



Final Report for Mhondoro Rural Development Project (MRDP)

Reporting Period: May 2011 to April 2012

Submitted to Serve



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Executive Summary

Location of Project	WARD 27, CHEGUTU DISTRICT
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The Zimbabwe agriculture sector recovery over the years has been negatively affected by recurring full and midseason droughts that have resulted in crop failure. The situation has also been made worse by delayed planting caused by late availability of seed and poor adaptability of the available varieties to the local agro-ecological conditions. Climate change, through frequent droughts has led to repeated loss of productive assets and reduced ability of communities to recover from natural shocks and stresses. Mhondoro communal area in Chegutu district is a drought prone area in Zimbabwe. Effects of drought are further constrained by the people's lack of resources. Most of these rural households have land, labour and members with skills in traditional farming using draught power but have no education, no savings and poor access to markets. This makes them vulnerable to climate change therefore affecting their livelihoods from subsistence and rain-fed agriculture.

Caritas Harare undertook to rehabilitate the Madzongwe Kupfumaishungu Irrigation scheme in Ward 27 of the Mhondoro communal area, Chegutu District. This was in an effort to enhance the livelihoods of the community that are threatened by the above stated challenges. Farmers in the villages that surround the scheme were targeted to benefit from the project. The farmers were set to benefit from access to farming land, irrigation water all year round, inputs and extension services. To date, 199 farmers are benefitting from the scheme. They have already started to produce their own vegetable crops and some are now already selling the crops to the local community. Much has therefore been done insofar as rehabilitation of the scheme is concerned as the system is now fully functional and the irrigation water is readily available to the farmers.

1. SITUATIONAL ANALYSIS

The humanitarian situation in Zimbabwe continues to be stable but fragile due to many factors. The UN 2012 Consolidated Appeals Process (CAP) identified food security as one of the factors that makes the humanitarian situation in the country fragile. The food security situation improved slightly in 2011 as a result of joint and concerted efforts by the Government of Zimbabwe and the humanitarian community in timely provision of agricultural inputs and increased acreage planted plus extension support. However, uneven rainfall distribution and a dry spell in the 2011/12 agricultural season affected six of the country's ten provinces and forestalled a potentially good harvest that could have reversed the food aid needs. The increasingly uncertain pattern of weather, characterized by droughts and poor rains, is making farming difficult and unpredictable. Agriculture is of fundamental importance to Zimbabwe contributing significantly to food security and the overall gross Domestic Product (GDP). The full value and potential of agriculture remains largely unrealised, leading to food insecurity and loss of income. The microeconomic shocks have resulted in the continual loss of livelihoods with most companies operating below 30% capacity while others are shutting down completely. The rural poor are the worst affected as their capacity to produce their own food has been significantly reduced and they are not able to secure formal employment.

Mhondoro Mubaira has 11 wards (64 catholic centres) and was set up as a communal area situated in Chegutu District made up of commercial farms, small scale commercial farms as well as communal settlements. Mhondoro is in natural region III. Natural region III is a semi-intensive farming region covering 19% of Zimbabwe. Although rainfall in this region is moderate in total amount, severe mid season dry spells make it marginal for maize, tobacco and cotton, or for enterprises based on crop production alone. The farming systems are therefore based on both livestock (assisted by the production of fodder crops) and cash crops. Mupfure River provides water for commercial agriculture in local farming areas and small holder farming in the Mhondoro communal area. Mhondoro communities rely mostly on rain fed agriculture which essentially caters for subsistence agriculture as a livelihood strategy. As such households rely on gardens which are hand irrigated and the larger and more productive gardens are close to the wetlands or along Mupfure River. These gardens are major sources of income and food for the family. Some irrigation schemes which were once established have since collapsed and stopped running in 2009 due to the hyper inflationary environment that was experienced in the country during that time.

The Madzongwe Kupfumaishungu Irrigation scheme is a communal scheme that was established in 1986 by the late Councillor Matsvaire. He mobilised enough resources to purchase two motors and pumps, install a mainline as well as purchase pipes for sprinkler irrigation. People from two of the surrounding villages became members of the scheme and they grew crops for consumption and the market. The scheme received support over the years from the Government and the NGO community to manage high operational costs as well as repairs and maintenance. More recently, a horticultural company engaged the scheme under contract farming. Unfortunately this relationship did not end well as the company defaulted on its payments to the farmers. The scheme was last functional in 2009. This was when Zimbabwe's economic challenges had reached a peak and the farmers were no longer able to produce crops viably. Eventually, due to neglect, the scheme got vandalized. Some irrigation pipes, one motor and pump were stolen. The village head where the scheme is located then took the

remaining motor and pump as well as the irrigation pipes and placed them at his home for safekeeping. In 2011 Caritas Harare then undertook to rehabilitate the scheme.

2. PROJECT ACHIEVEMENTS AND ANALYSIS

2.1 Introduction

The Mhondoro Rural Development Project (MRDP) sought to reduce Ward 27 of Chegutu District's vulnerability to climatic and economic shocks through strengthening people's livelihoods. Caritas Harare employed the strategy of long term sustainable development by rehabilitation of an irrigation scheme, provision of agricultural inputs through a seed and input fair as well as the provision of technical support to the farmers in horticulture farming. The community was therefore empowered by contributing to and participating in these activities. The project is set to increasing the community's resilience to food shortages while strengthening their livelihood strategies and capital base, using local knowledge, capacities and resources, coupled with innovative and appropriate technologies.

2.2 Accountability to Stakeholders

During the implementation of the project, Caritas Harare cultivated a good working relationship with the stakeholders of the project and these ranged from the local authorities, that is: the District Administrator's Office; Chegutu Rural District Council; Ministry of Agriculture, Mechanisation and Irrigation Development through its Agritex and Irrigation departments; the District Water and Sanitation Sub-Committee; the Social Services Sub-Committee and the District Development Committee; to local leadership that included: the chief; Member of Parliament for the area; villages heads; church structures in the area and most importantly, the community members themselves. A special Mass to bless the irrigation site was led by the Parish Priest. Guests at the ceremony included the Member of Parliament (MP) for the area, the local councillor and councillors from other wards, the chief, village heads, representatives from Agritex, the Forestry Commission, Chegutu Rural District Council (RDC) as well as the community members. The leadership voiced their support to the project by encouraging their constituents to participate. At the beginning of the project, a Memorandum of Understanding was entered into between Caritas Harare, the DA's office and the RDC. Technical stakeholders such as the afore-mentioned ministry and committees also signed the MoU and this enabled a smooth working relationship among all the partners. Monthly narrative reports on the progress of the project were shared with the stakeholders for accountability purposes. These reports were supplemented by review meetings held periodically to assess the progress as well share experiences for growth and learning purposes.

2.3 Rehabilitation of the scheme

Caritas Harare contracted a private company to rehabilitate the irrigation scheme. An informal tender process was followed for the procurement whereby nine irrigation companies were approached. Out of the nine, three companies managed to visit the site and give accurate quotations. Two were shortlisted from these three and physical verification of their work was done. It was on the basis of the findings that the final contractor, Dolitool, was selected. Dolitool undertook the work of rehabilitating the scheme by refurbishing the motor and pump. The mainline was replaced and more

sprinklers and pipes were added to the spray line. A backup system of four 10 000Lt tanks was installed. This system was put in place to provide a reserve of water for when there would be no electricity due to load shedding being experienced in the country. The company made use of locally available manpower whereby the community members dug trenches and performed other tasks that contributed towards rehabilitation of the scheme. The Department of Irrigation made an assessment of the work done by the contractor as a quality control measure.



Collage of pictures from top showing: starter for motor; motor and pump mounted on floaters in the river; hydrant; and water tank back-up system

2.4 Community Awareness, Registration and Baseline Survey

Community mobilization and registration of beneficiaries was done soon after clearance to work in the area was obtained. Mobilisation was mainly conducted through the councillor who then cascaded information to the village heads. The village heads would then send word to the villagers who would gather for sensitisation meetings and registration. The initial selection criterion was mainly the most vulnerable households, that is: child headed households; households headed by the elderly; households with the chronically ill; as well as households with orphans. The targeted households could not make up the numbers and eventually the youth, as well as others who were interested were free to join the project. Generally the turnout for registration was initially rather low, with only 92 households from 3 surrounding villages qualifying to directly benefit from the Madzongwe Kupfumaishungu scheme, compared to the expected target of 300 people. There was therefore need to mobilize more people from the villages that surround the scheme. At the end of the registration period, 84 male and 115 female farmers were registered for the project, bringing the number of beneficiaries to a total of 199. This marked a 66% attainment of the project's target. Local stakeholders indicated that the reason for the low turnout was that the community was waiting for the project to

take shape and only then would they start showing interest in the project. Another possible reason is that the target was too high, considering that initially the project was to be implemented in three different sites, and it was eventually implemented in one site and the numbers were not adjusted. Interest in the project by far off villagers was however quite high because 358 households were registered from 6 other villages in the ward but the distance to the scheme, (5 to 10km) is rather high and this would eventually affect participation.

A baseline survey was conducted and it revealed that there is relative food insecurity in the community manifested by a general lack of protein intake by the households. Subsistence farming is the most common livelihood in the community and this is shown by the fact that most starch and vegetables consumed in households are produced by the families. Shallow wells are the most popular source of water for vegetable gardens which however run out of water during the dry season. The community has no local sources of credit however internal savings and lending schemes for women are present in the community. Children are being denied the right to an education as parents and guardians are genuinely or otherwise failing to raise fees for their children to attend school. The baseline data collected was useful to the project because it provided a basis for which change brought about by the project could be measured.

2.5 Land Preparation

The size of the scheme was initially about 4 hectares (ha). This was inadequate to cater for the 300 farmers, if each was to be allocated a plot size of 300m² which is an economically viable allocation for entry into commercial horticulture. Negotiations were made with surrounding landowners for more land for the project. More land was added to the scheme, resulting in a total of 13.7ha of both arable and non arable land. The arable land is approximately 9ha. A new tap was installed at the scheme to service the farmers whose plots were beyond the reach of the taps installed by the contractor. Community members cleared the added piece of land by removing bushes and stumps, paving way for tillage of land. The project team liaised with the District Development Fund (DDF) for land tillage. It was planned that tillage would start before the end of September but the work only commenced in early October as the tractor had developed some technical faults. The tractor could not till the whole scheme because some parts were rocky and therefore inaccessible. The farmers then tilled the inaccessible parts using ox-drawn ploughs. Caritas Harare staff was assisted by Agritex Officers to peg plots for the farmers. Two hundred and seven, 30m x 10m plots were pegged. The farmers then began to prepare their beds.



From left: ox-drawn tillage in practise; tilled land and test-run of sprinklers

The Dept of Irrigation conducted a baseline survey of the scheme. They mapped the area so as to be able to come up with an independent design that will be used as a benchmark for the scheme.

Use of theodolite to map the area



2.6 Group Formation and Capacity Building of Farmers

Agritex assisted the Caritas Harare team in group formation for the farmers. Four groups with fifty members each were formed. Each group also selected respective committees with the following members: chairperson, vice chairperson, secretary, vice secretary, treasurer, committee member for marketing and committee member for maintenance. The community also set up and is managing a fund from member contributions to cater for security as well as maintenance or any other costs that may arise. The contributions will be revised with time to cater for electricity and water bills.

The farmers were trained in technical areas that include: Irrigation Maintenance, Marketing, Small Business Management, Nursery Management and Leadership for the committee members. Agritex and the Dept of Irrigation officers assisted the Caritas Harare team in facilitating the trainings.



Training Sessions...

2.7 Input and Extension Support to Farmers

The farmers managed to conduct a market survey whereby they visited local boarding schools, hospitals and market places. They also visited large retail outlets such as TM and OK, hotels and the hospital in Chegutu so as to identify the vegetables they would be able to sell with ease. Their findings included garlic, rape, potatoes, tomatoes and cabbages. The seasonality of the crops was also noted. A seed fair was held and the farmers had the opportunity to select seed, fertilizer and other farming implements of their choice using the voucher system. Each farmer was awarded a voucher worth \$38 and given the opportunity to select the items they wanted to purchase using the vouchers.



Seed fair pictures. From left: two women going through their vouchers; salesman advertising his wares; hoes and gumboots on display; farmers showing off their goods

Planting commenced after the seed fair; rape and tomatoes were planted in the nurseries. The rape came out quite well with close to 100% germination but the tomato crop did not come out well, with less than 10% germination. The seed house that provided that variety of tomatoes indicated that they would attend to the problem soon. Eventually, they gave no response on the matter. The farmers then transplanted their seedlings onto their vegetable beds. Eventually they began to sell rape, butternuts and tomatoes. They sold their crops to the local community and two boarding schools. The farmers however did face challenges in consistency of quality. The agric officer helped them to address these challenges.

Caritas Harare provided fencing material and hired a local contractor to supervise fencing of the scheme. The farmers participated by providing labour for the fencing exercise. The project team procured and distributed packaging material in the form of crates to the farmers. Distribution of the packaging material was based on the farmers' plot. Those who were working hard were given the crates and those who were not performing so well received the crates after their performance had improved.

A field learning visit conducted boosted the morale of the farmers. They visited a commercial farm where field and horticultural crops are grown. The farmers were given tips on how to improve their production and grow for market needs. They also toured the fields which had vegetables that include onions, tomatoes, cabbage and beans. The farmers were grateful for the experience and indicated that they would put more effort towards improving their crops after the learning experience.



Farmer Dube addressing the scheme members during learning visit to his commercial farm

Two Solar driers were also delivered to the scheme for preservation of excess vegetables



During monitoring visits the project team noted that the farmers needed more inputs as assistance since they had gone for prolonged periods without access to irrigation water. This was after ZESA had cut off electricity due to an unpaid bill and subsequently when the motor had broken down. The farmers were given seedlings to help them recover from crop loss to dehydration.

By the time the project ended the farmers were now selling their produce, which was a positive outcome of the project. Sustainability of the project at this stage however remains uncertain because there is the threat of the ZESA bill which still needs to be paid; leadership still needs strengthening so they can continue leading the other members, and there is also need for capacity building for all farmers so they can continue growing and selling their crops.

3. Project Goal and Objectives

The goal of the project was to improve livelihood strategies, alleviate suffering of the vulnerable rural population and reduce vulnerability of rural communities to food security in the Mhondoro communal area.

Specific Objectives (SO)	Project Outputs	Activities	VariANCES/Reasons
<p>SO 1: Provision of water supply for irrigation to 300 farmers.</p>	<ul style="list-style-type: none"> • The irrigation system is now functional and supplying water to the farmers who are members of the scheme. Water supply is however not consistent because of motor breakdowns and power cuts. • The electric mains were repaired. • The arable land in the scheme was increased from 4ha to 9ha. • 199 households are active in irrigation farming in the dry season. This marks 66% of the initial project target. • 50% of the 199 farming households are producing sufficient food to consume, preserve and sell excess produce. 	<ul style="list-style-type: none"> • A private company was contracted to rehabilitate the irrigation scheme. • The rehabilitation process included refurbishing the motor and pump; replacing the mainline; adding more pipes to the spray line and installing a back-up system of 4 X 10 000Lt tanks to provide water to the farmers when there is a power cut. • Negotiations were conducted with the village head and surrounding land owners to increase the size of arable land from 4ha to 9ha. Some of the added land was virgin land and the farmers cleared it in preparation for tillage. • 199 households were registered to become members of the scheme. • Registered farmers were given farming inputs and plots of land to work on. Once production started, extension support was extended to the farmers. Each farmer owns their own plot and is responsible for tending to their crops. When selling, they are free to partner so as to gain competitive advantage on the market and they share the income proportionally according to what one would have sold. • Two solar driers were purchased to enable preservation of excess produce. 	<ul style="list-style-type: none"> • The target of 300 farmers was not reached because many of those interested in the project stay far from the site of the scheme. Currently, only 199 farmers, i.e. 66% of the target are taking part in the project. It is hoped that as the scheme gains momentum, more of the nearby farmers will participate in the project.

<p>SO 2: Develop a capital base for the 300 farmers</p>	<ul style="list-style-type: none"> • 199 farmers received farming inputs at a seed and input fair. • Supplier contracts in place with 2 boarding schools 	<ul style="list-style-type: none"> • A seed and input fair was conducted whereby 199 farmers were given vouchers worth \$38 and the opportunity to use these vouchers to purchase farming inputs of their choice from the companies invited. They managed to buy seeds, fertiliser, agro-chemicals, knapsacks, gumboots and hoes. • The farmers went to local boarding schools with samples of their crops and started to supply them with rape. Other crops were sold locally to other community members and also at church meetings held in the area. • 100 of the 199 farmers are producing enough crops to sell the excess. This is 50% of the target. The other 50% are just producing enough for own consumption. 	<ul style="list-style-type: none"> • It was not possible to establish saving and lending schemes because of time and budget constraints.
<p>SO 3: Training and Capacity Building of farmers</p>	<ul style="list-style-type: none"> • Five training sessions in horticulture and related practices conducted • A total of 572 lead farmers trained in the above 	<ul style="list-style-type: none"> • Five training sessions in the following areas were conducted: Nursery Management; Leadership Training; Business Management; Irrigation Maintenance and Marketing. The Agritex and Irrigation Departments assisted in facilitation of these training sessions. • The farmers also went on a field learning visit to complement the trainings that they had received. They visited a commercial horticultural farm. 	<ul style="list-style-type: none"> • It was not possible to establish saving and lending schemes and post harvesting technology because of time and budget constraints.

The following farmers received trainings:

Training	Males	Females	Total
Leadership	13	17	30
Irrigation Maintenance	8	5	13
Marketing	21	11	32
Small Business Management	142	156	298
Nursery	92	99	199
Total	276	288	572

4. Project Challenges

- The target number of farmers was not reached. The communities in the villages that immediately surround the Madzongwe Irrigation scheme did not turn out as expected. Only 66% of the target was eventually attained. The number was not stable because the first crop was planted during the rainy season and the farmers were therefore giving more attention to their field crops.
- During the reporting period, ZESA shut down the power supply to the scheme owing to the unpaid bill of USD2,537.00. Caritas Harare advised the scheme members that the organization will not be able to foot the bill for them. The farmers agreed to contribute USD5 per month to clear the bill. Unfortunately the members are struggling to make these contributions such that it took long for them to be reconnected. The farmers also risk the danger of being disconnected yet again if they do not stick to their payment plan, further affecting their crops and also increasing production costs. They approached individuals and companies for assistance but nothing materialized out of that.
- Incessant power cuts affected office work; communication also affected the contractor's progress. The faults also pose a potential and major threat to the farmers once they start producing because the back-up storage system might be inadequate to cater for the scheme, given the protracted periods when there is no electricity.
- The Seed Fair took place towards the rainy season such that the farmers' attention was divided between the garden and their fields. Also, during the Seed Fair, only 1 Fertilizer Company turned up with limited supplies of the product such that the farmers had to be promised delivery at a later date.
- The tomatoes did not germinate very well, with less than 10% germination having been recorded. The seed company, Pannar, did not make efforts to address the issue.
- The community has developed a dependency syndrome towards development support over the years such that it is very difficult to mobilize them to make significant contributions to the project. This is especially so for the challenges the leadership is facing in mobilizing electricity bill payments as well as the time taken to mobilize resources for the construction of the other toilets.
- Inconsistent quality of crops especially those sold to schools. This was addressed through intensive training sessions by the Agriculture Officer.
- Breakdown of the motor caused farmers to go without water for long. This resulted in loss of crops due to dehydration. It also affected the farmers' attitude to the project as they were complaining of the hardships they were experiencing in watering their crops. A refresher training session on irrigation techniques had to be put on hold because of this issue.
- It was not possible to conduct a major component of the project, that is, establishment of internal savings and lending schemes. This was mainly due to time and budgetary limitations that could not support the activities for establishment of the schemes. Internal savings and lending schemes trainings require 8 -18 months before graduation of farmers to stand on their own.

5. Lessons Learnt

- There is need to seek experts in technical areas, in this case irrigation, when preparing for and implementing such projects. Technical experts in new areas also help in identifying contractors that are reliable.
- It is important to physically verify the work done by shortlisted contractors before making a final decision to contract them so as to identify weaknesses before proceeding.
- Faith based activities and mobilizing local leadership support at the beginning of a project has great benefits, e.g. increased turnout of beneficiaries after the Mass to bless the site.

- It's important to have a planning meeting with all stakeholders before a project commences such that all ideas are subject to constructive scrutiny before actual implementation. Stakeholder buy in at the beginning of a project enhances sustainability. An end of project meeting is equally important for learning.
- Leadership training is essential for strengthening of community group leaders.
- There is urgent need for back-up power supply or a diesel powered motor at the irrigation scheme because of the challenges being caused by power cuts.
- There is need for a wider database of reliable companies that sell fertilizers to avoid the challenge faced at the seed fair whereby only one company turned up.
- The organization should map procedures for action that can be taken when contractors default on their contractual obligations or delay in responding to faults that occur during the warranty period.

6. Crosscutting Issues

6.1 Sanitation

Some builders from the community constructed a set of toilets with materials that had been given by the contractor as a donation. An Environmental Health Technician visited the scheme and recommended that there is need to provide a clean source of water for the farmers, possibly through construction of a well as a cost effective method. A well was constructed at the scheme.



6.2 Gender

Generally women were fairly represented in terms of participation in the project. They constitute 58% of the total leadership. The leadership constitution is however not the same for the Irrigation Management Committee. There are only two out of the eight committee members who are women. This could have been due to the immediate absence of ideal candidates for the positions, given that in previous leadership, women constituted a larger percentage. Also, in group committees, women constitute approximately 50% therefore enhancing their role in decision making.

Outstanding issues

The project managed to successfully resuscitate the irrigation scheme. There however still lies a strong need to strengthen the scheme as it is still facing teething problems. The farmers seem not yet able to independently run the scheme without external assistance. They are still facing problems in terms of planning their cropping calendar; maintaining consistency in the quality of their crops; value addition to excess crops produced; maintaining the irrigation equipment; marketing their crops and dealing with challenges such as high operational costs. Internal Savings and Lending schemes need to be promoted so that the farmers can use their income meaningfully as they allow it to accrue. The leadership of the group still needs more training and mentorship so that they can be able to steer the other members in the right direction. There is also need for a backup power supply to keep the system running in the absence of electricity as well as in the event of a breakdown. In a nutshell, there is still need for capacity building for the farmers to ensure continuity of the scheme for when Caritas Harare pulls out.