

Project Fund Request: IRRIGATION FOR RUZAMBU AND KOTAMAURIME GARDENS

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1. Management summary

The community of Matibi is intending to cover the whole Ward 3 of Mwenezi District with organic gardens. Consultations with the Ministry of Agriculture were done and it was noted that at least 10 organic gardens will be sufficient to fill all corners of Matibi community. So far there are 4 gardens of this type constructed with the aid from the FFM. Of these, Tamuka and Njeremoto gardens already have drip irrigation systems installed (unfortunately Tamuka is struggling to replace stolen solar panels). The other 2 are Ruzambu and Kotamaurime which are ready to receive these solar powered irrigation systems, having satisfied the new requirements. The new requirements for a targeted organic garden to receive irrigation funds include constructing blair toilets, having a garden constitution and assigning a security guard to garden the equipments. The 2 new gardens are located along the great Lundi River near Ruzambu and Ruzogwe schools respectively.

When the current project was ready in September 2019, it was stopped to address the question of surety first. By the time this issue was done with, the quotations were already a year old. The Projects Coordinator approached the Irrigation Services Company to reconfirm their prices, which fortunately have not changed. This was also an opportunity to compare with other service providers. Leenomy Investments, Aqua Chem and Konicy Investments supplied their own quotations as well (quoting way above Irrigation Services). Finally, Irrigation Services was maintained, whose combined quote for both gardens is USD 20,690. Ruzambu Garden is taking USD 10,555 while Kotamaurime Garden takes USD 10,135. Added to USD 8,098 community contribution, the aggregate project cost is USD 28,788 as summarised below.

2 Total estimated costs of the project

Garden name	Total cost	Community contributions	Requested funds
Ruzambu	14,400	3,845	10,555



Kotamaurime	14,388	4,253	10,135
Combined costs	28,788	8,098	20,690

3 Funding

Cash from FFM	20,690 USD
Local contribution	8,098 USD
Total	28,788 USD

4 Time plan for realisation of results

Hardly a week is required to dig trenches for both gardens, which will be done by the gardeners with close supervision of Irrigation Services. The second week will be given to making tank stands, including their concrete footing which needs at least 5 days to set. The rest of the work will be done in the third week and it includes mounting solar panels, sinking the pumps, laying pipes, erecting the tanks, connecting the drip system and commissioning. While all the said work for both gardens may require 21 days from date of commencement, an extra week will be given to unexpected delays, bringing the maximum time range to 1 month. Opportunely the month of October is the driest month in the local climate thereby making it the most suitable month to set up irrigation systems with water levels being at their lowest.

5 Financing plan

The 3,845 USD to be contributed by gardeners at Ruzambu make 27% of the total cost, leaving the remaining 73% to FFM (10,555 USD). For Kotamaurime Garden, the 4,235 USD community contribution makes 30% while FFM's 10,135 USD constitute 70%. As indicated in the contractors' quotations, the work will commence upon payment of 50%. The other 50% will be paid after commissioning the finished irrigation systems for both gardens.

6 Person(s) in charge

The above described work will be conducted by Engineer Charles Chitanga of the Irrigation Services Company who will lead a team of experts from his company. The engineer will report to Adnos Chikomo the FFM Projects Coordinator who will be assisted in technical matters by Jemitius Pedzisai the local Agritex Officer.



7 Detailed information about the project

7.1 Detailed project description

A field inspection visit was done for the current project on August 23rd 2019 and the irrigation systems were designed accordingly. Each garden measures at least 1 hectare being at least 50 metres each side. Both gardens tap water from River Lundi which is normally a perennial source. Each of the gardens has 30 members, mostly women, representing 60 households in total. The two gardens serve 4 villages (2 each). The gardeners are already growing crops and vegetables organically ahead of the irrigation setup which will mark the beginning of a strict organic gardening system supervised by well-trained agricultural officers. The organic project is in line with the national agenda to promote permaculture as a way of apprehending climate change and its effects on food production and health.

7.2 Project goals

One general aim of organic gardening is to promote permaculture as stated already. Permaculture is an agricultural system where farmers exercise utmost care for the natural environment so that food extraction does not damage the environment. This system promotes sustainable development whereby future projects are not compromised by the extractive actions of today. So, permaculture says that the farmers must always be giving back to the natural environment in their daily endeavours. This will at least preserve the natural environment and prevent further deterioration such as deforestation, soil erosion and leakage of nutrients. So the organic gardening projects are part of the broad spectrum of activities termed conservation farming.

Apart from restoring the natural environment, the organic gardens will specifically restore the people's healthiness. Health institutions all over the world are calling for healthy habits such as eating organically produced foods which are high in nutritional value and low in toxicity. Trainings will be conducted on a regular basis touching health and nutrition aspects of food production in these gardens. The knowledge tapped from the garden will outspread to the wider community and benefit the general society health-wise.

Also important is the dimension of 'ease of work'. The Matibi community is used to riverside gardens which are not only far from homesteads but also far from water sources. For example, Ruzambu Garden is 355m from the river while Kotamaurime is 240m. This means the gardeners, who are mostly poor old women, are having a difficult situation carrying heavy watering cans. The drip irrigation system will make work easier for these underprivileged beneficiaries as has already been demonstrated in Tamuka and Njeremoto Gardens. So this project improves the community's garden infrastructure with a view to increasing production with less manual labour.

7.3 Project risks



The prevailing economic environment in Zimbabwe is itself a risk factor. Companies are collapsing and the few that remain afloat are sometimes dishonest in their dealings. The current project will be conducted by a trusted company which has conducted similar work for FFM before. To further securitise the contract, the FFM Trust will pay 50% of the agreed fees so that the work begins, keeping the other 50% until the work in both gardens is completed to the satisfaction of the local agricultural officer.

Still in line with the economic atmosphere, the prices are hardly stable and there is a cash crisis too. The FFM is fortunate to have the rare access to US dollars at bank. Otherwise it was going to be impossible for the service provider to withdraw foreign currency from their company account, let alone to keep the prices at same position since 12 months ago.

The other risk is the corona virus lockdown which has been in effect for a long time now. For many traders it brings untold trouble including forced closure of shops and a disruption of the supply chains. The fortunate spot with this proposed project is that Irrigation Services is a renowned company trading in considered essential services, which are exempt from the lockdown.

Then there is also the risk of pilferage, for which the gardeners have assigned security guards for manning the premises and protecting garden equipments.

7.4 Negative impacts of not realising this project

The most frightful reality in case of project letdown is continued environmental degradation. The government is happy that our organic gardens are arresting the wanton cutting of bushes to fence ordinary gardens. Furthermore, the Environmental Management Agency (a parastatal) is discouraging riverside gardens, which means beside our organic gardens the villagers will be left with no gardening alternative in a community which is infamous for droughts. Unsustainable livelihoods will ensue, including illegal border jumping. Worse still, there will be no alternative to the unproductive summer cropping in the open fields which commonly have poor soils and receive poor rains each year. A chance would have been lost to conserve natural resources such as rivers which continue to be silted due to overexertion in the open fields.

It must also be feared that without the organic alternative, conventional gardens are producing highly toxic foods due to the use of chemicals to grow and preserve the vegetables and crops. These 'poisonous' foods are also expensive to grow, hard to preserve and are also sold at unbearable prices, making the local food market highly inconvenient especially for the poor. If such a project is not taken on, the health and nutrition of the local people will be at stake as ever before, with even worse likelihoods due to the worsening famine trends.

Last but hardly the least, the intention to make work easy in the gardens must not be taken for granted. Apart from these organic gardens, the poor and the old especially among women-headed households do not have other meaningful livelihood strategies. The youthful and the energetic may indulge in laborious activities such as gold panning which is not



possible for the weak. Any letdown on the proposed irrigation will bring distress to the intended beneficiaries who are pinning their hopes on this project to make their lives easier.

8 Other organisations or governmental support

FFM is collaborating with the Ministry of Agriculture, the National Water Authority and the Environmental Management Agency in the proposed project. The Ministry of Agriculture is providing routine consultation to gardeners through its technical workers, one of whom is a Trustee in the FFM. The water authority governs water resources such as dams and rivers as well as underground abstraction and has sanctioned that the said gardens extract water from Lundi catchment. The environmental agency is also laying a key role by strongly campaigning against conventional gardens which are causing environmental and health hazards, in a way promoting organic gardening as an alternative.

9 Additional information

After the current 2 gardens, other new gardens will not have ready sources of water like dams and perennial rivers. Therefore, efforts are already underway to determine the possibility of drawing water from underground for use in drip irrigation.

10 Personal comments

In future it will not be surprising to want to drill boreholes as the standard source of irrigation water even in those gardens with dams and rivers as sources.

Project funding request status: New Assessment Ready for decision Cancelled Declined Approved Implementation Decision made by: E-Mail circular Board Meeting Telephone conference





Decision date:							
Signatures (two necessary)							
Oliver Müller	Michael Zuberbühler	Daniel Schmidt					
President	Vice President	Treasurer					
Friends For Matibi	Friends For Matibi	Friends For Matibi					