Project:	Restoring degraded lands to reduce rural poverty in Zimbabwe
Location:	Matabeleland South Province, Zimbabwe
Timeframe:	May 2019 – April 2021
Grant:	£83,977
Agency:	Excellent Development Isle Of Man Ltd
Implementing Partners:	Dabane Trust (Dabane)
Report Period:	Year 1: May 2019 – April 2020
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Introduction

Recurring droughts, flooding, deforestation, mining and poor land management have devastated Gwanda District in Southern Zimbabwe, with significant consequences for the rural poor. Severe land degradation and water scarcity poses a huge threat to livelihoods and the environment. 72% of households live in poverty, 70% required food aid in 2016 and 60% of rural water sources are in disrepair. The aim of this project is to restore degraded lands in 2 micro-catchments, improve water security for remote rural communities, and create an enabling environment for subsistence farmers in the Mzingwane River Catchment.
Dabane are working with two communities in Gwanda to construct a sand dam, implement environmental protection measures and training, regenerate woodlots and provide WASH training.

Aims & Objectives

The overall purpose of this project is to restore degraded lands in 2 micro- catchments in Matabeleland South Province to conserve important natural resources and reduce rural poverty. The key outcomes will be:

Outcome 1.0 Local communities have improved water security
Outcome 2.0 Reduced soil erosion and restoration of degraded land
Outcome 3.0 Reduced deforestation and improved natural regeneration of Mapane woodlands
Outcome 4.0 Reduced contamination risk within the catchments and improved hygiene behaviours in the beneficiary communities

The planned activities to deliver these outcomes are:

- Construct 2 sand dams; 1 in each micro-catchment
- Implement environmental conservation techniques as appropriate
- Training of Trainers (ToT) in environmental conservation
- Establish community woodlots
- Work with the Ministry of Health to establish/engage with *Health Clubs* in the community to promote keeping the home environment clean and safe, and raise awareness of the importance of safe water practice through encouraging regular hand washing, encouraging people to keep their water containers clean and covered, encouraging the safe disposal of rubbish around the homestead, and the avoidance of open defecation.

These activities are pursued in an effort to address the following Sustainable Development Goals (SDGs):

SDG6 Clean water and sanitation

SDG13 Climate action

Beneficiaries

The first year of this project worked with **Nathi Community**, who live alongside the Sengezane River, Gwanda District, Matabeleland South, and has directly benefitted **1,075** (570 female and 505 male) members of this community, with **6,666** (3,533 women and 3,133 men) people benefiting indirectly.

A comprehensive baseline survey was conducted at the start of this project, and found the following:

The catchment the community are living in, and dependent on is very poorly vegetated due to recurrent drought and extensive deforestation. NDVI value is 0.23. NDVI is on a scale of -0.1 to 1. A value of 0.23 indicates barren land with some limited shrub and grassland. The aim is for an NDVI value of 0.6 to be obtained following the sand dam construction and environmental protection measures.

The main water source are boreholes for the community, with 62% of the community having to walk over 1km to collect water, and 12% of the community having to walk over 4km to collect water. 69% of the community spend over 1 hour walking to their water source water, 23% of the community spend over 2 hours collecting water, and some members of the community have to spend up to 4 hours walking to collect water. The majority of the community have to then spend up to 1-hour queuing at the water source, however a small percentage (4%) have to queue for 2 hours at the water source. Therefore, for some members of the community daily water collection can take up to 6 hours a day, including walking to the water source, queuing and then walking back.

The UN recommends 50 litres per day per person for drinking, washing, cooking, and maintaining proper hygiene. Average household size in this region is 4.7, therefore households should have access to about 235 litres of water every day. Only about 15% of the population are currently able to collect more than 235 litres; and 47% of the population are able to collect less than 120 litres of water, about half the recommended minimum amount.
As a coping strategy, 54% of the households reduce the number of buckets for bathing and cooking to conserve water particularly during the dry season hence hygiene is compromised. At community level, water rationing is done through reducing the number of buckets for domestic purposes by consensus.

92% of beneficiaries have been affected by drought at least 5 times in the last 10 years, and currently only 31% of farmers practice conservation Agriculture.

Members of Nathi community during baseline survey data collection

Sand dams

Following the successful inception meetings with the key stakeholders and a detailed feasibility study, Nathi community was selected as a suitable community with a good sand dam site.

The sand dam has now been completed with full participation and support from the community, and included two members of the community being trained as sand dam builders to support the sand dam building process, and ensure knowledge and skills were built within the community for long term sustainability.

A rowa handpump (below photo) has also been constructed near the sand dam to enable easy water collection. It also reduces the risk of contamination during water collection, thereby improving the quality of water people collect. The Rowa Handpumps have been designed by Dabane as a low-cost abstraction technology, which are also easily accessible for older people and children who do not have the strength to operate standard handpumps. They have also been tested and proven to be accessible to wheelchair users.

The photo to the left also shows water testing taking place, which is a requisite, and checks that the quality of water from water sources is safe for human consumption

As the photo below left shows, the dam currently has plenty of water sitting in it, and is also filling up with sand behind the dam (photo below right), which will store the water, and protect it from contamination. Due to good rains, the sand dam is maturing much quicker than expected.

The community have already noticed significant benefits and changes since the sand dam was completed. Playmore Ndlovu, one of the community members explained how the increased availability of water has brought a number of benefits to the community. He explained how the sand dam has led to access to clean, palatable water for both domestic purposes and livestock. The availability of water without having to walk their animals for an 8-kilometre round trip to get water from a commercial farm has improved the condition of animals, as they can now spend more time grazing. Playmore has also noticed that men and boys are more willing to participate in water collection, which has eased the burden on women as well as more water being available for households, helping to improve the health and hygiene of families, as well as having more water available for poultry and vegetable growing.

Environmental Protection Works

The soil erosion risk map and land cover map generated at the start of the project identified the area to be of high erosion risk, and following more detailed on the ground surveying and community consultation, an environmental protection plan was developed. Implementation of the plan began with training 49 members of the community (26 women, and 23 men), in constructing a range of Environmental Protection and Restoration measures. This has resulted in:

- 24 Gabions, totalling 144m in length have been constructed
- 109 stone bunds constructed totalling 1,962m in length
- 88 silt traps have been established to rehabilitate 48 gullies (as shown in photo below)

In addition, 26m of sisal grass has been planted along the banks of the river around the sand dam to help stabilise the banks, and reduce soil run-off.

Establishment of Woodlots

The 0.5 ha woodlot that was fenced and established earlier in the project is now flourishing with 10 different species of grass now growing, all of which have naturally regenerated since the area was fenced off and grazing stopped. All of the grass varieties will be used for animal fodder.

Photo above right shows the fencing of the woodlot, and the impact of the fencing. To the left of the fence (outside the protected area) it is quite barren with little vegetation. However, to the right (inside the protected area) vegetation is growing, and the area is much greener.

Photo above left is inside the woodlot

The community have also been trained by the forestry commission in preparing a bed for planting tree seeds to establish the woodlot, as shown in the below picture. The training includes demonstrating to community members how to make the seeds up into balls of organic matter to protect the tiny seeds, and also to retain moisture around the seed, improving the survival rate.

The community have now planted 600 seed balls of four different species; *Faibeherbia Albida, Acacia Karoo, Acacia Erolobia* and *Acacia Eroloba*; and 54 tree seedlings of four different species; *Mopani, Acacia Senegal, Moringa*, and *Leucaena*.

In addition to training the community in both establishing a woodlot and constructing other environmental protection measures, the community were supported to establish their own Environmental Management Committee made up of 12 community members; 6 men, and 6 women. This committee is crucial for managing the woodlot and ensuring the long-term sustainability of the environmental restoration measures. Roles of the committee include:

- Identifying gullies that need restoring
- Promoting good environmental practice; including not to randomly cut down trees, to protect river banks by not cultivating them, encourage tree planting, and not to collect sand from undesignated areas
- Ensure grass in the woodlot is left to fully regenerate.
- Ensuring that trees are no longer randomly cut, but the systems are followed and all tree cutting is controlled and planned. People are encouraged to leave wood to mature and to use dead wood as much as possible.

WASH activities

3 health clubs have been established; two are women only, and one is for men only. The clubs ae established to promote good health and sanitation practices such as encouraging the village to construct proper sanitation facilities; encouraging people wash their hands after using the toilet; storing water in a covered container that is frequently cleaned; and storing cooking utensils and plates off the ground.

Challenges to Implementation

There was economic disruption across Zimbabwe at the beginning of the year, which was caused by hyperinflation and a change in currency (reintroduction of the Zimbabwean dollar) and the ban of foreign currencies. This caused political riots across the country and a shortage of materials, food and fuel, resulting in the delay in the project start. However, since May the project has run on time.

The global coronavirus pandemic resulted in Zimbabwe going into lockdown from 29th March, when Dabane were in the middle of completing the Environmental Protection, Establishment of Woodlots and WASH training activities, therefore not all of these activities have been completed with the first community. Dabane are planning to get back into the communities over the next couple of weeks, and can then complete these activities.

Dabane have also started working with the second community, including completing the siting and designing of the sand dam. Assuming Dabane are able to get back into the communities over the next couple of weeks, and there are no other significant delays, then at this stage, we are confident the project can be completed on time.

Year 2 Priorities

Complete the following activities with the second micro-catchment communities:

- **Construction of the sand dam** with Nkumbu community
- Implementing **Environmental Protection measures**, including stone bunds, Gabions, and Silt traps
- **Establishment of woodlots** to manage woodcutting and grazing within the communities
- **Hygiene training** to ensure the community use safe practices for collecting and using water from dams
- **Monitoring impact** of year 1's activities with Nathi's community

Project Expenditure

The year 1 finance report is attached. Overall, there is a small underspend on year 1 due to some of the activities having to stop early due to Zimbabwe going into lockdown. Overall though, the project is on track and we are not expecting any significant variances during year 2.

Report compiled by:
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