawe Shaai, the bottle test shows clearly that she has sandy soil. There is however also a proportion of clay, indicated by cloudy water after 24hrs. Sandy soil is good for rooting crops, it is easy to dig and work with. Water can get into the soil easily, but it dries out quickly and is not fertile.*

*Far right: Bottle test from Fenita Phokane's garden. This soil shows a mix of soil elements; sand, silt, clay and organic matter (floating on top).*

Soil structure is the shape that the soil takes, determined by the way in which individual soil particles bind together. Farmers were also taught that soil structure is influenced by how they manage their soil, some of the practices they use can be harmful or beneficial to soil structure. Harmful practices break down the soil structure making it harder, as run-off takes place. Beneficial practices, like adding lots of organic matter to their soil not only fertilizes the soil, but makes it easier to work with the soil and also increases water holding capacity of the soil. Farmers were taught about the importance of treating soil like a child, always cover the soil to prevent damaged from prolonged heat.

#### 5.1.3.4 Soil fertility

Farmers know what soil fertility means, they also understand that for crops to grow they must get food from the soil, if they are not growing and forming fruits it means the soil has no food. Plants need three main kind of nutrients:

1. Nitrogen (N) – for healthy leaf and stem growth;
2. Phosphorus (P) – for healthy roots and fruit formation
3. Potassium (K) – for general health and healthy flowers and fruit

All these three nutrients are needed in the soil if farmers are to grow their crops even if they would have water nor rain. Farmers cannot remember when last they had good harvests, but are generally convinced that this has to do with lack of rain and water, not soil fertility. This is a common misconception in the area. Farmers can improve the nutrients in their soil through good compost and planting of legumes or mulching using legume leaves like beans and cow-peas.

*Figure 24: Left: Ella Khohlwane planted ground nuts later in April after harvesting cow-peas. Right: Maanawe planted green beans, which also fix their own nitrogen, but remove a lot of that nitrogen again themselves during flowering and seeding. Green manures would work a lot better in adding nutrients to the soil.*

Composting was also looked at and farmers understand it much better. They are mostly using pit compost, but they forget to add water, which slows down the process substantially. Farmers requested that a practical demonstration be done on improved composting techniques.

#### 5.1.3.5 Soil enrichment Methods

Farmers were introduced to one soil enrichment method which is the trench bed as a way to increase soil fertility and water holding in their gardens and they seem to understand why all the materials are added and why water is important to add. Other soil enrichment methods were looked at using pictures as examples;

1. **Eco-circles:** These are small circular garden pits beds. For eco-circle they need a string and a stick, a spade, compost and mulch, seedlings or seed to plant, a candle and matches, a piece of wire and used 2l bottle with a lid. Mark out a circle (using a stick and some string) on the ground where you intend growing food. The hole should be knee deep now (about 50cm). Place the bottle with tiny 16 tiny holes on the side going down (upright) in the centre of the circle. Now add a 2cm layer of compost, or decomposed kraal manure, kitchen waste or dry grass, into the base of the hole. Water the 2 layers well. Continue replacing the subsoil layering it with compost (grass and or whatever organic material you have) watering each layer as you go. Having added all the subsoil replace the top soil. The surface of the bed will be higher than the surrounding ground. Scoop the soil from the centre of the circle to the outside to create a basin with the top of the bottle in the centre. The basin shape funnels water into the centre where it sinks into the soil. So it can't run off carrying precious topsoil with it. Mulch and plant. When they fill the bottle, the water will slowly drip into the soil.

*Figure 25: Eco-circles where they planted mustard spinach and onions.*

2. Shallow trench beds: These are easy to make, takes less energy than a deep trench, it also takes a shorter amount of time to create. They are the shallower version of the deep trenches. This trench is dug to about 30cm deep. The bottom of the trench is filled with sticks and branches. This is covered by a layer of dead leaves or green leaves and grass Then the rest of the hole is filled with compost and finally it is covered with the topsoil that was dug out. Farmers can also build a shallow trench bed from the ground going using cement bricks if they have thin topsoil and rocks to avoid digging.

#### 5.1.3.6 Reflection

Farmers were asked to reflect on the two-day workshop;

1. Aquafina Machimane – The workshop was very good more especially that it includes practical demonstration, she doubts that they will forget as they have done the practical over 10 houses. She also likes the way farmers are working together to assist each other with collecting materials and filling trenches. She also asked that a practical demonstration of other soil enrichment methods be carried out.
2. Ella Kgohlwane – She likes trench beds but she is old she won't be able to dig; she asked that we also assist her with making shallow trench beds and eco-circles in her garden.
3. Nomsa Mafologela – These workshops will encourage farmers more and more workshops like these ones should be held regularly.

The workshops went well and farmers attended both workshops without dropping a number. Farmers were happy for the workshop and were interacting during the workshop even though they all have one challenge water shortage.

## 5.1.4 Liquid manure and soil fertility in Turkey

*Written by Betty Maimela*

Based on a request from farmers a workshop was held on the 18th June to re-cap and deepen knowledge on soil fertility and different kinds of liquid manures. 24 Participants attended the

workshop which was held at Nkhurwane Shaai's homestead. Three new members attended for the first time; Andrew Magobatlou, Rosina Shaai and Mmalehu Magobatlou.
*Figure 26: A view of the workshop with participants adhering to distancing requirements and wearing of masks.*

The workshop focused on the following;

1. Review of five finger principles
2. Review of soil fertility and crop management practices that farmers implemented in their gardens
3. Demonstration of liquid manure using banana stems and foliar spray.

5.1.4.1.1 Review of Five finger principles, soil fertility and crop management practices

Implementation to date:

- Elizabeth Mokgatla – She uses dry leaves mixed with chicken manure to increase soil fertility, which has allowed her to produce maize in the past three seasons, when most farmers could not. She also mentioned that there is now less erosion, as she no longer sweeps her yard to remove loose sand, but rather adds more soil and mulch to ensure that rainfall can infiltrate.
- Norah Tshetlha – She mixes top soil with chicken and cow manure and dry leaves together then adds this mixture to her beds. She also likes planting using diversion furrows, to create flow paths for water and the ability to seep into the ground. She also makes liquid manure. She used a maize meal sack filled with dry leaves, cow manure and chicken manure tied it and placed this bag inside a closed container with water. She leaves it in the sun for 3 days, then irrigates with the water on the roots of her plants. She does the mixture the whole year.

*Figure 27: Norah Tshetlha's liquid manure made of cow manure, dry leaves and chicken manure inside a closed container and uses after 3 days of brew.*

- Lucas Mokhawane – Use of organic matter like your dry material and green materials in a shallow trench bed mixing your topsoil well with kraal manure like chicken manure helps crops grow fast and to their regular size and results in good quality and yield. This he observed in his garden, he can't do deep trench beds but he does shallow trench beds and he likes the results.
- Rackson Magobatlou – He implemented trench beds in his garden and mulching using dry grass, he also observed that the grass decomposes and fertilizes the soil but also keeps the soil moist which is good for his crops because it can be extremely hot in summer.

Betty talked about soil conservation: farmers have implemented most practices but when it comes to soil conservation little has been done in their garden that prevents soil erosion and gully formation on their streets. Farmers implemented furrow systems and stone bunds in their gardens but without looking at the direction of water flow and diverting run-off to their gardens, instead some still divert water out of their households. Five finger principles look at the following;

1. Good water management;
2. Soil erosion
3. Good crop management
4. Soil health
5. Looking after indigenous trees

Betty also taught farmers about soil fertility focusing on the main three nutrients a plant needs, which are; Nitrogen (N), Phosphorus (P) and Potassium (K) and organic meethods of addition of these nutrients.

1. Nitrogen: Is required for healthy leaf and stem growth. It can be added to the soil by using chicken, goat and cattle manure which are used dry and by planting their legumes like cow-peas, ground nuts and beans. They can add more nitrogen to the soil if they use the legumes as green manures; where green plant material is dug into the soil just before flowering. Farmers did not like this idea much as they want to grow crops that they can eat and keep seed from.

2. Phosphorus; Is difficult to find naturally, as it is most prevalent in hair, nails and bones. Bones and hides can be incorporated into trench beds, or bones can be heated on a fire to make them more brittle to be ground up and spread on planting beds. P helps for healthy root and fruit formation.
3. Potassium: Is required for general plant health and healthy flowers and fruits. It can be added by using chicken manure and fresh wood ash. Nkurwane Shai indicated that the use of ash is an old system but it needs water; crops look good and grow fast, but when it gets hot more water is required in beds with ash to ensure plant growth.

#### 5.1.4.2 Demonstration of liquid manure and foliar spray

Liquid manures are homemade brews for both soil fertility, plant nutrition and pest control, which can be made using different materials. For example, you can use weeds that are chopped and put inside an orange mesh and soaked inside a 20l of water and closed, left for 7 to 10 days and diluted before use. Brews provide plants with food to assist help grow fast and look healthy.

Banana stems were used to make a practical demonstration of liquid manure; banana stems were chopped and an orange mesh was filled with chopped banana stems, tied on a stick and placed in a 20l bucket with clean water and the container was covered.

*Figure 28: From left to right Elias Mogofe is chopping banana stems in the picture in the middle an orange mesh was used to fill with banana stems and the last picture Betty tied the mesh on a stick to place inside a 20l bucket filled with water.*

A foliar spray was also done using the following materials:

1. Water 60l
2. Wood ash 5kg
3. Agricultural lime 5kg
4. Bone meal 5kg
5. Chopped weeds and chopped banana leaves
6. 30kg fresh cow manure
7. 5l milk
8. 2kg brown sugar

*Figure 29: Farmers and Betty are making a foliar spray mixing all materials inside a clean 210l drum and covering the mixture to leave for 10-15 days before use.*

Farmers could tell how fertile the soil would be by using a foliar spray but had a problem with using sugar and milk to make it; they will rather do other brews because they can't afford to waste sugar and milk.

#### 5.1.4.3 Reflection of the workshop

Farmers requested to all be there when the brew more especially the foliar spray, is being used to see how to apply it. The date was set for the 2/07/2020. Farmers appreciate the workshops where practical activities are undertaken and requested further such workshops both to review what they have already learnt and to introduce new ideas. The next demonstration workshop will be at Elias Mogofe looking at garden layout, soil fertility methods and soil conservation on the 26/06/2020.

### 5.1.5 Market progress with Hlokomela under the Hoedspruit Training Trust during COVID-19 Lockdown

*Written by Betty Maimela*

Hlokomela is a Non-profit organization that is well respected role player in the health and well-being of the local community serving about 6 000 people annually (direct and indirect beneficiaries). During lockdown Hlokomela started a fundraising initiative called the Hoedspruit Training Trust; which has been set up to support vulnerable community members with whole-foods-based (Fresh herbs, vegetables &fruits, and some grains) and essential product (toiletries, household goods) baskets. The trust is mobilising to help fight the spread of Corona Virus in the greater Kruger to Canyons Biosphere area. This area is home to many rural communities already fighting a wide range of immune deficiencies like HIV, TB and diabetes

Hlokomela reached out to farmers working with Mahlathini Development Foundation and other farmers from Acornhoek to buy fresh produce from them every week to include in the food baskets, of which 100 are distributed on a weekly basis. Farmers working with Mahlathini have been well placed to supply fresh vegetables for the food baskets, as they continued farming during lockdown and a number of farmers increased their production, noting the surge of demand for locally produced food. Farmers have planted and are selling, the following vegetables: Mustard spinach also referred to as Morogo, beetroot, onions, cabbage, kale, tomatoes, green beans, sugar beans, spring onions, sweet potatoes and butternut. Mahlathini is assisting farmers with transportation of fresh produce to Hlokomela every week and distributing cash back to the farmers accordingly. Farmers started participating in the Hlokomela Hoedspruit Training Trust towards the end of May in response of to the COVID-19 pandemic.

*Figure 30: Above Left; beans and beetroot delivered at Hlokomela, Right; a bakkie loaded with half of the harvested green beans, sweet-potatoes and Morogo and Far Right; Christina packaging Morogo bundles in her garden*

*Figure 31: Right top; Lepekane and his family harvesting green beans Right Bottom; Mmadiatla Monyela harvested beetroot from his garden. Far right; Phinias Pako harvesting beetroot from his garden.*

*Figure 32: Left; Onions harvested from Harry Kgwedi's garden at Willows together with Sweet-potatoes from Lepekane Malepe in Sedawa. Right; tomatoes harvested from Nthabiseng Letebele's garden, for delivery to Hlokomela*

The table below provides a summary of sales for June - July 2020 during which period farmers sold a total of R38 420.00 worth of vegetables. On average each of the 25 participants in this process made R650.00 from sales

*Table 2: Summary of organic vegetable sales to Hlokomela; June- July 2020*

| Date | Surname | Name | Produce | Quantity | Price | Total income | Village |
|---|---|---|---|---|---|---|---|
| 29/05/2020 | Malepe | Lepekane | Green beans | 60kg | R15,00/kg | R900,00 | Sedawa |
| | Monyela | Mmadiatla | beetroot | 11 bundles | R10/Bundle | R110,00 | Turkey |
| | Mmaditiro | Mayebela | Spinach | 50 bundles | R15,00/bundle | R750,00 | Mametja |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 02/06/2020 | Tshetlha | Norah | Morogo | 16 bundles | R10/Bundle | R160,00 | Turkey |
| | Shai | Lydia | Morogo | 1 bundle | R10,00/bundle | R10,00 | Turkey |
| | Magobatlou | Rackson | Morogo | 2 bundles | R10,00/bundle | R20,00 | Turkey |
| | Machimane | Alfred | Morogo | 1 bundle | R10,00/bundle | R10,00 | Turkey |
| | Madire | Sarah | Morogo | 9 bundles | R10,00/bundle | R90,00 | Turkey |
| | Malepe | Josphina | Morogo | 15 bundles | R10,00/bundle | R150,00 | Sedawa |
| | Sekgobela | Mpelesi | Morogo | 4bundles | R10,00/bundle | R40,00 | Sedawa |
| | Malepe | Lepekane | Green beans | 144kg | R15,00/kg | R2 160,00 | Sedawa |
| | Malomane | Makete | Chilli | 11kg | R100,00/kg | R1 100,00 | Turkey |
| 11/06/2020 | Letebele | Nthabiseng | Beetroot | 15kg | R10,00/kg | R150,00 | Willows |
| | Monyela | Mmadiatla | beetroot | 32kg | R10,00/kg | R320,00 | Turkey |
| | Phinias | Pako | Betroot | 3kg | R10,00/kg | R30,00 | Willows |
| | Letebele | Nthabiseng | Tomatoes | 50kg | R10,00/kg | R500,00 | Willows |
| | Malepe | Josphina | Mororgo | 10 bundles | R10,00/bundle | R100,00 | Sedawa |
| | Thobejane | Christina | Morogo | 10 bundles | R10,00/bundle | R100,00 | Sedawa |
| | Sekgobela | Mpelesi | Morogo | 5 bundles | R10,00/bundle | R50,00 | Sedawa |
| | Magobatlou | Rackson | Morogo | 2 bundles | R10,00/bundle | R20,00 | Turkey |
| | Malatji | Isaac | Mororgo | 7 bundles | R10,00/bundle | R70,00 | Turkey |
| | Tshetlha | Norah | Morogo | 16 bundles | R10,00/bundle | R160,00 | Turkey |
| | Mogopa | Alex | Morogo | 11 bundles | R10,00/bundle | R110,00 | Sedawa |
| | Malomane | Makete | Chilli | 11kg | R100,00/kg | R1 100,00 | Tuyrkey |
| | Malepe | Lepekane | Sweet-potatoes | 55kg | R20,00/kg | R1 100,00 | Sedawa |
| | Malepe | Lepekane | Green beans | 117kg | R15,00/kg | R1 755,00 | Sedawa |
| 17/06/2020 | Malepe | Lepekane | Green beans | 57kg | R15,00/kg | R855,00 | Sedawa |
| | Malepe | Lepekane | Sweet-potatoes | 55kg | R20,00/kg | R1 100,00 | Sedawa |
| | Meissie | Mokwena | Morogo and spinach | 6 bundles | R10,00/bundle | R60,00 | Sedawa |
| | Magdalena | Malepe | Spinach | 4 bundles | R10,00/bundle | R40,00 | Sedawa |
| | Christina | Thobejane | Morogo | 11 bundles | R10,00/bundle | R110,00 | Sedawa |
| | Esinah | Malepe | Morogo | 7 bundles | R10,00/bundle | R70,00 | Sedawa |
| | Nthabiseng | Letebele | Beetroot | 50 bundles | R10,00/bundle | R500,00 | Willows |
| | Sara | Madire | Morogo | 22 bundles | R10,00/bundle | R200,00 | Turkey |
| | Malomane | Makete | Chilli | 10 kg | R100,00/kg | R1 000,00 | Turkey |
| 23/06/2020 | Lepekane | Malepe | Sweet-potatoes | 87kg | R20,00/kg | R1 740,00 | Sedawa |
| | Meissie | Mokwena | Spinach | 5 bundles | R10,00/bundle | R50,00 | Sedawa |
| | Rackson | Magobatlou | Morogo/spinach | 5 bundles | R10,00/bundle | R50,00 | Turkey |
| | Lydia | Shaai | Morogo | 7 bundles | R10,00/bundle | R70,00 | Turkey |
| | Mmatshego | Shaai | Morogo | 8 bundles | R10,00/bundle | R80,00 | Turkey |
| | Isaac | Malatji | Morogo | 13 bundles | R10,00/bundle | R130,00 | Turkey |
| | Mpelesi | Sekgobela | Morogo | 3 bundles | R10,00/bundle | R30,00 | Sedawa |
| | Christina | Thobejane | Morogo | 10 bundles | R10,00/bundle | R100,00 | Sedawa |
| | Moses | Mogofe | Kale | 11 bundles | R10,00/bundle | R110,00 | Willows |
| | Malomane | Makete | Chilli | 13 kg | R100,00/kg | R1 300,00 | Turkey |
| | Nthabiseng | Letebele | Tomatoes | 50 bundles | R10,00/bundle | R500,00 | Willows |
| | Herry | Kgwedi | Onions | 50 bundles | R10,00/bundle | R500,00 | Willows |
| 01/07/2020 | Herry | Kgwedi | Onions | 50 bundles | R10,00/bundle | R500,00 | Willows |
| | Sarah | Madire | Morogo | 20 bundles | R10,00/bundle | R200,00 | Turkey |
| | Mmatshego | Shaai | Morogo | 10 bundles | R10,00/bundle | R100,00 | Turkey |
| | Sarah | Mohlala | Morogo | 5 bundles | R10,00/bundle | R50,00 | Turkey |
| | Christina | Thobejane | Morogo | 18 bundles | R10,00/bundle | R180,00 | Sedawa |
| | Samason | Pako | Tomatoes | 50 bundles | R10,00/bundle | R500,00 | Willows |
| | Lepekane | Malepe | Sweet-potatoes | 100 bundles | R20,00/kg | R2 000,00 | Sedawa |
| | Malomane | Makete | Chilli | 15 kg | R100,00/kg | R1 500,00 | Turkey |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 08/07/2020 | Nora | Tshetlha | Morogo | 15 bundles | R10,00/bundle | R150,00 | Turkey |
| | Lydia | Shaai | Morogo | 10 bundles | R10,00/bundle | R100,00 | Turkey |
| | Sara | Mohlala | Morogo | 10 bundles | R100,00/bundle | R100,00 | Turkey |
| | Magalangake | Mogale | Morogo | 5 bundles | R10,00/bundle | R50,00 | Turkey |
| | Mmatshego | Shaai | Morogo | 5 bundles | R10,00/bundle | R50,00 | Turkey |
| | Roony | Sekgobela | Morogo | 8 bundles | R10,00/bundle | R80,00 | Sedawa |
| | Meissie | Mokwena | Morogo | 5 bundles | R10,00/bundle | R50,00 | Sedawa |
| | Esinah | Malepe | Morogo | 5 bundles | R10,00/bundle | R50,00 | Sedawa |
| | Lema | Malepe | Morogo | 8 bundles | R10,00/bundle | R80,00 | Sedawa |
| | Magdalena | Malepe | Morogo | 5 bundles | R10,00/bundle | R50,00 | Sedawa |
| | Christina | Thobejane | Morogo | 26 bundles | R10,00/bundle | R260,00 | Sedawa |
| | Triphina | Malepe | Morogo | 5 bundles | R10,00/bundle | R50,00 | Sedawa |
| | Samson | Pako | Chilli | 4kg | R100,00/kg | R400,00 | Willows |
| | Samson | Pako | Spring Onions | 30 bundles | R10,00/bundle | R300,00 | Willows |
| | Herry | Kgwedi | Butternut | 50 bundles | R50,00/bundle | R2 500,00 | Willows |
| | Herry | Kgwedi | Onions | 50 bundles | R10,00/bundle | R500,00 | Willows |
| | Malomane | Makete | Chilli | 6kg | R100/kg | R600,00 | Turkey |
| 15/07/2020 | Herry | Kgwedi | Onions | 50 bundles | R10,00/bundle | R500,00 | Willows |
| | Nthara | Seotlo | Spring Onions | 30 bundles | R10,00/bundle | R500,00 | Sedawa |
| | Malomane | Makete | Green beans | 100kg | R15,00/kg | R1 500,00 | Turkey |
| | Nthabiseng | Letebele | Tomatoes | 50 bundles | R10,00/bundle | R500,00 | Sedawa |
| | Rackson | Magobatlou | Morogo | 5 bundles | R10,00/bundle | R50,00 | Turkey |
| | Trona | Morema | Morogo | 10 bundles | R10,00/bundle | R100,00 | Mametja |
| | Rony | Sekgobela | Morogo | 10 bundles | R10,00/bundle | R100,00 | Sedawa |
| | Mpelesi | Sekgobela | Morogo | 6 bundles | R10,00/bundle | R60,00 | Sedawa |
| | Christina | Thobejane | Morogo | 15 bundles | R10,00/bundle | R150,00 | Sedawa |
| | Paul | Maphori | Morogo | 20 bundles | R10,00/bundle | R200,00 | Sedawa |
| | Nthara | Seotlo | Spring Onions | 30 bundles | R10,00/bundle | R300,00 | Sedawa |
| | Meissie | Mokwena | Morogo | 8 bundles | R10,00/bundle | R80,00 | Sedawa |
| | Herry | Kgwedi | Onions | 50 bundles | R10,00/bundle | R500,00 | Willows |
| | Sara | Mohlala | Morogo | 10 bundles | R10,00/bundle | R100,00 | Turkey |
| | Mogalangake | Mogale | Morogo | 5 bundles | R10,00/bundle | R50,00 | Turkey |
| | Mmatshego | Shaai | Morogo | 12 bundles | R10,00/bundle | R120,00 | Turkey |
| 22/07/2020 | Isaac | Malatji | Morogo | 9 bundles | R10,00/bundle | R90,00 | Turkey |
| | Sarah | Madire | Morogo | 6 bundles | R10,00/bundle | R60,00 | Turkey |
| | Lydia | Shaai | Morogo | 10 bundles | R10,00/bundle | R100,00 | Turkey |
| | Sara | Mohlala | Morogo | 10 bundles | R10,00/bundle | R100,00 | Turkey |
| | Magalangake | Mogale | Morogo | 5 bundles | R10,00/bundle | R50,00 | Turkey |
| | Paul | Maphori | Morogo | 10 bundles | R10,00/bundle | R100,00 | Sedawa |
| | Mpelesi | Sekgobela | Morogo | 6 bundles | R10,00/bundle | R60,00 | Sedawa |
| | Moses | Mogofe | Morogo | 10 bundles | R10,00/bundle | R100,00 | Willows |
| | Herry | Kgwedi | Butternut | 50 bundles | R50,00/bundle | R2 500,00 | Willows |
| | Triphina | Malepe | Morogo | 9 bundles | R10,00/bundle | R90,00 | Sedawa |
| | Christina | Thobejane | Morogo | 15 bundles | R10,00/bundle | R150,00 | Sedawa |
| | Magdalena | Malepe | Morogo | 10 bundles | R10,00/bundle | R100,00 | Sedawa |
| | Daphney | Maphori | Morogo | 5 bundles | R10,00/bundle | R50,00 | Sedawa |
| | | | | | | **R38 420,00** | |

#### 5.1.5.1 Reflection

Being able to sell locally produced vegetables through Hlokomela and the Hoedspruit Trust has been of great help to the smallholder farmers who have surplus. They are also selling in their villages, but this short-term

market has provided a very welcome boost to their sales and has also allowed them to sell vegetables for which there is not a high demand in their villages, such as green beans.

## 5.1.6 Organic Mango production training

*Written by Betty Maimela, Thembani Mabunda and Nelson Ngobeni*

146 Mango trees have been delivered to 39 participants across 5 villages. Participants contributed R20/ tree and small workshops have been conducted to assist participants in planting and caring for these trees.

Organic mango production training has been conducted for 4 learning groups across two sessions (Turkey and Worcester, Sedawa and Willows ) for a total of 70 participants (attendance registers are provided in the report package), in association with the Hoedspruit Hub and the Bavaria Fruit State. The training consisted of 1 day at the Hoedspruit Hub for theoretical inputs as well as a visit to the Bavaria estate to cover grafting, composting and tree management as well as a site visit to the villages, with one of the estate managers, Andrew Chabalala, to assess the condition of the participants' orchards and provide advice.

The training programme is shown below

**Hoedspruit Hub Organic Mango Production Workshop for Startup Farmers**

***Draft programme***

**Day of site visit in the community**

**DAY 1**
08:00 Arrival and registration
09:00 Welcome, introductions and expectations
09:45 Overview of programme
10:00 Organic mango production in South Africa - what has worked and what not
10:30 Why organic mango production is suited for smallholder farmers
11:00 Tea break
11:20 A discussion about mango varieties and grafting
12:00 Lunch
13:00 Practical grafting demonstration
13:30 Nutrition management for optimal mango yields
14:30 Water management and saving techniques
15:00 Comfort break
15:15 Developing nutrition and water management schedules
16:00 Departure

**Day at the Hoedspruit Hub and Bavaria**

**DAY 2**
08:00 Overview of the last day
08:30 Potential markets for organic mango
09:00 Developing marketing strategies
10:00 Tea break
10:30 Work session to apply lessons learned to problems identified during site visits
12:30 Lunch
13:30 Site visit to mango orchard
14:15 Site visit to compost making site
15:15 Visit to farm nursery to purchase trees
16:00 Departure

### 5.1.6.1 Organic Mango production training for Worcester and Turkey (23-24 June 2020)

This training is reported in detail and was similar for the second group

Venue: Turkey (Mmatshego's homestead)
Number of participant's day 1: 32
Number of participant's day 2: 19 Hoedspruit hub and Bavaria orchard

On the 23rd and 24th of June 2020, Mahlathini Development foundation (MDF) made provision to continue to support the organic mango production training workshops with a view to organic mango production for supplying formal commercial markets. The training was held at Turkey at Mmatshego's homestead. Hoedspruit Hub facilitated the workshop; Nelson Ngobeni, Andrew Chabalala, and Karabo Mdhluli alongside MDF facilitators Betty Maimela and Thembani Mabunda.

On the 23rd of June 2020, the organic mango training workshop was held at Turkey village in with attendance of both farmers from Worcester and Turkey. The workshop was held outside in an open space with chairs a distance of 1,5m apart from each other as per regulations. Farmers were provided with hand sanitizer before entry and masks were provided to those who didn't have. It was initially planned that 10 participants from each village should attend the workshops.

*Figure 33: Farmers attending organic mango training workshop facilitated by HH (Hoedspruit Hub) are wearing mask and are 1,5m apart from each other*

Surprisingly, on the first day of the workshop, Turkey farmers attended in numbers and we had 32 participants in total. Participants were keen to learn how to better manage their fruit production to be able to enter the formal market. Due to Hoedspruit Hub's restrictions, only 19 participants could attend the 2nd day.

#### 5.1.6.2 Day 1 site visit in the community

Nelson Ngobeni from Hoedspruit Hub handled the introduction and expectations for the workshop These included:

- Pest Management
- Planting Spacing (what is the right space in between mango trees)
- How to plant & how deep to plant
- What to include in the planting hole when planting trees
- Managing Diseases
- Grafting
- Why do mango trees only produce one side?
- Why do the trees dry out?

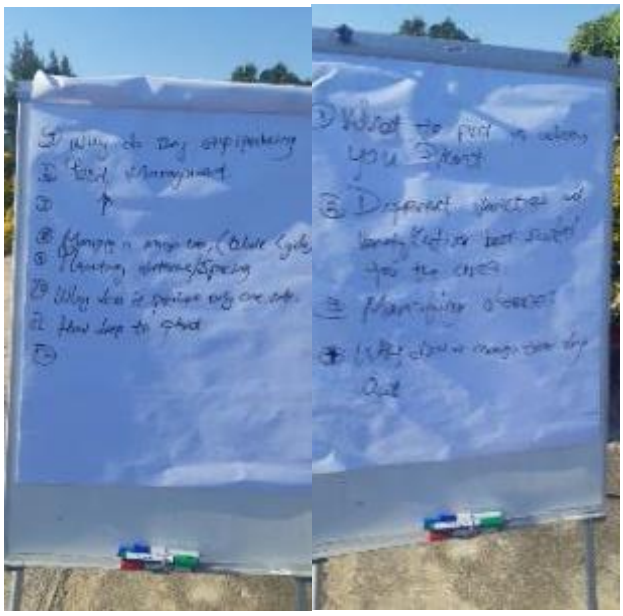

*Figure 34: Questions from farmers recorded and then responded to by Andrew Chabalala*

Andrew Chabalala started by explaining the mango varieties that they have at Bavaria before answering questions and providing further information

**ORGANIC MANGO VARIETIES**

Andrew mentioned that varieties of mangoes that most smallholder farmers have in their household or in their orchards (Sabre and Peach) are not suited for the market as they have fibres and that these are only suitable for atchar. He stated that they have nine mango varieties at Bavaria including:

1. **TOMMY:** This is a mango tree that is harvested in December-January.
2. **SHELLY:** High market demand locally and for export. Shelly is harvested in January-February.

3. **KENT:** Good market demand, harvested in February.
4. **PRINCESS:** Harvested in February or March.
5. **TANGO:** Tango mango market is local only.
6. **KIET:** Kiet is harvested in March to April. Kiet is harvest when it is still green and then left to further ripen until the skin changes colour.
7. **ATOM GOLD:** Atom Gold does not have much of a market as it remains green even after ripening.
8. **SENSATION:** Sensation can be planted or is mostly planted at home and it looks like peach. Bavaria approved it for market but it is not exported.
9. **HEIDI:** Heidi is not available for everyone; farmers are required to pay royalties to get it. Bavaria have produced trees with a three- way graft of Heidi, Kent and Kiet and those can be bought without royalites.

- **What to include when planting mango tree?**

Compost can be used in the planting hole and the final planting basin can be mulched with leaves to protect the soil and keep moisture in. Planting holes should be dug 1m in depth and width and then filled to the top with a soil-compost mixture, after which is basin is created with the remaining top soil for irrigation.

- **Why mango trees dry?**

This could be due to a lack of water. Greywater that contains soap can also kill the trees. Soap contains substances such as sodium hydroxide or a strong alkali that can poison the trees. Termites might also be the reason why trees dry out, due to damage to the roots. He is not sure of organic ways to control termites.

- **How do you water mango tree?**

This can be done using buckets, hose pipes or drip irrigation. For young trees they need a minimum of 2L, twice a day. Mature trees need as much as 20L of water per day.

Mango trees are watered up until they should start flowering, when irrigation is stopped for two weeks in order for it to start flowering. By stopping the watering processes, the tree becomes stressed and then it starts flowering. A question was raised by one the participants (Madike Nkhekhe) in the group; “Which water is best for watering mango trees borehole water and pure water?”, Andrew said that there is no difference in using borehole water or pure water for watering the mango trees. However, when fertilizers are used, more water is required to allow the fertilizer to be transported into the entire root zone.

- **Why is organic mango production suitable for small holder farmers?**

Farmers commented that organic production is better for their health and also for the environment and as it uses local resources is cheaper than using external inputs.

Nelson also added that as most commercial orchards use external inputs, there is a good niche market available to smallholder for organically produced fruit. Farmers can grow mangoes organically by adding compost to boost soil fertility and plant growth. Compost can be made on a small scale at home, but also on a larger scale for bigger orchards. Betty also explained about the market and the relationship between Mahlathini and M-Pak that deals with drying mangoes, they will be taking mangoes from small-holder farmers.

*Figure 35: The farm worker who oversees compost production at Bavaria orchard, in blue work suits in the picture, is explaining to the group the process of making compost*

- **Pruning and Improving fruit formation**

The form and height of amango tree has to be controlled to guide the tree and to be able to harvest without damaging the fruit. Pruning is trimming a tree by cutting away dead or overgrown branches or stems, especially to encourage growth. Andrew elaborated that this process is important, since mango trees become stressed if this is not done. He also explained formative pruning, which is done in the first year of

the young tree to guide the tree to a desired shape with 3-4 well-formed branches, after which new flushes of growth and branches should be removed. Pruning also provides for an open canopy where all branches and fruit can receive sunlight. Andrew Chabalala continues explaining the pruning process to the people, he also mentioned that pruning also helps for creating enough space for people and tractors to move around and that it makes the tree no to grow up too much. There is structural pruning which is done for proper maintenance of the tree. This also helps that fruiting doesn't only occur on the 'outside' of the tree and thus encourages the production of more fruit.

Nelson and Andrew explained to farmers that young grafted trees may flower within the first or second year, but they should avoid fruit formation as it will affect the growth of the tree. Blossoms should be plucked until the fourth year when flowering is permitted to develop. Andrew also advised farmers to keep the orchard clean by removing weeds and ripe fruits from around the tree. Proper pruning after each harvest season facilitates pest and harvest control and encourages good fruit yield, it also limits tree growth.

- **Improving soil fertility**

Andrew mention that for organic planting of mango tree, one should look at the soil. Soil cannot be too sandy and needs to contain some organic matter and have enough structure to hold water and allow for the presence of micro-organisms can survive inside the soil. Before planting any trees, one has to make sure that there is no soil erosion. Compost can be added to the soil to improve the soil quality. Kraal manure can also be used to improve the soil quality (Goat, Cattle, and Chicken).

Farmers need to implement proper management strategies to improve the fertility of the soil and weed management; they can do the following;

- Mulching, especially for young mango trees,
- Control weeds by using small animals like goats to graze and monitor the animals to avoid damaging the mango trees,
- Planting of cover crops before fruit production starts. The organic material left on the soil surface provides a mulching layer that protects the soil and positively influence the water retaining capacity of the soil.
- During early development of the young tree, during the first four years it is important to provide the tree with regular supply of compost and green manure to improve foliar development. Addition of compost or organic material should always follow the flowering, so that enough nutrients are available for fruit formation and development.

- **Harvesting and handling of mango**

When harvesting the fruit should be removed with the small stem(10cm) it is growing from, to improve ripening of the fruit and also make it easier for the tree to produce again. Furthermore, if the harvesting is not done properly, a sticky milky sap is exuded by the tree that can cause sap burn on the tree and fruit. Sap burn causes black lesions on the fruit, leading to rot and cutting storage and usage time. Mmatshego Shaai from Turkey village was the one who asked how can one harvest a mango without getting in contact with the milky sap.

*Figure 36: Mangoes can be harvested by hand, or using a knife or scissors. If the tree is high a ladder is used, the fruit should be put inside a crate or a basket lined with some leaves to avoid and prevent damage.*

- **Pest management**

Andrew Chabalala also explained to the group different types of pests and diseases that are common on mango trees and ways to manage them;

- Fruit fly; the fly punctures the fruit skin and lay eggs that develop into larvae in the flesh of the fruit after hatching. The larvae feed on the fruit and causes it to drop prematurely and destroys the pulp of the fruit. Framers should always scout in their orchard and always keep the orchard clean. A trap of pheromone can be placed in a tree to disorient male flies. A paper bag can also be wrapped around the fruit when they are still green and hard to avoid them being stung.
- Mango seed weevil; the larva is the damaging stage of the pest, it enters the fruit by burrowing through the flesh into the seeds, where it feeds until pupation destroying the seed. These can be managed by keeping the orchard clean and continuously monitoring for egg-laying marks. Sticky strips at the upper end of tree trunks can be applied when the trees start to flower.
- Powdery mildew; damages young fruit and flowers. In severe attacks, the entire panicle may be involved and fruit will fail to set.
- It is possible to cover each fruit with brown paper or plastic, to protect them from pest attack. This is however quite time consuming. Another method is to collect all the rotten mangoes and dig 50cm deep pit in the ground not far from the mango trees and put the rotten mangoes inside with some stones and then to cover the pit with soil. Nora Tshetlha from Turkey village used a method that she was taught at the last Organic mango workshop, she uses a method called smudging a practice where one collects moist organic material like grass or leaves under the tree and smoke them in order to induces flowering and kill pests. She further explained that she had a problem of pests in her mango trees but since she started using this method, the pests are no longer a problem. Smudging is commonly done towards the dry season when mangoes are ready to flower. Smoking materials can be mixed with herbs like lemongrass or lantana leaves to produce a repellant smoke that chases away insects from the tree.

- **GRAFTING**

Andrew Chabalala then explained grafting to the group why, when, and how they graft the mango trees. Generally, rootstock is chosen to be hardy and diseases resistant, to produce a strong tree. Sabre is a common rootstock variety. Then the scion, or top part of the grafted tree is the preferred fruiting type. To perform grafting, one needs material such as a grafting knife, grafting tape, and variety of mango trees. Grafting is only done in summer. They can start grafting from the 15th of August onwards.

For the scion, the tree has to be starting a new flush of growth. Branches can be cut and kept cool for a day or two prior to using the smaller stems for grafting. The grafting cuts have to be at an angle on the stem, not perpendicular, and the cuts need to be made carefully to ensure a good fit between the rootstock and scion. When they are wrapped up care should be taken to make sure there is not contact between the graft and air. Grafting tapes can only be removed after 7 days or when one can see that the graft is starting to 'take'. These grafter cuttings should be kept moist at all times, but should not be over-watered.

### 5.1.6.3 Day 2 (Hoedspruit Hub and Bavaria)

The second day of the Organic mango training workshop was held in Hoedspruit Hub and Bavaria on the 24th of June 2020, the 19 participants were screened for COVID-19 at arrival in Hoedspruit Hub and they were divided into two groups, to use separate classrooms, with a maximum of 10 participants per classroom.

*Figure 37: Magalangake Mogale is sanitizing her hands after screening, before entering the classroom.*

A review of day one was conducted and then input was provided on: ensuring a careful harvest, handling of fruits after being harvested, quality criteria for fruit, introduction to Agroecology (Climate Smart agriculture), and garden walking and explanation.

- **Overview of day 1**

Farmers or participant were asked what they had learned from the previous day. They outlined all the points that were discussed. Madike Nkhekhe explained that he didn't know the importance of dry leaves under the tree as he used to clean and burn them, but he now knows that he doesn't have to do that and use them as mulch. He also knows how to plant mango seedlings. Magalangake mentioned that she took home smudging, a practice where one smokes moist organic material in the tree to induce flowering and reduce pests and the importance of irrigating properly and the exact amount of water required. She now knows that soap water is like slow poison to the tree. Victoria Makofane said that she now knows that pruning a tree is not killing a tree but is turning a tree to have enough sunlight coming through to hit all branches of tree and also increase yields. She also learned about different kinds of diseases that affect mango trees and how to avoid pestproblems in her orchard.

*Figure 38: One of the groups consisting of 10 participants at Hoedspruit Hub*

- **Handling the fruit after harvest**

Mangoes hold be harvested in a way that they don't fall on the ground, as this damages them or pelting the tree with stones to dislodge fruit is also a very undesired practice. Mangoes should be carefully placed directly into crates and boxes and not thrown on the ground first. Even though they are hard when harvested, the fruit will still bruise. Good post-harvest management of the mangoes minimizes damage and contamination of the fruit, thus extending the shelf life and ensure freshness and attractive appearance.

- **Maintaining the orchard after harvest**

Farmers should not forget to collect all fallen or decomposed fruits, prune the old, weak, shaded branches and twigs, cut the grass around the trees and compost the waste properly or burry it deeply.

- **Garden walk about for agroecology session**

*Figure 39: Nelson the facilitator took farmers to show them some of the practices of Agroecology being implemented in the Hoedspruit Hub garden. Above right is the tunnel and below right is a mandala garden.*

In the garden walk participants were shown how to make and apply compost and also other techniques such as vermi-composting, vermi-teas, mixed cropping and mulching. They were also shown 'earth

pod', which are small containerized beds, where plants draw up water and nutrient from below the rowing medium, rather than being irrigated from the top.

- **Bavaria orchard visit and tour with Andrew Chabalala**

The following stations were visited in Bavaria; Bavaria nursery, Bavaria compost site and mango orchards. Farmers were first taken to the nursery, where the manager Andy Lewele, did a practical grafting demonstration. It was explained to farmers that they start grafting from the 15th of August because temperatures start to change from cold to hot. They also explained that they graft trees looking at the demand of the variety, and they use Sabre is a root because they have strong roots and they can survive harsh environments.

*Figure 40: Above, Andy the nursery manager is talking about the different varieties and nursery management and Right and Far Right is demonstrating how grafting is done.*

Farmers showed a lot of interest as they were now seeing what was explained by Andrew Chabalala on the first day with their own eyes. Rackson Magobatlou, from Turkey villages was allowed to graft one Kiet tree for the first time.

*Figure 41: Rackson Magobatlou is grafting after a demonstration that was presented to them*

- **Bavaria compost site**

After pruning of trees, all the waste in the orchard is brought to the site and used to make compost; ripe fruit, pruned branches with leaves etc. Materials are well mixed in lines and a machine is used to turn the compost from time to time. Water is also added to ensure the compost remains moist. Compost is ready after 5-6 months.

*Figure 42: farmers being shown the composting process*

- **Mango orchard tour**

The tour was to show farmers how they prune trees and how they graft a variety in demand on top of an old sabre tree that had a different variety before the one grafted. Farmers were also shown how irrigation is done. Practically the tour was to show farmers all the theory they were taught that are practiced in the orchard. Andrew also explained the spacing in between the trees in a big orchard will be different from small orchard as they would not need tractors to be moving in between the trees. He also showed farmers that they don't clean fallen leaves from the tree, they are used as mulch that adds organic matter to the soil and protect the soil from losing moist and from erosion.


*Figure 43: Above and Right;*
*views of the Bavaria orchard where various aspects of orchard management were explained.*

### 5.1.6.4 Conclusion

Farmers were extremely interested in the management and grafting aspects of mangoes and were enthusiastic in asking questions and sharing their knowledge. They were also particularly keen to get access to grafting tapes and knives, so that they could try out their own grafting. They were also very enthusiastic about improving their orchard management to enable them to enter a formal commercial market for their fruit.

# 5.2 Water committees

In both Sedawa and turkey the two locally managed schemes for provision of household based agricultural water are now fully operational. In each case 18 households now have daily access to water for irrigation and the participants have been gardening enthusiastically. This has been linked to the greater local demand for fresh produce that has emerged as a consequence of the COVID-19 lockdown and also to the weekly sales of produce to the Hoedspruit Trust and Hlokomela.

## 5.2.1 Turkey water committee and garden monitoring.

*Written by Betty Maimela*

The situation in Turkey is such that without a dedicated supply of water, participants could not undertake much farming. Although the present borehole only provides a limited amount of water, this has already made a significant difference for the participating farmers. All 198 households are now actively gardening for both household consumption and sale.

Each household has been responsible for arranging their own water storage arrangement. They have been impressively diligent and meticulous about this process. The group has appointed two people who oversee borehole operation and equal sharing of water: Alfred Machimane and Rackson Magobatlou. In a week each person is allowed to fill their 3x 210l tanks, twice (~1300L/week).

A group of five of these participants; Matshego Shaai, Norah Tshethla, Sarah Madire, Lydia Shaai and /, have decided to do a joint revolving savings scheme between them to buy themselves 2200l Jo-Jo tanks to better manage their gardening water supply into the future.

*Figure 44: Above left:* ***Mmatshego connected drip kits to a 210 litre tank that she uses to irrigate both inside the tunnel and two trench beds outside where she planted beetroot, green pepper, Mustard spinach and Swiss chard spinach. Above centre: Norah Tshetlha collects her share in 3x210l tank, placed close to the garden for ease of irrigation, although she also uses some of this water for household purposes Above right: Lydia Shai, has a range of containers that she fills from her 'mainline' valve, when she is provided access to water.***

Farmers also clubbed together to put in an order for buying seedlings at PARMA nursery in Hoedspruit: 5000 cabbage, 2000 Swiss chard spinach and 2000 beetroot. In total the farmers managed to collect R3400,00 of the overall cost of R4259,00 for the seedlings. MDF assisted with transport.
A few participants are also buying from Sarah Madire, who bought seeds before lockdown and has been producing the following seedlings for sale locally; mustard spinach, beetroot, kale, onions and tomatoes.

*Figure 45: Right; Beetroot seedlings collected from PARMA and Far Right; Seedlings that Sarah Madire was selling in her community. She managed to make R200,00 from selling seedlings thus far, selling them at R10 per bunch.*

Most participants planted similar crops that have a high local demand, but including also some of the 'new' crops such as mustard spinach introduced in previous seasons. Farmers are happy to be able to make an income from farming and to have running water. Electricity is not a problem as they all contribute a fair price and appreciate the way they working together without fights and would like to keep it in that manner.

The pictures below provide a snapshot of activity in a number of the participants' gardens.

# 5.3 Village Savings and Loan Associations (VSLAs)

This aspect of the work is managed by Mr Nqe Dlamini from StratAct, who specialises in microfinance solutions for the rural poor. The concept of savings groups was introduced at a cluster meeting on 25th February 2020, which included members of all learning groups and villages. Participants who were interested were then provided with introductory meetings in their villages.

VSLA is a model that promotes the establishment of Savings Groups for the purpose of using their collective savings to build a group fund that they use to provide key financial services to their members.

The following clarification meetings were in held in the communities:

| Wed 26 Feb | | Thurs 27 Feb | Fri 28 Feb | |
|---|---|---|---|---|
| 1. Sedawa | 2. Willows | 3. Worcester | 4. Madeira | 5. Turkey |

## 5.3.1 Structure of presentation

MDf was assisted by Bigboy Mkhabela from AWARD in translation and facilitation; as AWARD also has an interest in this kind of work and a collaborative effort was agreed to.

1. The objective of the meeting was explained

This was an orientation and introduction meeting for recruiting community members to establish and operate Savings Groups that would support their production activities. Specifically for these communities, the key objectives were:

- To explain and demonstrate how safe their money would be in the Savings Groups
- How would Savings Groups help them to finance their production objectives

2. Scarcity of money and its consequences were explained

- Incapacity to meet the household needs
- Heavy reliance on loan sharks
- Inability to start and operate an income generating activity

3. The ugly reality of financial illiteracy was explained

- **Debt problem:** Instalment sale agreement steals people's money. Borrowing money from a loan shark is like buying expensive money.
- **Problem of instant gratification:** The desire to buy non-productive products remain the strongest in the brain. Instant gratification kills the ability to save for productive assets. In many instances, this is largely as a result peer pressure.
- **Poor appetite amongst smallholder farmers to invest in productive assets:** People chosoe to ignore productive assets in favour of money wasters. There is a tendency that many farmers and rural enterprises would ignore buying productive assets. There is a "loyal" expectation that government institutions and some NGOs would provide grants for free production infrastructure.
- **Appetite for grocery stokvels:** The largest majority use grocery stokvels to buy food items in bulk in December, and sadly groceries that only last for a month or two. Their money is not put into good use.

4. It was concluded that:

- Debt takes money away and makes other people richer
- Food is necessary, but over-consumption takes money away
- Instant gratification is the worst enemy towards achieving a better life in future
- There is a solution: start saving money to buy productive assets

5. Security of collective savings in VSLA was explained

- Knowing each other very well, trust, respect and living in the same neighbourhood is the "make or break" of their Savings Groups. They must not accept people that have a bad reputation in their community.
- There will be a 3-way lock steel money box. 3 Members keep the keys and a box keeper only keeps the box without the key.
- Money box is opened by 4 people but only at the start of the meeting.
- People sit in a circle so that they can see all transactions. Transparency!
- There will be 2-way recording system. There will be a master record book and an individual transaction book.
- Memory-based recording will be enforced. The Chairperson is allowed to fine forgetful members of the Savings Group. A Savings Groups must be able to reconstruct records using their memory in the unlikely event the books are tempered with or lost.

6. The rules and procedures were explained

- Savings-led approach
- Major components of a constitution and non-negotiable rules
- Share-based model; buying of shares
- Loan taking rules
- Transparent operations
- Share-out meeting procedure

**7. The following demonstrations/calculations were made:**

- Recording of shares
- Calculation of shares
- Taking of loans and benefits for taking loans
- Recording of loans
- Conducting a share-out meeting

After these meetings training sessions were held for interested groups in June 2020. A facilitator training manual was produced for this training and handouts and savings books in siPedi was produced for the participants. In addition, moneyboxes were procured and provided to all the groups

## 5.3.2 VSLA training sessions

### 5.3.2.1 Training outline for sessions 8-11June 2020

| Key | Item | | Min | Responsible |
|---|---|---|---|---|
| | COVID-19 | Observe all COVID-19 public meetings protocols | | ALL |
| | | **START THE MEETING** | | |
| 1 | Opening and welcome | Observe local protocols, prayers, introductions, etc. | 10 | BB/BM |
| 2 | Purpose of the workshop | Duration of workshop (3.5 to 4 hours) | 10 | BB/BT |
| | | Expectations | | |
| | | Structure of the workshop | | |
| | | Goal and outcome of the workshop | | |
| 3 | Confirm Savings Group establishment | Recap key learnings in meetings in February | 15 | BB/BT |
| | | Name of the groups | | |
| | | Size of the group | | |
| | | Management Committee | | |
| | | Value of a share | | |
| | | If they have started operating | | |
| 4 | Rules and procedures | Goal of a Savings Group: Rules 1 to 3 | 60 | ND/MD |
| | | Governance: Rules 4 to 11 | | |
| | | Basic operations: Rules 12 to 18 | | |
| | | Membership: Rules 19 to 25 | | |
| | | Savings meeting procedure: Rules 47 to 56 | | |
| | | Buying of shares: Rules 57 to 62 | | |
| | | Taking and repaying of loans: Rules 63 to 76 | | |

| Key | Item | | Min | Responsible |
|---|---|---|---|---|
| | | Share-out procedures: Rules 77 to 80 | | |
| | | Cooperative buying: Rules 81 to 82 | | |
| | | Fines: Rules 83 to 85 | | |
| | | General matters: Rules 86 to 90 | | |
| | | Summary of non-negotiable rules: Rules 26 to 38 | | |
| | | **BREAK** | | |
| 5 | Recording of transactions | Operating tools (issue books) | 30 | ND/MD |
| | | Shares | | |
| | | Loans | | |
| | | Closing balances | | |
| 6 | Support, training and supervision | Local/village- based supervision | 30 | ND/MD |
| | | Monthly supervision, training and re-training | | |
| | | Skills workshops, e.g. enterprise development | | |
| | | Training of chairmen and secretaries' workshop | | |
| | | Share-out procedure training | | |
| | | Share-out meeting support | | |
| 7 | Next steps | Clarifications | 15 | BB/BT |
| | | Next savings meetings | | |
| | | Training of chairmen and secretaries' workshop | | |
| | | Enterprise development training workshops | | |
| | | **CLOSURE AND REFRESHMENTS** | | |

#### 5.3.2.2 VSLA training sessions conducted

*Written by Thembani Mabunda*

The villages where the workshops were introduced were; Turkey, Santeng, Sedawa, Willows, and Worcester. Training for Madeira was postponed due to active COVID-19 cases in the area. The Facilitators of the VSLAs workshops were Nqe Dlamini (StratAct and partner of MDF), Mazwi Dlamini (MDF senior development facilitator), Betty Maimela (MDF senior development facilitator), Bigboy (BB) Mkhabele (Award development facilitator), and Thembhani Mabunda (MDF development facilitator Intern).

Nqe mentioned that the goal of a savings groups is to provide financial services to the people to use to enhance their livelihood strategies. Financial services are deposit taking (savings as in buying of shares, access to short-term credit/loans and usable lump sum pay-outs at the end of a savings cycle). The model of buying shares is based on principles of, and/or promotion of inclusivity. Members of savings groups can buy between one (1) and ten (10) shares in a meeting. This means that if the value of a share is R200, a member saves between R200 and R2 000 in a meeting.

Nqe took the participants through the rules and procedures of establishing and operating a savings group, from governance to operations. In the main, the following was explained and discussed.

**GOVERNANCE**

- He explained that savings groups are formed by people who know and trust each other very well and most preferably neighbours.
- The minimum age a member should have to be part of the savings groups is 21 years.
- Each member is only allowed one account, that is, one savings/transaction book. However, members are allowed to send their proxies to savings meetings. It is highly recommended that proxies are introduced on the second or their meeting of a group. Proxies are only sent to buy shares and to repay loans. They are not allowed to take out loans on behalf of their absent "senders" (members).
- Members are given "account numbers" starting with the chairman as number 1, followed by the secretary as number 2, vice secretary as number 3 and so on. The third money box key holder shall be number 9 and the last member of a management committee.

- Each savings groups must have a management committee which includes a Chairman, Secretary and Vice Secretary (record keepers), Treasurer (money box keeper), two Money Counters, and three money box key holders. He then explained the role for each member in the management committee starting from the Chairman to the last member of the management committee. For instance, the chairman must check that there is a quorum before each meeting start and it is compulsory for every member to attend the savings meeting which is done once every month because if the money box keeper fails to attend the meeting, the meeting would not sit.
- A saving cycle can extend from 12 months to 24 months as decided by the group.
- Money box is only opened in front of everyone member present in the meeting by the key holders.
- Meetings are held once in a month on a date, time and venue agreed by all members of the group.
- All rules and procedures are important and must be observed all the time.

**OPERATIONS (Conducting a savings meeting)**

- The first step of the meeting is confirmation of closing balances and buying of shares. Before the money box is opened, the chairman has to ask members how much was in the box from their last savings meeting. The secretary and/or the vice secretary will then confirm the closing balance. In the event of one or two members fail to remember the closing balance, the chairman has to fine those members. Once the closing balance is confirmed by the secretary, money counter will count the money in the money box in front of all the members.
- After confirmation of the closing balance, the chairman would request members to buy shares. The chairman, as member number 1 of the groups would be the first to buy shares, followed by the secretary as member number 2, then vice secretary as member number 3, and so on. Depending on the share value, members of a savings groups would buy between 1 and 10 shares. R100 and R200 were recommended as most affordable share values to the participants, and calculated as follows:

| Share Value | Number of Shares Bought in a Meeting | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| R100 | 100 | 200 | 300 | 400 | 500 | 600 | 700 | 800 | 900 | 1000 |
| R200 | 200 | 400 | 600 | 800 | 1000 | 1200 | 1400 | 1600 | 1800 | 2000 |

- One money counter, checks that money used by each member is not fake or ink-tainted. The second money counter counts the total amount used to buy shares by each member.
- All transactions are recorded by the secretary in the individual member's books and the group's master book. Secretaries do not record their transactions. Transactions of a secretary is recorded by vice secretary or chairman, and transactions of a vice secretary are recorded by the secretary. The vice secretary records similar transactions on a flip chart for every member to see in the following order: shares, repaid loans, new loans issued and closing balance. MDF will provide flip charts and soft pens to the groups. The vice secretary counts the total number of shares bought by all members in a meeting – and total shares must correspond with the amount of money counted by the money counters. This amount is announced in the meeting.
- The second step is repayment of loans by indebted members (borrowers). In each case, the borrower gives money to money counters for checking and counting before it is recorded by the secretary. At the end money counters count the total amount of money received from repaid loans. This amount is announced in the meeting.
- The third step is issuing of loans. No new loans are issued to indebted members. This means that a borrower must settle her/his debt before requesting for a new loan. Loans are only taken between months (meetings) 2 and 9. However, depending on the availability of money, the group may grant loans from the first meeting. Members are allowed to take two times the value of their shares as loan amount between months (meetings) 2 and 7. For example, a member with R1000 can take a loan up to R2000. Between months (meetings) 8 and 9, members are only allowed to take loans equivalent to their total savings, i.e. total value of shares. For example, a member that has saved R5000 can take out a maximum loan of R5000. No loans are granted from the 10$^{th}$ month (meeting).

The loan is 3 months at 10% interest per month on reducing balances. A borrower may be granted a 4th month to settle her/his debt. No interest is charged from the 5th month. Borrowers are not fined for failing to repay a loan. MOST IMPORTANTLY, INTEREST ACCRUES TO THE GROUP AND NOT A BORROWER! Borrowers sign for all loans and outstanding balances in their books. The secretary signs only when a borrower settles her/his debt. When all new loans are issued and recorded, the chairman asks the money counters to count money remaining in the box/table. This is the closing balance of the meeting. This amount is announced in the meeting.

- The pros and cons for not taking loans during the saving cycle were explained. The benefits are presented in the next section on page 13 of this report.
- The chairman asks the secretary to put money and all books in the money box and the three key holders to lock the money box. The chairman gives the locked money box to the money box keeper ("treasurer"). This closes the savings meeting however, the chairman may/should allow the meeting to raise and discuss matters of social protection/security.
- Groups are advised to come up with amounts of fines for fining transgressors. Fines should include; coming late to the savings meetings, talking while meetings are on progress, sleeping during meetings, using cell phones, forgetting closing balances, and forgetting savings/loans of a member sitting on your right and on your left.

**OPERATIONS (Conduction a share-out meeting)**

- Towards the end of a savings cycle and in particular month (meeting) 12, a savings group should meet to reconcile all the books in terms of total shares bought and loans outstanding (if any) in preparation for the final meeting. Members are still allowed to buy shares in this meeting but not to take out loans.
- At the final meeting, month 13, a savings meets for the purpose of dissolving a group fund (loan fund). No other business is carried out in this meeting. No shares are bought; however, outstanding loans must be settled.
- A representative of MDF will be present in the meeting to supervise the group.
- The chairman asks the secretaries to confirm that no member has an outstanding debt.
- The chairman asks the money box to be opened and money to be counted.
- The chairman asks secretaries to count the total number of shares by each member – and the total number of shares bought by the group.
- **CALCULATING FORMULAR:** The total amount of money (group fund) is divided by the total number of shares of the group in order to get the new value of a share. The total number of shares of each member is multiplied by the new value of a share in order to get a share-out amount. An example of a group with 9 members was used to explain the share-out procedure.

| | | | |
|---|---|---|---|
| **Total Group Fund:** | | | R113 760 |
| **Total Group Shares:** | | | 711 |
| **Total Value Shares Bought:** | | | R71 100 |
| **New Value of a Share:** | | | R160 |
| ***Book #*** | ***Shares*** | | ***Share Amount*** |
| 1 | 75 | X R160 | = R12 000 |
| 2 | 80 | X R160 | = R12 800 |
| 3 | 90 | X R160 | = R14 400 |
| 4 | 55 | X R160 | = R 8 800 |
| 5 | 77 | X R160 | = R12 320 |
| 6 | 93 | X R160 | = R14 880 |
| 7 | 98 | X R160 | = R15 680 |
| 8 | 66 | X R160 | = R10 560 |
| 9 | 77 | X R160 | = R12 320 |
| **TOTAL** | **711** | | **R113 760** |

The table above represents a savings group with 9 members that bought 711 to the tune of R71 100 over a period of 12 months. Fines and interest charged on loans grew the group fund to R113 760. The value of a share that was R100 grew to R160 at the end of a savings cycle. The number of shares bought by a member is multiplied by the new value of a share to get the share-out amount of a member.

**DAY 1 (VSLA Training in Turkey & Santeng Villages)**

On the 8th of June 2020, the VSLA training was undertaken in Turkey village facilitated by Nqe Dlamini and Bigboy Mkhabele. Turkey group had not elected their management committee but they had already started with savings meetings which made the workshop easy to conduct. They had a savings meeting before and decided that each member of the savings groups should buy shares starting from R200 up to R500 but they had a challenge of a box to put their savings money in, so they had decided that some of the money would be used to buy the savings box. One of the rules of the savings groups states that the savings groups is established by 19 members most preferably people who know and trust each other well and people who are neighbours. However, the Turkey group had 39 members including the management committee and it is the only group that exceeded the required number for the savings group. It was then agreed upon that this group will have to divide themselves into two groups. Only one money box was issued. The second money box will be issued once the split has been done. The first management committee of the first group is as follows;

- (1) Chairman: Alfred Machimane,
- (2) Secretary: Pinky Ratshosi,
- (3) Vice Secretary: Portia shai,
- (4) Money Box Keeper: Sara mohlala,
- (5) Money Counter 1: Mogofe Elias,
- (6) Money Counter 2: Mogale Magalangake,
- (7) Key Holder 1: Magobatlou Rackson,
- (8) Key Holder 2: Madire Sara,
- (9) key holder 3: Malatji Angelina

It must be noted that the management committee may change depending on the results of the splitting of the “mother” group.

On the same day the VSLA training was also done in Santeng village. For the Santeng group the savings groups were their first experience since they never had a savings workshop before. Nqe Dlamini, Betty Maimele, Mazwi Dlamini, and Thembani Mabunda facilitated the workshop, and started by explaining the rationale of the savings groups including the rules and regulations of the savings group to the Santeng group. The Santeng group were also given time to elect their management committee for the savings group. The overall number of the members in Santeng village is 13 members and the management committee are as follows;

- (1) Chairman: Julia Lehlwane,
- (2) Secretary: Lethabo Malepe,
- (3) Vice Secretary: Frida Kgohlwane,
- (4) Money Box Keeper: Nomsa Mafologela,
- (5) Money Counter 1: Maanawe shai,
- (6) Money Counter 2: Getrude Mankgele,
- (7) Key Holder 1: Florence Mashego,
- (8) Key Holder 2: Rose Molobela,
- (9) key Holder 3: Phokane Fenita

*Figure 46: Avoe Left: Mr Nqe Dlamini facilitating the workshop in Turkey and Above Right: Betty Maimela running the workshop in Santeng.*

**DAY 2 (VSLA Training in Sedawa Village)**

On the 9th of June 2020, the savings group training was done in Sedawa village. The Sedawa group had already elected their management committee and the overall number of their group is 19 members. They had also started with saving money, although they had some problems understanding the rules and regulations which were resolved by this present workshop and proper recording books and money box were given to Sedawa group.

The group, immediately after the workshop, recorded every transaction made to the proper books for the saving groups. The Sedawa group started with buying of shares on April 2020 after the first workshop was conducted and they managed to save R5 700 in April, with members buying shares starting from at least R100 to R1000. In May 2020 the group saved R3 800 with members buying shares between R300-R700 of value. and in June 2020 they saved R4 100. The Sedawa savings group had also started with taking of loans. Members had already started with taking loans for buying farming inputs and equipment and to operate profitable business enterprises.

The management committee of Sedawa savings group is as follows;

- (1) Chairman: Christina Thobejane,
- (2) Secretary: Fridah Thobejane,
- (3) Vice Secretary: Vinolia Malepe,
- (4) Money Box Keeper: Norah Malepe,
- (5) Money Counter 1: Thea Morema,
- (6) Money Counter 2: Ntebo Malepe,
- (7) Key Holder 1: Magdelina Malepe,
- (8) Key Holder 2: Drona Morema,
- (9) Key Holder 3: Lawrence Motsha.

*Figure 47: The VSLA training in Sedawa, with Nqe Dlaminifacilitating.*

**DAY 3 (VSLA Training in Worcester Village)**

On the 10th of June 2020, Worcester village was visited for the savings group workshop and it was facilitated by Nqe, Bigboy, and Thembani. Worcester already had a background of savings groups and stokvels which made the facilitation easy. The group also had elected their management committee and also had started with the buying of shares and taking of loans. Worcester Group has 16 members but during the workshop there was a group of home-based care workers that had attended the workshop and asked the facilitators if they can separately start their own savings group. Worcester savings group started with buying of shares on the 09th of March 2020 and also with members taking loans. Members bought shares starting from as low as R100 to R300.

The management committee that the members have selected is as follows;

- (1) Chairman: Naomi Manaso,
- (2) Secretary: Madike Nkhekhe,
- (3) Vice Secretary: Sekgobola Suran,
- (4) Money Box Keeper: Mahlo Nkutsane,
- (5) Money Counter 1: Ramoshaba Anna,
- (6) Money Counter 2: Malatji Melidah,
- (7) Key Holder 1: Mmola Matiyela,
- (8) Key Holder 2: Maanaso Rosina,
- (9) Key Holder 3: Madike Anna.


This pictures above were taken on the 10th of June 2020 in Worcester village. The left picture shows the members of the Worcester savings group and the right picture shows Nqe and Bigboy facilitating the Worcester workshop.

**DAY 4 (VSLA Training in The Willows village)**

The last savings group workshop was on the 11th of June 2020 in Willows facilitated by Nqe, Mazwi, Bigboy, Betty, and Thembani. The Willows group had about 26 people who attended the workshop; they were taken through the rules and regulations of a solid savings group. A management committee was elected during the workshop.

Moses Mogofe, a resident and a farmer in the Willows village came up with ways on how their savings group can use their saving to make more profit; he mentioned they can buy local cattle at a low prices of R5 000 and sell them at R9 000 after a few months, as long as they are in good condition. He further explained that he also knows somewhere where they can sell the cattle since they have been calling him wanting to buy his cattle. They agreed that they will meet again after the workshop to properly elect their management committee so the money box and booklets of the saving group were given to them.

The 6 members of the management committee are as follows;

- (1) Chairman: Kgaogelo Mahlako,

- (2) Secretary: Mogefe Moses,
- (3) Vice Secretary: Letswalo Motlatso,
- (4) Money Box Keeper: Shai Mokgadi,
- (5) Money Counter 1: Mogofe Pedetsi,
- (6) Money Counter 2: Mahloko kholo

The pictures below were taken on the 11th of June 2020 and they illustrate the settings of the workshop in Willows with both pictures showing the facilitators and the participants.

#### 5.3.2.3 Frequently asked questions

In all the workshops conducted in the villages in the Lower Olifants basin, there were certain questions that were asked by al groups regarding the savings process. The questions are as follows; “What happens if a member of a savings group dies?”, “What if a member buys only shares and does not take out loans?”, and “What happens if a member fails to repay the loan?”. The answers were carefully elaborated by Nqe Dlamani for better understanding of savings groups.

For the first question; Nqe mentioned that it is good if a member passed on without having any outstanding balances but if it is not the case, the savings group will have to accept that they have lost. But if a member passes on while having shares in the group, the amount of the money of shares will be given to the family of the deceased person.

For the second question; Nqe used two different members of a certain group as an example; one member who only buys shares and doesn’t take out loans and the other member who does both. He mentioned that those two members will benefit differently at the end of the year when share out occurs; a member that buys shares and takes out loans will benefit more than the member who doesn’t, because that member can be able to buy a fridge and a stove for example, in the middle of the year using the money from the loans that he/she has taken and also get a certain amount of money at the end of the year.

For the last question, Nqe used the record keeping books to show that each one has the rules written out at the beginning that a member signs before starting saving. This is like signing a legal contract and members who do not repay loans can be taken to court. A person is given at most four months to repay the loan, Nqe advised the savings groups in different villages that they should not allow a member to go to month three without paying anything, by that month the group should call a meeting for the member to have a talk with the person. For all the villages that had savings groups workshops before and had also started with buying of shares and taking of loans they had the same problem of how to pay back the loans which includes the interest rate of the loans. Some of the savings groups had a problem of understanding the interest rate of the savings groups, they were not understanding if the interest rate is meant for one person or for the whole group.

Nqe used the picture on the left as an example to the savings groups to answer the question of the two members in the same group wherein one member of the group is taking out loans and is also buying shares compared to the one who is not. With member number 1 having 75 shares and 5 having 77 shares at the end of the year, member 1 is only buying shares and not taking loans and member 5 is both taking out loans and buying shares. At the end of the year member 1 will have a share of R12 000 whereas member number 5 will benefit a R12 320 plus a fridge and a stove.

Some groups and in particular Willows and to some extent Sedawa are already integrating enterprise development in their plans. Cues for starting enterprise development training (Street Business School – SBS) were very clear during the training workshops. We need to develop a plan to integrate SBS during group supervision starting with the groups that are ready to do so. However, the priority should be supporting groups to master saving meetings and recording of transactions.

We should build monitoring tools and an evaluative tool to track the performance of the savings groups and how they integrate into the CRA programme. This tool can be designed in such a way that it provides data for a research paper if we decide to publish in the near future.

## 5.3.3 VSLAs: Summary of progress to date

As the groups are still new and new members have come on board for most groups, since the training and initial meetings, a review of the operation of savings groups was undertaken. The summary included;

- the goal of a savings groups,
- governance of a savings group;
- operations of a savings group,
- savings meetings procedure, i.e. buying of shares, taking and repaying loans, calculation of closing balances and recording of all transactions;
- share-out (group fund dissolution) meeting procedure,
- co-operative buying, and
- dealing/fining of transgressors

In addition, most groups were somewhat confused about the interest charge on loans as it is cumulative over three months, rather than being a flat rate of 10% for example. Below is a diagram that was used in the sessions to explain how to calculate the interest, that assisted members to understand the process.

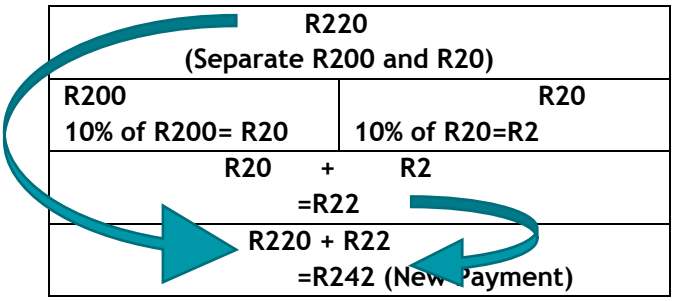


*Figure 48: Table demonstrating the calculation of the 10% interest.*

In addition, each group was supplied with the following tables to use to calculate the interest.

| AMOUNT | INTEREST |
|---|---|
| R10 | R1.00 |
| R20 | R2.00 |
| R30 | R3.00 |
| R40 | R4.00 |
| R50 | R5.00 |
| R60 | R6.00 |
| R70 | R7.00 |
| R80 | R8.00 |
| R90 | R9.00 |

| AMOUNT | INTEREST |
|---|---|
| R100 | R10 |
| R200 | R20 |
| R300 | R30 |
| R400 | R40 |
| R500 | R50 |
| R600 | R60 |
| R700 | R70 |
| R800 | R80 |
| R900 | R90 |

The table below outlines the progress to date.

*Table 3: Summary of VSLA progress in Limpopo, July 2020*

| Village | No of members | Group name | Cumulative savings since start | Loans taken | | Loans repaid | Comments |
|---|---|---|---|---|---|---|---|
| Worcester Start date: June 2020 | 16 | Rutanang (Teach each other) | R3 000 | R1 800 | | R880 | Re-cap of loan and repayment process |
| Santeng Start date: July 2020 | 13 | Rekakgona (We can make it) | R1 200 | R0 | | | Re-cap of loan and repayment process |
| Sedawa Start date; March 2020 | 19 | Sedawa group | R20 100 | R21 950 | | R20 050 | Need careful adherence to rules- too many irregularities |
| Willows Start date: June 2020 | 26 | Epopeng (Bunch of things) | R3 000 | R0 | | | Review of whole SG process for members |
| Turkey Start date: July 2020 | 19 | Tšwelapele (Going forward) | | | | | Review of whole SG process for members |
| Turkey Start date: July 2020 | 19 | Refentše (We have conquered) | | | | | Review of whole SG process for members |
| Madeira Start date: August 2020 | | | | | | | Review of whole SG process for members |
| **SAVINGS TO DATE** | | | **R27 300** | | | | |

*Figure 49: Above Left and Right: VSLA meetings in Sedawa and Worcester respectively.*

## 5.4 Networking and stakeholder engagement

### 5.4.1 Stakeholder engagement

The following processes have been engaged in:

- **AWARD:** Co presentation, with Derick du Toit (AWARD) and John Nzira (Ukuvuna), of a webinar entitled 'Building networks and skills for climate change preparedness with small scale farmers in the Olifants river catchment' on the 16th June.
- **The Nova Institute**: Further refinement of a joint proposal (Attie van Niekerk and Hendrik Smith) for a full feasibility study to develop the smallholder mango marketing chain in the area to be presented to AgriSA. A copy of this proposal is available on request.
- **K2C**: Liaison with Cindy Koen from K2C, to incorporate the work for MDF in the "from the region for the region' marketing platform.
- **The Hoedspruit Hub:** Finalisation of the organic Mango production training for three groups
- **The Hoedspruit PGS:** Bimonthly web-meeting was held on the 21st of July. Learning workshops have been planned, in collaboration with AWARD, for 3learning groups during August 2020 (Sedawa, turkey, Willows), to enable these groups to register for PGS certification
- **Agroecology South Africa:** this civil society networking and policy support group has now been formally constituted and a vision and principles document has been created**.** In addition, a civil society statement on the Supplementary Budget and the implications for food security and land reform has been prepared and endorsed by a wide range of organisations, including MDF. (A copy of this statement is provided in section 8.2)
- **C19 coalition:** Continuation with the process of meetings and negotiation for provision of support to smallholder farmers with the Minister's Office. Development of work streams for development of advocacy materials and involvement in the Agroecology practices work stream with around 19 other organisations.
- **Local Food systems:** Creation of an interest and working group to explore principles, approaches and joint activities in promoting and implementing local food system processes and projects, with a membership of around 18 civil society organisations. The intention is to create an alternative development paradigm for smallholder farmers, spearheaded by like-minded organisations supporting agroecology and food sovereignty principles.

# 6 Monitoring, evaluation and learning (MEL) plan

## 6.1 Framework & indicators

Below is a summary of implementation according to our indicators for May-August 2020

| Indicator | Overall target | Actual (May-August 2020) |
|---|---|---|
| No of participants in learning groups | 370 | 112 |
| No of learning groups | 9-12 | 10 |
| -No of local facilitators | 6 | 6 |
| Percentage of participants engaged in CC adaptation responses | 1-2 (45%)<br>2-3 (25%)<br>>3 (10-15%) | <br>42%<br>20% |

| | | |
|---|---|---|
| No of participants experimenting with new innovations<br>-local<br>-co-designed | <br>15%<br>45% | <br>9% |
| No of participants showing increased knowledge | 35% | 61% |
| Percentage of participants engaged in collaborative activities (water committees), marketing) | 35% | 54% |
| Percentage of participants with improved livelihoods<br>-increased availability of food<br>-increased income<br>-increased diversity of activities and livelihoods options | <br>40%<br>5%<br>5% | <br>62%<br>45% (most farmers w water have increased production for sale)<br>4% (drying, livestock) |
| Qualitative assessments;<br>-stakeholder engagement<br>-Increased understanding and agency to act towards increased resilience<br>- Adaptation and innovations into local context<br>-Potential for increased resilience<br>-Social engagement | Stories, case studies (5-6), CC impact summaries (4), best practices booklet | |

# 7 Work Plan for Milestone 4

Below a brief assessment of progress for each of the activities mentioned for the May-August workplan is provided.

| | |
|---|---|
| 1. Set up mango production training for 2 groups (30 each) in association with Hoedspruit Hub (May-June 2020) | Training done for 3groups x 20 participants (July 2020) |
| 2. Order and deliver mango trees according to list of trees and participants prepared (May 2020) | Done. 146 Mango trees delivered to 39 participants from Turkey, Sedawa, Worcester, Willows and Santeng) |
| 3. Finalise CA and field cropping monitoring for 35 participants across 4 villages | Done and reported on in Milestone 2 |
| 4. Set up learning groups and identify and induct local facilitators for new villages | Done |
| 5. Order materials and tunnels to support in the training and learning activities (May 2020) | Done. Materials from BUCO still on order – Shade netting and bone meal has been unavailable- necessitating postponement of tower garden training |
| 6. Recap of agroecology/permaculture training workshops for existing groups and start on training for new groups; (garden layout, soil and water conservation, soil fertility, bed design, mixed cropping, shade cloth tunnel construction) (May- July 2020) | Done. Learning workshops conducted in 5 villages (Santeng, Willows, Turkey, Sedawa, Finale), on trench beds, liquid manure, soil fertility, contours, furrows and ridges and winter cover crops. |
| 7. Do VSLA training for the 5 new savings groups set up in February 2020. Monthly mentoring during group saving meetings is to be undertaken. (May- July 2020) | Done. VSLA training for 7 VSLAs across 6 villages (Madeira, Sedawa (2), Turkey 1 and Turkey 2, Santeng and Willows) |
| 8. Initiate garden monitoring after training and learning sessions | Not started yet. |
| 9. Initiate beneficiary selection and training in construction of shade cloth tunnels (June 2020) | Done. Tunnel construction will start in the 3rd week of July |

## 7.1 Work plan for August to November 2020.

MDF strongly believes that our presence in the villages where we work is crucial within these difficult and uncertain times, both to continue and strengthen the agricultural work and food production of the

participating farmers and also to provide social support and commentary on the effects of COVID-19 and South Africa's national strategy.

We propose thus to continue activities, as responsibly as possible, within the strictures of present legal and health directives. Large gatherings and cross visits will therefore be put on hold for at least 4 months and networking and communication through SMS and WhatsApp groups will be given attention.

Below a brief work plan is presented:

1) Initiate construction of shade cloth tunnels (19) (July - September 2020)
2) Set up new learning groups and run climate change impact workshops in Ntshabeleng, Butswana and Balloon and/ or Molalane (August 2020)
3) Set up a new learning group in Botshabelo and select a new Local Facilitator (August 2020)
4) Run CCA planning workshops in Madeira, Worcester and Santeng (August-September 2020); including the five fingers monitoring framework
5) Run PGS training workshops in partnership with AWARD in Sedawa, Mametja, Willows and Turkey (August 2020)
6) Attendance and monitoring at monthly VSLA meetings x 7 (August- November 2020)
7) Learning and mentoring workshops in agroecology and CRA practices; including tower gardens and natural pest and disease control in 6 villages (August- November 2020)
8) Compile a proposal for support in water provision activities in Santeng, Sedawa 2, Turkey 1 and Madeira)
9) Continue weekly organic vegetable marketing process with Hlokomela (August- November 2020)

# 8 Appendices

## 8.1 COVID-19 social survey report

### 8.1.1 Survey responses

Villages; Finale, The willows, Santeng, Sedawa, Turkey, Madeira, Worcester
No of respondents: 43
Female – 65%
Age; 39-72

#### 8.1.1.1 Sense of resilience

1. Stress level 1-10

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 9 | 2 | 3 | 1 | 11 | 1 | 3 | 3 | 2 | 8 |

2. Agricultural activities undertaken
   - Growing vegetables; spinach cabbage, kale, tomatoes, green peppers: 21
   - Field cropping; harvesting summer crops (Maize, beans, cowpeas): 8
   - Cleaning household and yard: 3
   - Looking after livestock: 0

Vegetable production was limited to those villages who have some access to water. Notable for lack of access were Finale, Santeng and Worcester, where the struggle for everyday household water consumed most of their energy.

3. Required support (Finale)

This question was not answered by all participants. It related to immediate support that participants would need. Responses are listed below in order of importance

| Required support | No of respondents across all villages |
|---|---|
| Food parcels | 18 |
| Sanitizers and masks | 13 |
| Seedlings | 10 |
| Water for gardening (filling of Jo-Jos- requires access and payment) | 5 |
| Fencing | 4 |
| Assistance with transport to town | 3 |
| | |

#### 8.1.1.2 Social isolation and community

| | **COVID-19 information** | **Strongly Disagree** | **Disagree** | **Neutral** | **Agree** | **Strongly Agree** |
|---|---|---|---|---|---|---|
| | I am not worried about being infected | 16 | 1 | 5 | 14 | 6 |
| | I am confident that my family members and I would recover if we were to be infected | 2 | 6 | 5 | 26 | 4 |
| | I have access to accurate facts and information on when to get tested | 15 | 3 | 5 | 16 | 4 |
| | I have access to accurate facts and information on when to self-quarantine | 12 | 0 | 3 | 22 | 5 |

| | |
|---|---|
| COMMENTS | No access to real facts, just what we see on TV and hear on the radio and from our neighbours |
| | They have information about testing because health care workers gave them a number to call from if they ever feel like they are infected. |
| | Always in fear of getting infected and not sure that they will recover if they get infected since people are dying. |
| | family members have assisted by fetching her medication, attending funerals and shopping |
| | People continue support local business even though they have reduced their way of spending as most work temporary jobs. People also adhere to social distancing as they don't know who is affected and who's not. He doesn't feel safe going outside his household |
| | It was mentioned by health workers that there is no cure for the virus,<br>Information shared is confusing as one said there is no cure but on the news they state a number of people who recovered, is there any information that they are no told that is hidden. |

| | **COVID 19 community response** | **Strongly Disagree** | **Disagree** | **Neutral** | **Agree** | **Strongly Agree** |
|---|---|---|---|---|---|---|
| | My community has banded together during this time | 28 | 1 | 6 | 8 | 2 |
| | I want to continue supporting my local businesses | 5 | 0 | 1 | 31 | 2 |
| | Social distancing has not had a negative impact on my community | 12 | 5 | 3 | 11 | 8 |
| | Vulnerable members of my community are well-supported during this time | 31 | 1 | 6 | 7 | 0 |
| | I feel safe when I go outside / to the shops during this time | 31 | 2 | 6 | 3 | 0 |
| COMMENTS | We wish to visit old people to help them, but we are scared because we haven't been tested for the virus | | | | | |
| | Social distancing help because the virus cannot be spread but hunger is killing us | | | | | |
| | We can't go to the shops due to lack of transport and because we are scared to get infected | | | | | |
| | Social distancing has not had a negative impact on my community because it has helped with the control of alcohol which then lowered the rate of crime in the communities | | | | | |
| | There is no-one to take care of the vulnerable members of the community | | | | | |
| | We do not feel safe going to town as we aren't sure whether we will get the disease or not | | | | | |
| | Social distance has negatively affected the business around the community | | | | | |
| | Child headed and vulnerable houses holds are not assisted in the community and food parcels are only given to households with one child. | | | | | |
| | Covid-19 has an impact because we don't meet and advise each other on certain things. Poor people are not being assisted, the keep on assisting the rich who can afford. | | | | | |
| | Community can't band together during this time as people are not allowed to move so how can they help each other. Covid-19 is having a negative impact on the community because she can't get customers. | | | | | |
| | People buy chickens on credit for R60, allowed to take from 5 chicken going up on credit. Food parcel are being given to the people. They register from the council for food parcel. | | | | | |

1. What are the top three concerns re social distancing?

| | |
|---|---|
| Social grants; not sufficient for need | 2 |
| Education; children can't go to school and no provision is made for them | 1 |

| | |
|---|---|
| Farming; access to farming fields, inputs, marketing | 7 |
| Food: scarcity in shops and locally, long queues | 1 |
| Water scarcity | 2 |
| Transport; difficult to get transport to town | 3 |
| Staying at home and doing nothing; leads to depression | 4 |
| The economy is being destroyed | 4 |
| Unable to visit banks to be able to make payments such as loans | 1 |
| Not being able to see our children | 7 |
| There is no full proof way to protect yourself | 1 |

#### 8.1.1.3 Employment and income; Livelihoods

| | **Livelihoods impacts** | **Strongly Disagree** | **Disagree** | **Neutral** | **Agree** | **Strongly Agree** |
|---|---|---|---|---|---|---|
| | My job / work/informal trading/farming is not at risk | 19 | 8 | 3 | 9 | 3 |
| | My spending habits have not changed | 23 | 7 | 2 | 8 | 2 |
| | I am confident that I can continue providing for my family | 6 | 11 | 12 | 12 | 1 |
| | I am not worried about the impact of COVID-19 on the economy | 25 | 7 | 4 | 1 | 1 |
| COMMENTS | We depend on farming for income and don't have enough money to buy food | | | | | |
| | We cannot sell our crops, the only demand that seems to be high is for vegetables | | | | | |
| | I am now spending more money on food as more people are home and also have to travel to town twice to get the monthly supplies, because of the restrictions. Prices have increased. | | | | | |
| | We cannot afford the higher prices as we are reliant on social grants | | | | | |
| | Some businesses have closed, so access to supplies is difficult | | | | | |
| | There is insufficient water in the community | | | | | |
| | The government has helped with the addition to social grants to help buy food supplies | | | | | |
| | Some people still think that they will be able to provide for his family even though it will be tough and will have to cut on other things just to prioritise essentials | | | | | |
| | There is not enough food to feed my family | | | | | |
| | worried about the economy because the disease keeps on spreading and infecting more people | | | | | |

| | **Access to food** | **Strongly Disagree** | **Disagree** | **Neutral** | **Agree** | **Strongly Agree** |
|---|---|---|---|---|---|---|
| | I am confident that I can continue to afford food and supplies | 16 | 2 | 16 | 8 | 0 |
| | I am confident that my household can continue to access to basic utilities and services (e.g., internet, electricity, transport, water) | 11 | 4 | 17 | 10 | 0 |
| | I do not see the need to stock up on bulk-buy supplies | 19 | 6 | 3 | 7 | 1 |

| | | | | | | |
|---|---|---|---|---|---|---|
| | I am confident that my household will not run out of food and supplies | 12 | 5 | 11 | 3 | 0 |
| COMMENTS | We have no source of income except for farming, we cannot access grants | | | | | |
| | We see a need for bulk buying during this time, so that we will have enough food, but cannot do so as we rely on the pensions for an income and there is not enough | | | | | |
| | I am not confident that we won't run out of food, since we don't have money and can't provide for our family | | | | | |
| | I am supported by my children, who are currently at home, so there is insecurity as to whether our quality of life will go down | | | | | |
| | We are in fear of being unable to support our family, the only option is to sell livestock, but those were for lobola and we should not sell them | | | | | |
| | not be able to continue to afford food and supplies if the disease is not controlled. Stocking up on supplies is not a problem if one has money. | | | | | |

| | **Production impacts** | **Strongly Disagree** | **Disagree** | **Neutral** | **Agree** | **Strongly Agree** |
|---|---|---|---|---|---|---|
| | I am confident I can continue with my agricultural production activities | 8 | 3 | 2 | 22 | 3 |
| | I am confident that as a family we can produce enough food for our household | 7 | 3 | 4 | 25 | 2 |
| | I am confident that I can access the inputs and supplies I need to continue farming activities | 12 | 8 | 11 | 9 | 0 |
| | I have enough support to continue and intensify my productive activities | 15 | 11 | 12 | 4 | 0 |
| COMMENTS | Traveling to buy seedling is a problem because they don’t have permits. | | | | | |
| | If we can get seedlings, we can continue with our farming. | | | | | |
| | Not sure if will continue farming because we don’t have agricultural tools and water and also seed/Seedlling | | | | | |
| | I am confident that if I get some support, that I can continue with farming | | | | | |
| | Not confident that I will continue to provide for our household because of longer able to move around and sell products. | | | | | |
| | working together with other small holder farmers sharing seedlings and seeds. fear of not getting enough seeds/seedlings, people sell in the community and will run-out production to provide both at home and in the community | | | | | |

#### 8.1.1.4 Agricultural production

Production for respondents has not been significant. Mostly they mentioned being able to continue supplying food for themselves for the following 2-4 months if things continue as is. Garden sizes are mostly small < or equal to 100m$^2$. Around 6 respondents have larger gardens 200-4000m$^2$ and they have enough produce for household use and sale, making between R100-R500/week on average
Crops grown include: Sweet potatoes, green beans, onions, spinach, cabbage, kale, tomatoes, beetroot, chillies, green pepper, carrots and lettuce.
Towards the end of May 2020 a marketing process was initiated to assist the Hoedspruit trust to supply fresh produce in their food parcels and also to sell to individuals in town.

# 8.2 Agroecology SA: Civil society statement

AE AGROECOLOGY SOUTH AFRICA

Civil society catalysing the transition to agroecology

**Civil society statement on the Supplementary Budget and the implications for food security and land reform**

30 June 2020

**Context: engulfed by multiple crises**

The Minister of Finance has announced an austerity budget at a time when the fissures of unresolved historical inequality, poverty and suffering are made so much sharper. The lives of people are going to be made so much worse, at a time when redistributive and social measures are needed most. It is shocking that these measures are not the focus of the budget, despite the fact that the pandemic has exposed the vulnerabilities and inequalities in the society, and will deepen these issues with income loss, prolonged hunger and other negative health and social impacts. Instead the government is aiming to go from deep debt to a budget surplus in as little as four years, which is short-sighted and unlikely and will rather reinforce and perpetuate societal ills.

The Supplementary Budget was passed in the context of multiple, deep-seated economic, ecological, social and political crises in South Africa and globally. These crises reveal the apparent incapacity of the late capitalist system to deliver on the needs of diverse populations in complex societies. They have revealed the extent of corporate-financial capture of the state, in South Africa as much as in the US and Europe. We know the coronavirus pandemic is but one of a series of shocks to come, with the climate crisis already manifesting daily in a variety of morbid symptoms. The pandemic harshly exposes the vast and deepening inequalities in society, especially in the era of rampant militarised neo-liberalism and the unchecked rule of finance capital. The pandemic has shown the limitations of 'the market' in meeting the needs of humans and the ecological systems we are embedded in. It lays bare the structural problems with the global food system, the manner in which food is produced and the unequal power relations in global value chains. By so doing, the global crisis in the food system starkly reveals the grave problems with international trade relations and within institutions like the World Trade Organisation and the International Monetary Fund.

The budget is also framed in the context of a deepening debt crisis, wrought on by neoliberal policies advected by the International Monetary Fund and international and bilateral trade agreements exemplified in the economic partnerships agreements. This crisis is of the African National Congress's making over the past 10 years in particular. Where did the borrowed money go? We would at least expect some greater level of infrastructure and services, but the pandemic has revealed the failure of the government to respond to the needs of society these past years. The rich grow richer, and the poor grow poorer, even in the presence of a so-called 'developmental state'.

Corruption and nepotism are rampant and unchecked at all levels of society. Even emergency food relief has been fair game for embezzlement. There is no shame. Farmer support programmes such as the Comprehensive Agricultural Support Programme (CASP) and Ilima/Letsema have shown limited results despite tens of billions of Rands having been poured into them over the past

decade. Where land has been transferred, this is mostly without any further support forthcoming to settle on and use the land effectively and sustainably.

This state of affairs is evidence of a society that has been led down the wrong path. There is mismanagement and incapacity in the state even for basic functions, with the collapse of municipalities, non-functionality of entire departments and increasing irregularity of spending at every level. While we can acknowledge increases in social protection for the most vulnerable since 1996, this has also entrenched a reliance on the state, with many citizens constrained to being passive and disempowered recipients of government welfare rather than active participants in a democratised economy.

**Austerity: making the poor and vulnerable pay for the crisis**

President Ramaphosa has offered platitudes about a new society and a "new dawn" arising from the ashes of the pandemic, reiterating this message in the budget which says government is "resolved not merely to return our economy to where it was before the coronavirus, but to forge a new economy in a new global reality". We have understood the President's message to have meant that the pandemic has taught us about the failings of the industrialised production system that exploits the planet and the poor for profit. We had hoped this new dawn would include laying the foundations to ensure a rapid transition to a more resilient society where the wellbeing of every person counts, and the regeneration of the living earth systems on which we depend. However the budget shows more of the same: first stabilise the economy - which implies imposition of an austerity budget that is wholly inappropriate and unsuited for South Africa, especially as we face this health crisis – and then the benefits will "trickle down" later. The proposed budget entirely overlooks advice given by academics that government spending can bring about stimulus. For every "R1 billion government spends, gross domestic product (GDP) increases by R1.68 billion and 6,900 jobs are created. This means that spending 6% of GDP, R305.6 billion, would increase GDP by R513.4 billion and support the creation of 3,542,460 jobs."[1] Setting aside the fantasy of a budget surplus within the next three years, the logic of the Supplementary Budget is the same as that which misled us with GEAR in 1996, resulting in 24 years of widening inequality, and a widening gap between decision-makers and the mass of the population. State-society relations are filtered through party structures that act as a buffer between political elites and the mass of the population. This has created a political system characterised by lack of accountability, lack of trust in the people, and exclusionary, opaque, and undemocratic planning and decision-making. The budget is doubling down on the strategy of permanent austerity and policing the response of the poor. We call for immediate resistance to entrenchment of these austerity measures in the medium-term budget framework.

**Food security, land reform and small-scale producer support**

Government's remote and out of touch approach is nowhere clearer than in the deep cuts made to the budget of the Department of Agriculture, Land Reform and Rural Development (DALRRD). In essence, funds that were previously allocated to land reform, food security and rural development have been redirected to military and police spending in anticipation of increasing deployments onto the streets. The Defence and Police budgets have been increased by a combined R5.6 billion, while the DALRRD budget has been slashed by R2.4 billion, and Environment, Forestry and Fisheries by R766 million. According to Minister Didiza, Food Security had cuts of R939 million, Land Redistribution and Tenure Reform R544 million and Land Restitution R403 million, and provinces will receive lesser allocations for producer support for production and infrastructure. Again, this is familiar territory: we have just gone through years of public hearings and deliberations on land expropriation without compensation, but once again, nothing has come of it. Political elites have again shown that they will raise issues before elections for votes with no intention of following through with these proposals in reality.

Agricultural development is a primary industry and fundamental economic driver, especially from the low base we are now looking at. Productive employment to producing food which in turn creates a new economic growth node is crucial right now. Yet the budget appears to anticipate and prepare for food riots rather than rededicating resources to growing clean food in an environmentally sustainable manner, which implies an enormous increase in small-scale ecological farming, as advised by the United Nations Food and Agriculture Organization and called for in the Sustainable Development Goals, which the government has endorsed. Allocations to small-scale producers, and appropriate rural infrastructure are precisely the kind of investment needed to mitigate and weather predicted future shocks, especially if an agroecological approach is adopted, as civil society has called for. Instead, the supplementary budget provides a band-aid in social grants that, while of value, are set at low amounts that at best makes up for food price increases that have enlarged corporate coffers, especially in retail.

In the same manner, we are concerned with the Department of Environment, Forestry and Fisheries (DEFF's) budget cuts, which penalise the already under-funded small-scale fisheries sector. While Minister Barbara Creecy and DEFF officials continue to promise that support and capacity building programmes will be provided to develop the sector, no provisions are made in this budget to provide relief to small-scale fishers. Further cuts of over R88 million are made to the Fisheries Management Programme, at a critical moment where additional capacity is needed to meaningfully implement the coastal Small-scale Fisheries Policy and to develop and implement a legal and policy framework that will recognise the livelihood and food provision activities of small-scale fishers operating on freshwater bodies.

We view the DALRRD budget cuts and reallocations as an act of bad faith. Only a few weeks ago Minister Thoko Didiza and Director General Mdu Shabane expressed strong support for an orientation towards household and local food security initiatives as part of the immediate crisis response and as an essential medium- to longer-term approach. The Department has claimed it wants to engage with civil society to review existing policy and programmes and to redirect support to local initiatives. We understand that they were compelled by the Department of Finance to make cuts, but when it came to the crunch, local food security and redistribution faced the largest cuts. There was no consultation whatsoever with civil society about what to do in this emergency. It is clear that there is a long way to go to build trust and meaningful engagement.

Despite commitments to civil society about the importance of an active population in local food security, the underlying logic of the budget cuts in DALRRD and DEFF is still that large scale commercial agriculture and fisheries, and corporate food production and distribution are viewed as the ultimate guarantors of food security in South Africa. This aligns with Agri SA which is boasting that food supply to supermarkets has continued without disruption through the pandemic and therefore that South Africa remains food secure. On the contrary, the pandemic has exposed the lie that full supermarket shelves equate to individual, household and local food security. High and rising prices at supermarkets and conditions of restricted movement have meant lack of effective access. The pandemic has highlighted the essential services provided by street traders, informal and small-scale distributors and retailers, and the crucial role of public sector food programmes, especially the National School Nutrition Programme. The pandemic has revealed and intensified the stark lack of effective access to food for large numbers in the population. The Constitution states there is a right to food. This cannot be some abstraction but must mean the right to food every day, for every person, to meet nutritional, health, social and cultural needs. Effective access to food for all must be the organising principle of food systems.

The budget includes a R3 billion liquidity bridge to the Land Bank, which blames rising costs and drought for reducing its income. This is another example of a string of bailouts for financial institutions which support unsustainable production models of commercial agriculture. We also

note with concern the pursuit of public-private partnerships (PPPs) (disguised as "blended finance") in order to direct (commercial) funding to developing farmers. This is the opposite direction to the one required and poses a massive threat to any chance of food sovereignty and promotion of local food economies. It opens the door for further privatisation of farmer support, and essentially defeats the object of the exercise by turning new farmers into vassals to the financial system. Bailout funds could be better spent to support agroecological transitioning and support for a majority of small-scale producers and local food distribution systems that have proven their importance as essential to ensuring the right to food during the lockdown.

**Alternatives: invest in the potential of the people**

What is required is investment in the innovative and productive potential and capacity of the diverse population, with popular agency in food systems at a human scale, and active involvement of the people. This was the spirit and promise of the mass democratic movement and the "people-centred development" of the 1994 Reconstruction and Development Programme, but which was allowed to dissipate without achieving traction in the material world. Today there is a woeful lack of participation in economic activity, with wasted human potential exemplified in extremely high youth unemployment and increasing economic disparities which fuel social violence including violence against women and girls. The pandemic offers an opportunity for the mobilisation of the whole society to respond to the crisis and to reorient the economy towards one that responds first and foremost to the basic needs of everyone in the society. But this is apparently not on the agenda of this government, with its preference for top down, remote and (not very effective) technocratic planning and decision-making, and its ceding of food systems to corporations to run and profit from.

**Call for a radical and people-centred response to the crisis**

In this context, we the undersigned insist on the following:

- We reject the redistribution in the supplementary budget from household and local food security to increased militarisation and policing of our society. We call for the **full restoration of funds** taken from household and local food security programmes, including for small enterprise support in ecological input supply, agroecological production, small-scale fisheries, processing, distribution and retail, and fresh produce markets situated close to end users, all managed in a participatory and decentralised way.
- We call on the Minister of Agriculture, Land Reform and Rural Development to show good faith by an **internal reallocation** of the revised DALRRD budget back to food security, land reform and integrated rural development.
- We call on the Minister of Environment, Forestry and Fisheries and the Department to make an internal budget reallocation towards the Fisheries Management programme, particularly towards the Small-Scale Fisheries Unit and its support and capacity building programme.
- We call for more **active participation** of popular rural movements, small-scale farmers and fishers, and other civil society organisations in decisions on budget allocations and programmes in DALRRD and DEFF, not just as recipients of decisions made by the departments.
- We call for the government to **publicly recognise the critical role** of rapid land redistribution, tenure security, release of commonage land, local food production and distribution, and democratised food systems as urgent responses both to the short term crisis of lack of effective access to food at individual, household and local levels, and to the increasingly urgent imperatives for a rapid and just transformation of the South African economy centred on the needs of the population, and empowering the population (citizens and migrants alike, regardless of status) as active participants in transformative actions.

- We call for a **participatory, rapid and critical review of producer support programmes** over the past 15 years, including Ilima/Letsema and CASP, the Land Development Support policy and other relevant policies, development of concrete proposals for revised, more transparent and participatory, land and producer support programming, and a commitment from the leadership of DALRRD to materialise revised producer support programmes in alliance with civil society.
- We call for **state capacity and budgetary support for agrarian reform** that is aimed at addressing the combined hunger, climate and water crises, and a producer support strategy that explicitly acknowledges the serious climate, biodiversity and related ecological crises by promoting ecologically and socially sustainable forms of production (agroecology, organic, biointensive, permaculture, biodynamic, regenerative etc) and the role of small-scale producers.
- While policy and programme reviews are taking place, we call for the identification and immediate **unblocking of bureaucratic bottlenecks** that inhibit farmers from accessing funds and other support for their farming activities.
- We note that farm workers, who have provided an essential service in ensuring the availability of food during the crisis, still face evictions and retrenchments in some places. We call for an **immediate moratorium on all evictions** in the midst of the pandemic, and for this moratorium to be extended into longer term tenure security for all even beyond the immediate crisis.
- We call on the government to **prioritise the livelihoods of rural farmers instead of pushing mining** as a source of jobs (particularly coal mining) given that mining displaces hundreds of people and negatively impacts on thousands who potentially have the capacity to feed themselves and their families. Mining is unsustainable and leaves behind devastated landscapes, contaminated water sources and polluted soils and air that are unlikely to be rehabilitated and will become a burden that rural communities will carry for many generations.
- We call on the government to initiate talks at continental and international levels to **challenge and undo the current balance of forces in international trade arrangements** that result in unequal returns for small-scale farmers and food producers in global and domestic value chains.
- We call on social movements, small scale farmer and fisher organisations and other community-based and **civil society** organisations not only to resist the austerity budgets, but also to **mobilise and organise independently**, without waiting for the state to act, to respond to the immediate food crisis and to continue to advance the longer term imperatives for democratisation of our food system.

**Endorsements**

Organisations:

Abelimi Bezekhaya
African Centre for Biodiversity (ACB)
African Climate Reality Project (ACRP)
Association for Water and Rural Development (AWARD)
Biowatch South Africa
Cooperative and Policy Alternative Center (COPAC)
Dijalo
EarthLore Foundation
East Cape Agricultural Research Project (ECARP)
Eategrity
Environmental Monitoring Group (EMG)
Food Equity, Equality and Democracy (FEED)
GenderCC Southern Africa – Women for Climate Justice
Global Environmental Trust

Good Food Network
Green Business College
Greenhouse Project
groundWork (Friends of the Earth, South Africa)
Hoedspruit Hub
Institute for Poverty, Land and Agrarian Studies (PLAAS), University of the Western Cape
Inyanda National Land Movement
Land Access Movement of South Africa (LAMOSA)
Mahlathini Development Foundation
Masifundise Development Trust
Mfolozi Community Environmental Justice Organisation (MCEJO)
Mopani Farmers Association
Natural Justice: Lawyer for Communities and the Environment
Ntinga Ntaba kaNdoda
One Voice of All Hawkers Association
Participatory Guarantee Systems South Africa (PGS-SA)
PHA Food & Farming Campaign
Phuhlisani
Rural Women's Assembly (RWA)
Seed and Knowledge Initiative (SKI)
Seriti Institute
Siyavuna Development Centre
Siyazakha Land Rights Forum
Solidaridad Southern Africa
South African Adaptation Network
Southern African Faith Communities' Environment Institute (SAFCEI)
South African Organic Sector Organisation (SAOSO)
South African Urban Food & Farming Trust
South Durban Community Environmental Alliance (SDCEA)
Surplus People Project (SPP)
Trust for Community Outreach and Education (TCOE)
Tshintsha Amakhaya
Ukuvuna
Umgibe Farming Organics
Umphakatsi Peace Ecovillage
Umsizi Sustainable Social Solutions
Unyaka Wakho Youth Foundation
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Buhle Mbatha
Busisiwe Mgangxela
Daniel Moody
Donna Hornby (Dr)
Erica Inches
Fikile Vilakazi (Dr)
Gareth Haysom (Dr), African Centre for Cities, University of Cape Town
Geoff Davies (Bishop), Patron of SAFCEI
Glenn Ashton
Jama Mashele, Nelson Mandela University
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C19 COMMUNITY RESPONSE
Relief to Resilience
african centre for biodiversity
Food Equity, Equality and Democracy
FEED
ABALIMI BEZEKHAYA
PLAAS
Institute for Poverty, Land and Agrarian Studies
award
COPAC
CO-OPERATIVE AND POLICY ALTERNATIVE CENTRE
EARTHLORE
SEED | JUSTICE | SACRED LANDS
The Green Business College
EATegrity
TIA
Farmer's Market
biowatch
SOUTH AFRICA
EMG
Environmental Monitoring Group
THE ADAPTATION NETWORK
MASIFUNDISE
GenderCC
Women for Climate Justice
Southern Africa
GOOD FOOD NETWORK
SOUTH AFRICA'S ORGANIC, ETHICAL FOOD ECOSYSTEM
phuhlisani
Umgibe
Farming Organics and Training Institute
eCARP
safcei
PGS
South Africa
mahlathini
development foundation
M.C.E.J.O
NATURAL JUSTICE
TSHINTSHA AMAKHAYA
Working together for rural change
OUR LAND AND
NOTHING ABOUT US
WITHOUT US
Rural Women's Assembly
We are the Guardians of Land, Life, Seeds and Love
PHA
Food & Farming Campaign
PHILIPPI HORTICULTURE AREA
UMSIZI


[1] Gilad Isaacs 2020 "South Africa is bent on austerity: there's a strong case that it should change tack." (https://theconversation.com/south-africa-is-bent-on-austerity-theres-a-strong-case-that-it-should-change-tack-135977 accessed 29/06/20).