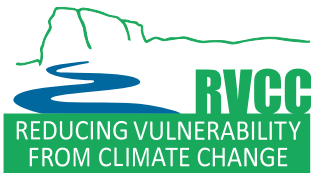


MOHALE'S HOEK COMMUNITIES REDUCE THEIR VULNERABILITY FROM CLIMATE CHANGE



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Senqu River meandering in Quthing District

The United Nations Development Programme (UNDP), in close collaboration with the Ministry of Forestry, Range and Soil Conservation (MFRSC), through financial assistance of Global Environment Facility (GEF), is implementing a project named REDUCING VULNERABILITY FROM CLIMATE CHANGE (RVCC). The Project is implemented in the Foothills, Lowlands and the Lower Senqu River Basin. The selected project sites are along the Senqu Valley in Mohale's Hoek, namely: Thaba – Mokhele, Lithipeng and Khoelenya councils.

Lesotho, like the rest of the world, is suffering the damaging effects of climate change characterized by the rising temperatures, a greater frequency of droughts and extreme rain events. The UNDP, in close collaboration with the (MFRSC), is implementing the REDUCING VULNERABILITY FROM CLIMATE CHANGE. The RVCC Project explores

various climate-smart land rehabilitation and management programmes and interventions in the Lithipeng, Khoelenya and Thaba-Mokhele Community Councils of Mohale's Hoek district. The project is aimed at assisting the Government of Lesotho to adopt environmental management practices that promote a low-carbon, climate resilient economy and society, sustainability in the management of natural resources and reduced vulnerability to disasters. It is intended to mainstream climate risk considerations into the Land Rehabilitation Programme of Lesotho for improved ecosystem resilience and reduced vulnerability of livelihoods of climate shocks.

From agricultural and ecological points of view, Lesotho is divided into four agro-ecological zones (Figure 1), namely, mountains (59% of Lesotho), foothills (15%), lowlands (17%) and the Senqu River Valley (9%) (CIAT and World Bank 2018; FAO 2005).

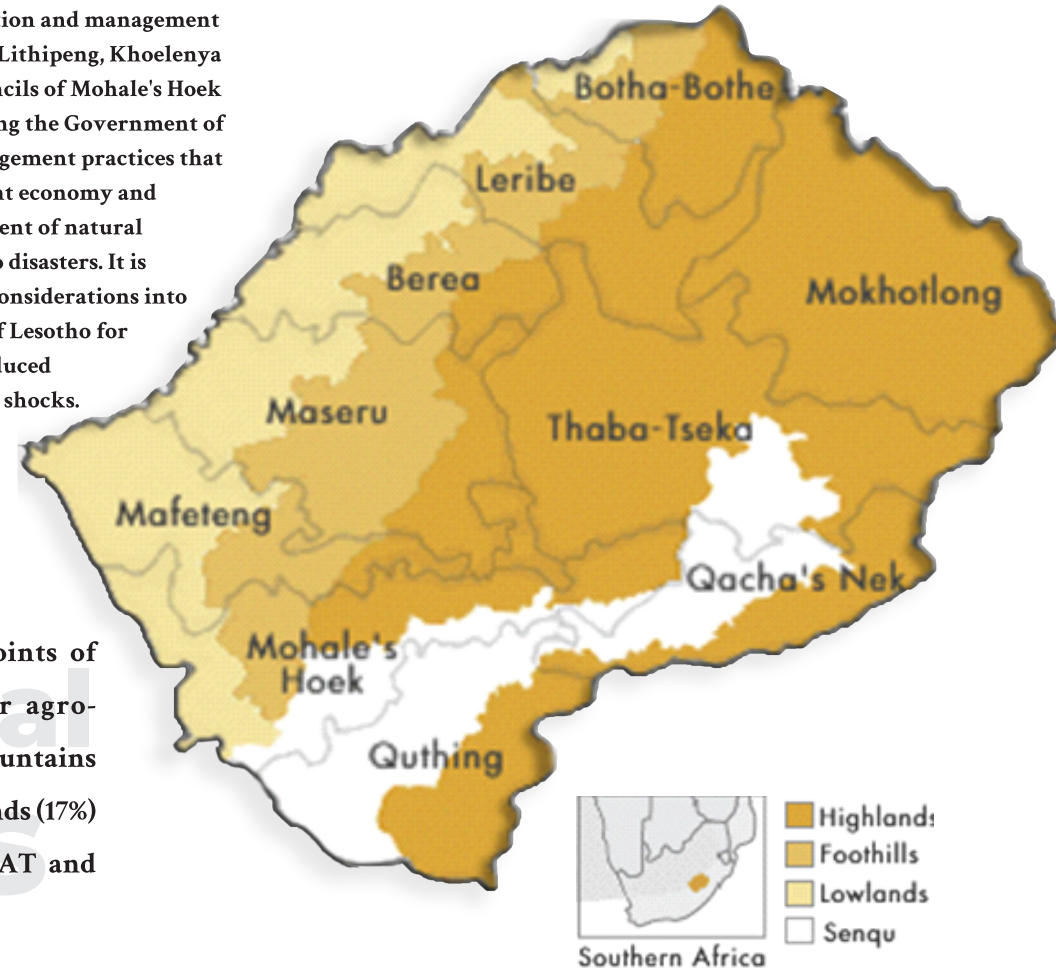


Figure 1: Lesotho's agro-ecological zones (Mekbib et al. 2017)

What are the Ecological Zones?

COMMUNITY OF HA RAISA TAKE THINGS INTO THEIR OWN HANDS

By: Lerato Loke / Lits'oeneng Tiheli / 'Makamohelo Makhoalinyane / Tlomoko Molapo / Thakanyane Motsieloa / Ts'eliso Senekane

The community of Ha Raisa has finally figured out how to overcome challenges posed by climate change, through the support of UNDP funded project, RVCC. With a clear aim to address the climate change crisis in Lesotho, RVCC operates in the district of Mohale's hoek in three Community Councils namely Khoelenya, Lithipeng and Thaba - Mokhele. The key Ministries with a major stake in the project are the Ministry of Forestry, Range and Soil Conservation and the Ministry of Agriculture and Food Security.

Ha Raisa is a village located in Mohale's Hoek District in the Lithipeng Community Council with a population of about 247 people. It is situated at about 30 kilometers away from Mohale's Hoek town center along the Senqu River Valley. Most of the families in this area are not formally employed and earn their livelihoods through agriculture and odd jobs.

Communities in this area are stricken by abject poverty and are mostly affected by the land degradation as a result of climate change. According to one of the villagers, Mr. Tumelo Simon Likotsi aged 67, the prolonged drought brought about by the effects of climate change has led to the loss of livestock and a remarkable decline in agricultural production. "We feel the brunt of livestock shortage mostly during the planting season. Most families do not have cows and are forced to hire tractors. For this reason, some families end up not cultivating fields as they do not have money to hire tractors", he said.

Loss of livestock is related to the declining quality of rangelands, which has left animals with no food. The livestock farmers of Raisa Village are guilty of overgrazing, which has resulted in an enormous loss of stretches of land and formation of gullies and dongas along the terrain and in fields. Without healthy livestock and crops, the community is living under destitute conditions of dire food insecurity.

A ray of light was brought by the introduction of the RVCC Project in 2016. Through the Project, the community now know what that climate change is the cause of all the challenges they are facing in farming. Before, the community saw the decline if their farming activities resulting from the poor conditions brought by climate change without necessarily understanding what was happening to the environment. Through RVCC, communities were trained to understand the concept of climate change and ways of remaining resilience against if negative effects.

"The introduction of RVCC in 2016 RVCC changed everything in our community. Through the Project, as the residents of Ha Raisa, we were mobilized to come together and address the environmental challenges we were facing. Then were delved into many activities including brush control, whereby we removed invasive species on the rangelands to restored them to their healthy state", said Mr. Likotsi.

According to the Range Resources Management Officer, Mr. Matela Makhetha, Ha Raisa is a different place now. Its rangelands have been rehabilitated and new grass is beginning to grow. The communities are sensitized on the importance of preserving rangelands for a selected period to allow it to recuperate into a healthy status. He said, I am happy to see different species of grass that signal healthy rangelands. Healthy grass is not only beneficial to animals but some of it is used for roofing houses".

The community engaged in other climate smart activities such as construction of gully structures that had encroached on the fields and rangelands. According to the village Chief, Mr. Letlamoreng Mabetha, the gullies had significantly reduced the size of the fields and pastures and were making soil erosion worse. With the support of RVCC, the land management activities carried out helped to stop further degradation. The activities have also restored the lost biodiversity including indigenous plants and animals.



Trash lines constructed to trap sediment and to improve soil fertility for promotion of re-vegetation for improved vegetation cover at Ha-Makhabane, Khoelenya Community Council (Makhabane Grazing Association and Community)

According to Mr. Matela Makhetha, it is estimated that the total size of the lost rangelands of Ha Raisa

was approximately 35 hectares. Since the beginning of the range rehabilitation interventions, about five hectares have fully recovered. It has been a steady progress that required a lot of sacrifice and hard-work by the residents. A 51-year-old villager, Mrs. Malithakong Raisa, added that they initially volunteered to carry out all the interventions and today they are motivated by the results. Mrs. Raisa said, "I am proud of the commitment of my fellow community members for dedicating their time to right all the wrongs brought about by climate change. RVCC Project played a catalyst role to motivate us to take things into our own hands to ensure that our land is rehabilitated and remains fertile for our own benefit". The commitment and dedication of the community of ha Raisa is highly commendable. Youth voluntarily also took part in the initiatives without any pay.

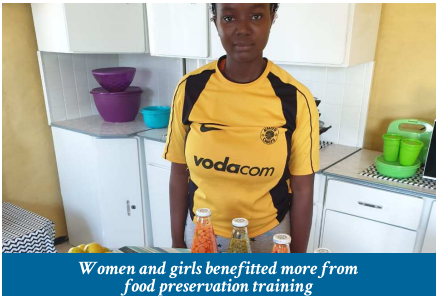
Recently, UNDP introduced an incentive of paying minimal fee to community members for taking part in the land rehabilitation initiatives of Ha Raisa. The incentive has been received with great gratitude by all beneficiaries. It came at the time when most families were facing serious bankruptcy as a result of COVID-19 outbreak that spiked in March 2020. Most people were retrenched from their jobs and some could not run their small informal businesses due to lockdown restrictions. Ms. Ithabeleng Mokhejane, a young woman of 21 years, was forced to stop doing part time jobs when COVID-19 struck. Her family had no food as she could not afford to buy any and agricultural produce was poor since 2019. She said, "the wages that were recently introduced will go a long way to put food on the table for our families. While we are busy engaging in climate smart agriculture that is protected through the use of shade nets, we will be having food in the meantime".

Through the Project, the community were supported with hybrid seeds for summer and winter cropping, fodder, fruit trees and indigenous chickens. Furthermore, the Project assisted them with water harvesting tanks for irrigation of vegetables and household use.

While it cannot be disputed that the effects of climate change have adversely affected the world, with the poor being most affected, RVCC has played a significant role to uplift the communities. The Ha Raisa community is in agreement that the future now lies in their own hands. Most of the people attest to the fact that the activities of the Project have to remain sustainable beyond the Project lifetime.



A good harvest of butternut for RVCC beneficiaries



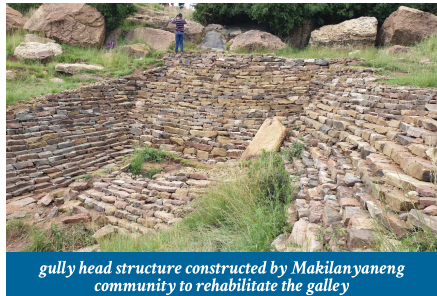
Women and girls benefitted more from food preservation training



Preserved food resulting from a robust training by RVCC



Communities harvest different varieties of beans from the seeds provided by RVCC



gully head structure constructed by Makhilanyane community to rehabilitate the gully



RVCC climate smart initiatives success owed to community empowerment and volunteerism



Silt traps constructed by the community to reduce surface water run-off and trap sediments



Silt traps reduce surface water run off



Great harvest resulting from protected agriculture using shade net



Communities produce cabbage under protected agriculture

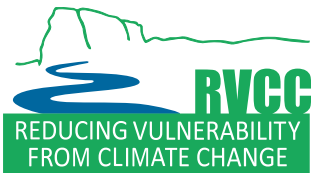


Shade provide protected environment for vegetables

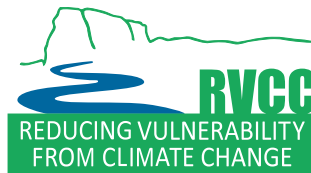


RVCC supported communities with water harvesting tanks for irrigation of vegetables and household use

OUR STORIES IN PICTURES



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MAKILANYANENG COMMUNITY ADOPTS CLIMATE SMART PRACTICES

By: Lerato Brouns | Sefora Napijane | Frank Phamotse | Mathe Maboe | Thabo Mokotsi

The Village of Makilanyaneng is nestled in the south region, also known as the foothills of the Mountain Kingdom of Lesotho, in the district of Mohale's Hoek. Having travelled 25 kilometers from the city center on the rough gravel road, the village welcomes one with echoes of life coming from noises of children playing on the dusty streets. The backdrop of the once beautiful green lively village is the broken land, split with hallow dongas that have pierced the earth.

Basotho as a nation have always been self-sufficient. While most families were economically sustained by migrant mining industry, Basotho have always had sufficient food security through practicing subsistence farming. Mostly, their livelihoods were dependent on crop and livestock farming, which have sustained them in the past. The people of Makilanyaneng are no different. Prior to the changes in climate, when the environment was conducive for farming, they kept busy working in their fields to produce food for their families. Their produce, though not necessarily commercial, was sufficient to last them year after year.

Climate change is forcing everyone to think differently and find better and different ways of doing things. The residents of the beautiful village of Makilanyaneng are deeply concerned about the future of their land regarding food production and grazeland for their livestock.

"I own five acres of land, which I inherited from my grandfather. For many years my family used the land to grow food and always had an average of about 500 kilograms (kg) of maize and 300 kg of beans yearly, which was enough for the whole year, not only for my immediate family but even extended one. In recent years, due to the lack of rain and persistent drought, our lives are not the same. Our food production activity has been negatively affected", said a 62 year-old resident, 'Manthabiseng Palinyane.

To address the imminent threat of climate change in the lives of Basotho, in 2015, the United Nations Development Programme (UNDP) Lesotho, in partnership with the Ministry of Forestry, Range & Soil Conservation and the Ministry of Agriculture and Food Security, launched a project titled Reducing Vulnerability from Climate Change (RVCC) in the Foothills, Lowlands and Lower Senqu River Basin. The Project is implemented in the district of Mohale's Hoek in the three councils namely: Khoelenya, Thaba-Mokhele and Lithipeng. The overall aim of the Project is to aid Basotho communities to reduce the vulnerabilities of communities to the projected impacts of climate change. The Project has helped the communities residing in the project sites with creative sustainable solutions for climate-smart farming and land management practices.



Makilanyaneng Community Garden Greenhouse tunnel for production of high value crops at Makilanyaneng, Thaba Mokhele Community Council.



Marou Lenkoe, Makilanyaneng (Maphutseng Bee Keeping Association), Thaba Mokhele Community Council.

The RVCC Project was introduced to the Makilanyaneng village at Thaba Mokhele Council in 2017. At that time most of the land was damaged by soil erosion thereby negatively impacting food production and rangelands for livestock. Many households were faced with food insecurity. The Project introduced new sustainable ways of living for the community to help minimize external vulnerabilities to their wellbeing.



Leboella at Makilanyaneng (Makilanyaneng Grazing Association-not legally registered), Thaba Mokhele Community Council

The community of Makilanyaneng embarked on removal of invasive wild shrubs (sehalahala) on approximately five hectares of the rangelands. The process, popularly known as brush control, is done to restore the grass land so as to enable the restorage of indigenous plants that are suitable for animal grazing. Subsequent to the brush control, the community also engaged in building structures of stone lines along the grazing land slopes to prevent soil erosion during heavy rains. Silt traps were also built in the dongas to halt their enlargement and therefore contribute to the rehabilitation of the land.

In an effort to contribute to the eradication of poverty caused by land degradation and exacerbated by climate change, 20 households were capacitated with a short course, including poultry, and vegetable vegetables through the construction of greenhouses. These interventions were meant to enable economic advancement through trading and an improvement

in the supply of food. Finally, to guaranteed sustainability and continuity of the land rehabilitation initiatives, community members were inducted in conservation agriculture, which is endorsed as the best agricultural practices.

The voices of the people of Makilanyaneng stood ready to attest to the life changing impacts of the RVCC Project within their community. According to one of the residents, Mrs. Mathuhloane Mapanya, aged 65, there has been significant progress in the rehabilitation of the land and the eradication of poverty. "Although a lot has been achieved in land rehabilitation, there is still room for improvement and further development with enough passion and collective commitment from the Makilanyaneng community", she said.

Over time, the community got used to sharing information with their fellow council. This initiative has given community members, who were initially not willing to participate, a sense of purpose and collective responsibility to restore their land and continue to live fulfilling lives. Through the Project, the community now has sufficient food, and their grazing lands have improved significantly. Looking at the land today, one can see a reduction in the incidence of soil erosion and a big contrast from the previously degraded land.

In tandem, with all the achievements from the Project, it is also important to note that there are some key challenges experienced in implementing some of the initiatives. As stated by Area Chief, Mr. Marou Lenkoe, the key challenges affecting the progress of the Project is the invasion of rangelands by livestock farmers, and the lack of participation from other community members. These challenges cause a regression on the efforts made to rehabilitate the land and threaten the long term sustainability of the Project. He said, "It is worrying to see the lack of participation and vandalism done by some of the residents, it is like taking one step forward and two steps backwards". Efforts are currently being made the community leaders to stop the vandalism and bring perpetrators to book.

With just a few month before closing the Project in December, 2021, the RVCC project leaves remarkable results on the ground. What was witnessed in Makilanyaneng was just an image of the intent. It is important to remember that tragedy only strikes when an idea dies in the mind. The fact that what emerged as a dream to rehabilitate the land has now been realized and has been a motivation to the people to anticipate more success stories.

MOROBONG DEMONSTRATES TRUE LEADERSHIP IN CLIMATE CHANGE ADAPTATION

By: Mr Kabelo Thejane | Mr Tshita Tshita | Mrs Neo Mokoara- Neuzah | Mrs Lintle Phoofofo | Ms Puleng Sehloho | Ms Mpho Qhasho- Cosmo

Mr. Ponto knew then that something had to be done. He mobilized the residents of Morobong into an association of farmers. Together, the association, which was named Seli-la-ka-Mponesetse-Tsela (loosely translated as my light shine my way), was motivated to take things into their own hands and address the degrading land. The visionary, Mr. Ponto invited the Area Chief, Mr. Samalala Makhabane, to be the designated leader of the group. The objective of the Association was to address the challenges related to environment, particularly extreme soil erosion and loss of vegetation in the rangelands.

In relating the changes as he sees them, Mr. Ponto said, "We grew up with plenty of rangeland and animals had enough food and water. We produced the best quality of wool and mohair. I have watched how in the past ten years, all those were eroded by the climate change".

Mr. Ponto Views
A man living in MOROBONG in a village named MOTLOHELOA

community councils in Mohale's Hoek district, namely; Khoelenya, Thaba-Mokhele and Lithipeng. The main purpose of the Project is to promote climate-smart ecosystem rehabilitation and management interventions. According to the National Adaptation Programme of Action (NAPA) 2007, Mohale's Hoek is one of the most vulnerable districts to climate change in Lesotho.

According to the Field Coordinator, Mrs. Mabataung Sekete, the success of the RVCC Project is entirely dependent on the participation of the communities in activities that are meant to reduce their vulnerability to the climate change. "We were very happy to find an already established group of residents who were doing a lot of work to rehabilitate land on a voluntary basis. This was the easiest way to commence implementation of the Project activities. The Association was then given a mandate to mobilise all members of the community to take part in the Project", she said.

As an entry point, the Project worked with the already formulated Association to kick-off. Inspired by the hard-working spirit of the group, the Field Coordinator worked



The degraded land has reduced the size of arable land as well. The changes have been slow but consistent, resulting in soil erosion, deep dongas and furrows. It was a call for action for the residents.

The community delved into building gabions to control soil. They also built more gabions around the wetlands in an effort to rehabilitate them. They dug dams and planted different crops on their small gardens. These, they were doing amidst the climate change, which made success a difficult goal to reach. The extreme drought affected their production as there was water scarcity for watering the crops. Dam water was used for animals and laundry instead of watering crops. In no time, the dams also dried out and this caused conflicts among residents. In 2012, the community conflict led to separation, with some members leaving the group. Only a few members remained. The few who remained continued to work on the crops and land rehabilitation.

Luck struck in 2017 when the United Nations Development Programme, in collaboration with the Ministry of Forestry, Range and Land Conservation introduced a project named Reducing Vulnerability from Climate Change (RVCC) in the Foothills and the Lowlands and Senqu Valley. The objective of the Project was to work on rehabilitation of dams, climate-smart agriculture, as well as land rehabilitation. The RVCC Project is funded by Global Environment Facility (GEF). Launched in 2015, the Project is implemented in three

with the Association on setting up plans and implementation thereof. The Project then donated different types of fruit trees and fodder seeds to members. The purpose of the fodder seeds was to rehabilitate the land and improve rangelands.

Moreover, the trees were planted to control soil erosion and fruits production. In addition, the community was given a big shade net of approximately 10m x 20m for protected vegetable production.

According to a member of the Association, Mrs. Mahlalefang Makhele, having the shade net motivated them to increase their efforts in vegetable production. "We embarked on developing vegetable plots inside the shade nets and immediately planted different vegetables including tomatoes, green peppers, onion, spinach, etc", she said. The process of developing plots took longer than anticipated as there was a need to bring in soil and fertilizer into the shade net.

Their initial effort of planting peppers, spinach, tomatoes, beet root, carrots and cabbages using drip irrigation system yielded very positive and encouraging results. Drip irrigation uses dripper emitters that supply water directly to each plant in precise quantity as the water drops frequently on one point until the soil become moist. Upon harvest, they distributed the produce among themselves for consumption by their households and for selling to neighbours. This brought a difference in their lives and their livelihoods were improved.

After the first harvest, the community was motivated and worked harder. The money they made from selling some of their produce supported their families. As a continuation of the sustainable lives they were now creating, the group has also been trained on food preservation (drying and canning) and also given two food dryers for that process. Other benefits include the following: (i) dual-purpose chickens (bushveld), which lay eggs and also yield chickens for consumption; (ii) water harvesting tanks with 4,000 liters capacity, which is used for storing roof harvested water to be a contingency for irrigation and household use during dry seasons; (iii) fencing of the community field to prevent vandalism and animal invasion, (iv) multipurpose energy efficient stoves, which can be used for cooking, lighting, heating and charging phones. Furthermore, the group was trained on importance of soil testing and input planning so that they could determine the amount and type of fertilizer they need for their soils. They were also given farm inputs such as fertilizers and grain seeds (peas, beans, maize, sorghum and wheat), which they distributed among themselves.

As a form of motivation, the Field Coordinator organized the competitive exhibition in 2019 where "Seli-laka-mponesetse tsela" won the competition and was awarded with M20,000.00. This money was used to buy essential farming tools and equipment such as water pump, pipes and fencing.

"The person who can say that he/she is starving in this group is because of negligence" said by Mrs. Mahlalefang Makhele. She continued to indicate that they are able to pay fees for their children with money they make from selling the produce. Their biggest customers are the surrounding primary schools who buy in bulk to cater for school feeding program.

"There is no easy road to success. We have survived several challenges in this journey to reach this momentous moment. The villagers who were not part of the group were stealing the vegetables and grazing their animals without permission and even destroying the crops. Our Chief had to intervene for all that vandalism to stop" said Mrs. Matelang Mokoali.

The Association is very grateful for the help they received from the Project. One of the members, Mrs. Manthati Sefuthi, expressed that "What UNDP, through Mrs. 'Mabataung, has done for us is really commendable, and we truly thank the organization for the greatest assistance we received. In the beginning, it was hard to see the vision of the Project, but now we testify that it has changed our lives. We have seen light in farming. We are now educated, we know how to preserve our vegetables and fruits. We eat healthy food as a result and we will continue with the work even when the project has ended".