

MAHLATHINI DEVELOPMENT FOUNDATION LEAVES A LEGACY OF ENHANCED LIVELIHOODS AFTER USAID RESILIENT WATERS PROGRAM GRANT

USAID Resilient Waters is a five-year, \$32-million project implemented by Chemonics International. Its goal is to build more resilient and water secure Southern African communities and ecosystems through improved management of trans-boundary natural resources and increased access to safe drinking water and sanitation services.

One of the strengths of the USAID Resilient Waters Program is the holistic view it takes of support to livelihoods development. Investment in smallholder farming will not be sustainable if it is not coupled with climate-resilient approaches, better land management, increased resilience of the entire water system, and increased equity and inclusion. With this focus, Resilient Waters awarded a grant to the Mahlathini Development Foundation (MDF) in January 2020, with an emphasis on building local livelihoods through strengthening institutions at the village level in the Mametja-Sekororo region of the Lower Olifant's basin in Limpopo. MDF supported community-based climate change adaptation (CbCCA) for improved livelihoods and resilience of project participants through the introduction and implementation of climate resilient agricultural (CRA) practices, the building of social agency and stakeholder platforms, and support for alternative income generation opportunities.

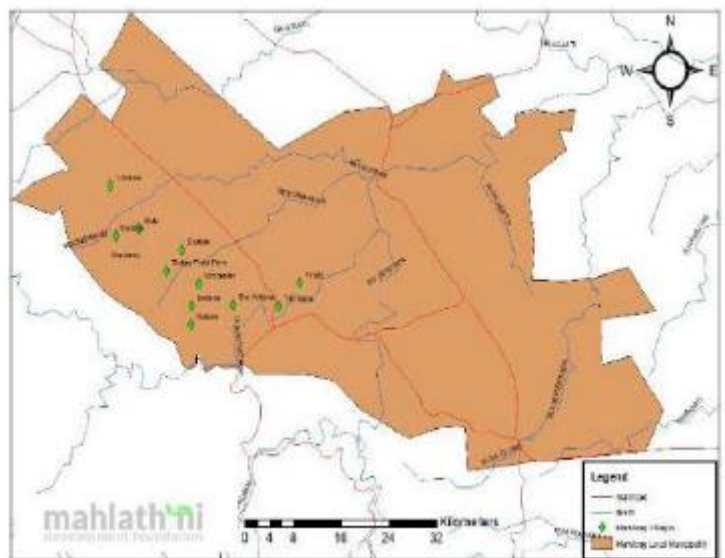


Figure 1: Maruleng Municipality, with 11 active village learning groups

MDF's holistic approach to supporting livelihoods through its grant from Resilient Waters centered around a five-pronged model for smallholder farmer support. In association with the Association for Water and Rural Development (AWARD), MDF developed a CbCCA strategy and methodology for smallholder farmer support under the USAID-funded Resilience in the Limpopo Basin-Olifants (RESILIM-O) program, and it expanded this model over the two years of its grant from Resilient Waters. The intention has been both to effect immediate positive change in terms of climate resilience and livelihoods for the beneficiaries and to fine-tune a model for implementation of CbCCA that can be upscaled in the broader environment and financed using a range of financial instruments. MDF's experience has shown that building the resilience of smallholder farmers to climate change cannot rely on one single pillar of work. While climate-smart agriculture may be effective in increasing yields, greater productivity does not, on its own, translate into more resilient households. Building sustainable and secure households that rely on gardens and adjacent businesses requires bringing together a range of skills and experiences. Through its Resilient Waters grant, MDF has brought together all the pieces

of livelihoods support into one integrated package to build rural resilience. This model acknowledges that supporting households requires multiple entry points and that what works in one community, may not work in another. Support must take a participatory, iterative, and adaptive approach, providing platforms to expand on programmatic areas of success.

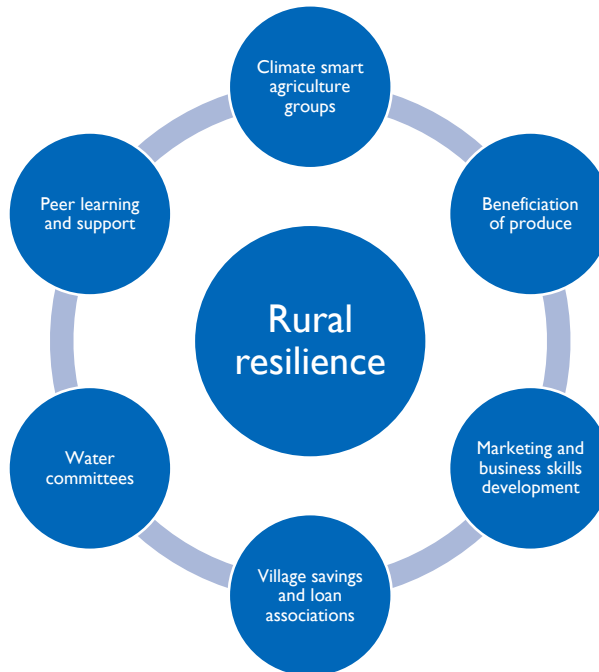


Figure 2: Innovation Systems Methodological Approach for Household Resilience, developed by MDF and codified by the MEL team.

To begin implementing the model above, a village-level assessment of climate change impacts and general natural resource use patterns is carried out. Secondly, an analysis of adaptive strategies and associated practices provides the platform for the implementation of locally derived and prioritized activities and CRA practices. Thirdly, learning groups are formed to 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 local marketing. The role of the USAID Resilient Waters Program has been to create and facilitate innovation platforms for local action in an environment of increasingly fractured social structures and immense economic pressures. The use of the smallholder farmer-level decision support system has ensured a locally motivated and owned agenda for action, with the potential for transformative adaptation that includes local stakeholders and service providers in the Communities of Practice (CoPs).

I. Climate resilient agriculture learning groups

All of MDF’s development work has Climate Resilient Agriculture learning groups (CRA-LG) as the foundation of community organization and building other means of livelihood support. Over the course of this grant, MDF has successfully introduced CRA-LGs in 14 of 33 villages in the Mametja-Sekororo region, working with 490 participants, of whom 69% are women and 11% are youth. These learning groups select from a menu of activities relevant to their context and include topics such as training on CRA techniques, the introduction of new crops, integrated water management, and understanding local food supply chains.

456 Participants have implemented CRA practices in some form or another. 86% of participants have engaged in more than three adaptation responses including, for example, improved rainwater harvesting, agroecological

food production, and integration of small livestock. 65% have improved their knowledge and skills through involvement in learning sessions on a range of topics. Of the 456 participants, 98 did not officially join the LGs but rather undertook practices as shown to them by neighbors and friends.

The outcomes have been extremely positive and have shown a marked improvement in food security, income generation, livelihoods diversification, and climate resilience for the participants:

- 19 new crops introduced are now being produced, and 22 new CRA practices (across the mixed farming system – gardening, field cropping, livestock integration, and soil and water conservation) have been implemented.
- 98% of participants have improved their food security.
- 13% of participants have increased and diversified their livelihoods, undertaking small on- and off-farm businesses.
- 65% of participants have been engaged in collaborative community activities (e.g., water committees, local marketing action groups, seed-saving networks, and savings groups).
- Farming activities have increased substantially for gardening (200%), fruit production (80%), and livestock production of both poultry and cattle (~100%).
- 55% of participants have improved their incomes. Average monthly savings have increased by R84 (approx. \$4.69), and average farming incomes have increased by R250 (approx. \$13.95). While seemingly small, these amounts are significant in an environment where people are food insecure at the household level, unemployed, and reliant on social grants for income. It is also important to note that this growth has happened exclusively within local markets, due to COVID-19 closures, and therefore reflects sustainable growth in the context of the pandemic crisis. Finally, these amounts do not rely at all on external funding and so can be sustainable in the absence of external funding.

Mmakopile Seotlo from Sedawa village is one of the residents who was not active in farming as she did not have money to buy water for irrigation. She is unemployed and sustains herself and her family on social grants. As a member of the village-based learning group and a beneficiary of the community-owned water scheme, she has become very active, and has increased her garden size from 600 m² to around 800m². She has implemented a wide range of MDF-introduced CRA practices including trench beds, mandala beds, mulching, mixed cropping, crop diversification, increased and improved fruit production, and cropping in a shade cloth tunnel. She plants for household consumption and selling of excess. Her grandchildren assist by selling tomatoes and spinach door to door in the village. With her increased average income of R500 per month, she is also able to pay the water committee the weekly R50 (approx. \$2.79) for pumping. Ms. Seotlo is very grateful for being part of this initiative and feels that her life and livelihood have substantially changed in the process.

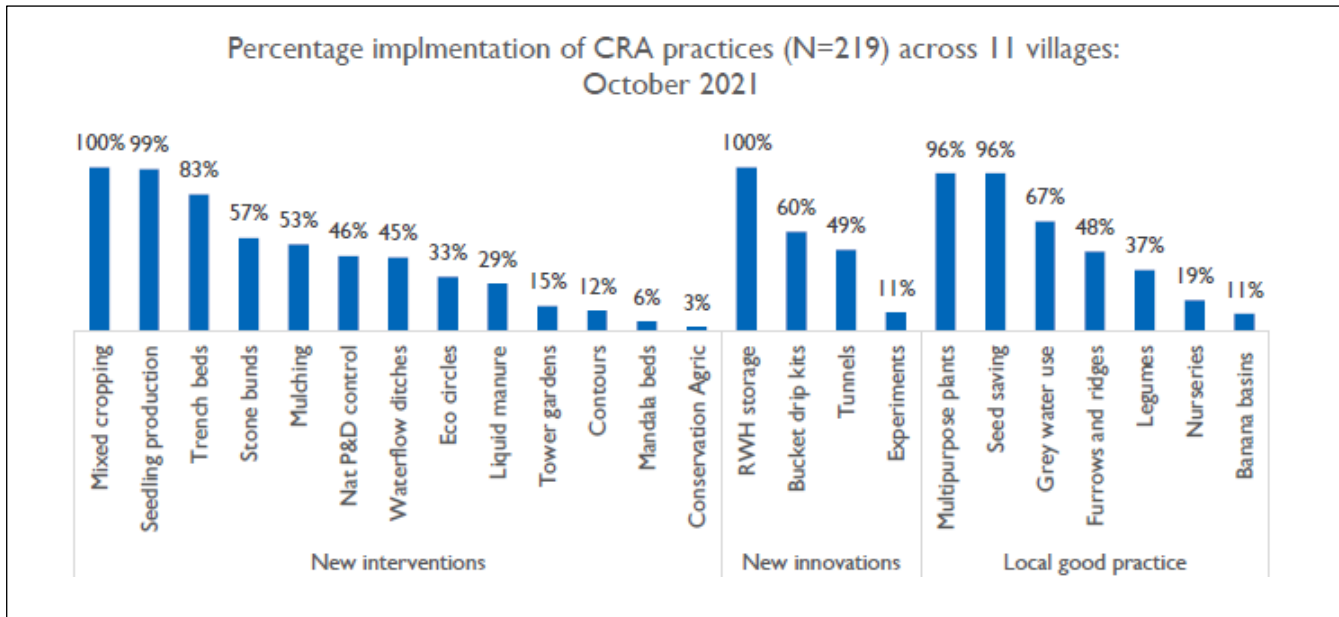


Figure 3: Levels of implementation of CRA activities by all learning group participants

2. Marketing and business skills development

To help improve the value of produce grown by the members of the CRA learning groups and increase profits for individual members, training modules were carried out on marketing and business skills development, and these skills were put into practice by a collaborative sales initiative, which reduces transport costs and allows for better management of stock. “Tala Tables” (green tables) are set up at strategic sales locations, and groups elect participants to manage sales. This allows farmers to receive payments for their individual stock but also lets the group collectivize the costs of transport and time spent at market. Finally, it allows the group to have continuity selling a well-stocked stall at a single location, and that reliability increases the customer base of the farming group.

3. Beneficiation of produce

Figure 4: Organic endorsement logo



Once the “Tala Table” has a presence in the community and is well stocked with common produce that is known and most frequently used in the community, members of the CRA-LG can introduce processed items to test their uptake. This process allows members to scale up their production based on demand and prevents investing too much in any one item. It also allows them the flexibility to improve the storage of seasonal produce. Jams, dried fruit, chutneys, and achaars allow members to increase their profits and diversify their sales slowly.

Additionally, MDF facilitated the registration of interested CRA-LG members as organic producers, which allows some produce to command a high price at the market. This happened in conjunction with the Tala Table presence so that members could inform the community about the advantages of organic production, and supply and demand could grow together.

4. Village savings and loan associations

MDF supported 10 village savings and loan associations (VSLAs) across six villages, with a total of 173 participants making more than R700,000 (approx. \$39,061) in new loans. Each participant saved nearly R5,000 (approx. \$279), which is more than six months of income for most members of the community. These loans smoothed consumption of larger household expenditures such as home maintenance and water storage and allowed many households to invest in small enterprises.

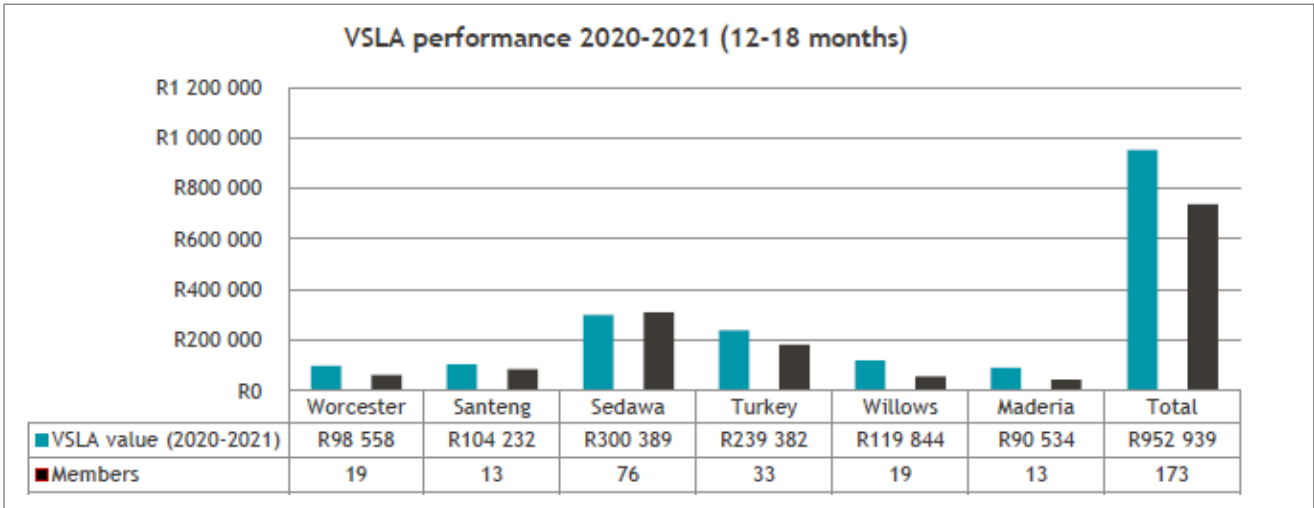


Figure 5: VSLA summary of group savings

16 small case studies have been conducted on enterprise development through the mentoring visits undertaken after the enterprise development training sessions. Participants took small loans ranging from around R5,000-R17,000 (approx. \$279-\$949) and used portions of their share outs to start small businesses ranging from broiler production and vegetable market stalls to sewing and hairdressing. All participants operated locally in their villages and made small profits ranging from around R200-R4,500 (approx. \$11.16-\$251) per month.

Sarah Mohlala from Turkey 2 village is one of the members of the VSLA. She increased her garden size and implemented most of the practices she learned from the learning group in terms of water, soil, and crop management. Examples of these practices include a shade cloth tunnel, mulching, compost making, use of liquid manures, and natural pest and disease control. She also practices roof rainwater harvesting (RWH) and has installed gutters and a 2,500l Jo-Jo tank at her home with a rotational loan payout. Prior to this assistance, she had given up farming, as she had repeated crop failures and could not afford to buy water for irrigation. Now she makes on average R300 (approx. \$16.74) per week from her produce.

5. Water committees

Only 5% of the residents of Mametja-Sekororo have access to municipal water. Due to a protracted drought in the area limiting access to surface water, households resort to buying water, and gardening activities are often out of reach for those who do not have access to private boreholes or springs.

Group boreholes are small community-owned and -managed schemes for the provision of multi-purpose water for household and productive use. Typically, a group of between nine and 50 individuals works together to have a borehole drilled and to install pumps, header tanks, and pipes to their homesteads. They then manage this supply themselves, and participants generally pay around R50 (approx. \$2.79) per month for pumping costs

and continued access. MDF, with support from the U.S. Embassy, provided support to two such schemes for the Sedawa and Turkey CRA learning group water committees.

Approach

A participatory and localized approach to building livelihoods has been key to the sustainability of MDF’s work. Each intervention is led by the association members, and learning and sharing are self-directed, so participants choose what they want to learn and share to support their livelihood aspirations. Knowledge, materials, and markets are all kept within the community to help facilitate sharing but also to ensure that travel costs or differences in context do not form a barrier to continuing the work of collective action after the end of the funded intervention.

“The Farmers’ learning group is a big change in our village. Farmers were used to minding our own business and keeping to ourselves, but now we are networking with each other, and even in other villages. We can work together sharing ideas, sharing resources, we are even no longer buying seeds because everyone is harvesting and saving seeds, so we know someone in the network will have them. It saves us from traveling so far to go and buy.” – Anna Mohlala, seed expert from Sekhukhune



Figure 6: 5 finger peer planning process

The process of promoting a basket of options of CRA practices, within the framework of the learning groups and farmer-level experimentation, has worked very well. Farmers have been able to try out and assess a range of practices and choose the set of practices best suited to their specific circumstances. In this way, farmers have included an average of between 15 and 22 new practices in their farming systems. The practices fall within the ambit of soil and water management, crop management, and natural resources management.

It has become clear that it is the combination of practices and synergies between these that have provided the largest impact on productivity, water use efficiency, and climate resilience. For example, the inclusion of trench

Nora Malepe from Sedawa was supported with a 25,000l underground RVH tank during the RESILIM-O intervention and has also benefited from the communal borehole. The underground tank has assisted her in farming into the winter season, and the borehole water has helped her to expand and sustain her production. She used to farm on 4x4.5m trench beds only. Now that she also gets water from the borehole, she has increased her garden size and stores water in a Jo-Jo tank, as she uses the water for both irrigation and consumption. She has implemented a range of CRA practices in her garden to improve her soil fertility and water management and now makes on average R250 (approx. \$13.95) per week from the sale of onions, tomatoes, spring onions, beetroot, and beans grown from her garden. She is forever grateful for what MDF has done to help change her life.

beds, mulching, mixed cropping, and drip irrigation in the implementation of shade cloth tunnels has allowed for a 300-400% increase in the productivity of vegetable production for the participating households.

“Mahlathini has taught us how to adapt to the changes in climate and how to work with nature to have beautiful gardens for producing healthy food and incomes. We now have water for both household use and irrigation. Working in these farmer networks has been a big change in our communities, as we now have a platform to work together and share knowledge and experiences”. – Niko Nkimane, farmer from Finale

CONCLUSION

The strength of Resilient Waters’ work lies in the Program’s multi-scalar approaches to each of its outcome areas. The Program focuses on improving protected area land management and transboundary water management to support basin-level improvements in water and sanitation management, soil quality, and a policy environment that will enable smallholder farmers to increase their productivity. At the same time, the Program works, through grantees, with the same smallholder farms to better understand their needs and to make sure higher-level policy debates resonate with the farmers whose livelihoods are ultimately in question.

The grants program has been the vehicle that has both allowed for the Program to continue implementation throughout the COVID-19 travel restrictions, and as we move into the post-COVID implementation period, it is the way through which Resilient Waters will ensure the sustainability of initiatives after the end of the Program. This ability to work across levels of engagement has strengthened the Program’s transboundary impact and means that the support to farmers like those who have been part of the CRA learning groups goes far beyond the individual experiences of the members participating. Through the grantee community of practice, as well as MEL work that has included sharing of good practices across a range of local initiatives in the region championing climate smart agriculture, natural resource beneficiation, and other integrated smallholder livelihood initiatives, each grantee’s localized work has benefitted from regional sharing.