

Ensuring Water for Growth and Development Contributes to Poverty Alleviation: Rainwater harvesting

The MVULA TRUST

Introduction

“One quarter of South African children suffer from stunting (UN, 2006), i.e. permanent physical and mental damage/underdevelopment, before they reach the age of five. In our case the main problem is usually not so much lack of energy foods (carbohydrate staples like maize porridge), but lack of micro-nutrients (needed daily from fresh vegetables and fruit) and complex proteins (apart from meat, this is also available in high protein crops like peanuts, certain types of beans and peas, etc)” (from: *Programme Guidelines for Intensive Family Food Production and Rainwater Harvesting* by DWAF).

Households can get access to food either by purchasing it or producing it themselves. The social support systems have already improved many households’ access to cash, but with 1.3 million households still unable to meet their daily food needs, clearly more needs to be done.

It is accepted that own production at home is a very direct strategy to improve child nutrition. However, poor households in SA always offer ‘lack of water’ as the main reason why they don’t grow food gardens at home. Rainwater harvesting schemes will provide access to water to a household to enable poor households to grow fresh food at home, and possibly grow a surplus to generate income.

Rainwater harvesting projects also contribute to the Asgi-SA objectives with the emphasis on the ‘shared’ component of growth. The Mvula Trust believes that this sharing of economic development gains implies improving livelihoods in poor communities. In particular the availability of water for livelihoods, through small scale agriculture, is important.

The water sector’s Water for Growth and Development theme focuses on “ensuring that water resource management and the provision of water services meet both economic and social priorities (national, provincial and local levels) over the next 5 years”. Rainwater harvesting projects make the ultimate contribution in this regard, reaching the poorest of the poor and lifting them out of the cycle of malnutrition, creating healthy individuals that can participate optimally in South Africa’s economy and society.

Additionally, rainwater harvesting projects have a strong gender focus, since it is generally women that tend to food gardens and that will be specifically empowered during the project.

Therefore, the Department of Water Affairs and Forestry has taken the initiative to promote rainwater harvesting and the Minister has approved a subsidy scheme to provide financial assistance in the form of a grant, which can be paid to a Water User Association (WUA) or other Approved Legal Entity, ALE (also called Registered Implementing Agents or RIAs), for the capital cost towards the construction of storage tanks for rain-water and related rain-water harvesting works for poor households in rural areas and villages, for the purpose of family food production and other household economic activities. The capital cost that DWAF funds amounts to R5,000.

In 2005, a rainwater harvesting project was piloted at 5 locations, with several ALEs. The Mvula Trust was one of these ALEs and piloted projects in the Eastern Cape, Mpumalanga and Limpopo (design and construction of rainwater harvesting tanks for 3 to 5 households, including the appropriate social development activities). Limpopo is currently working on the second phase of the projects, which involves construction of 350 rainwater harvesting tanks. Additionally, The Mvula Trust has implemented a rainwater harvesting project under the *Gwebindlala!* Programme, a programme focused on partnerships between government and civil society to create jobs, promote shared growth and build social capital and development.

The DWAF RWH Program targets “Millennium Development Goal 1a: extreme hunger”, by:

- First introducing intensive home food production (or any other home-based productive water uses) through methods of channeling and using rainfall run-off.
- Then, once a household has shown commitment by successfully implementing their production system at home, they qualify for a 30 000 litre underground rainwater storage tank, and a manual water pump, which improves their water security and enables them to expand to about 100-200m² intensive production in the backyard (i.e. about 1-2% of a hectare).

Besides having produced valuable benefits to participating households and communities, these projects have generated important lessons learned – which so far have gone undocumented. The Mvula Trust has developed this proposal to ensure that lessons learned are documented and shared in the wider development community, and to ensure large scale roll-out of rainwater harvesting projects. The funds requested do not only relate to the funding of the capital costs, but also to funding to conduct the institutional and social development component of the project (see “Approach” and “Budget” further on).

Objectives

The overall objectives of the proposed project are:

- Promoting the productive use of water for sustainable livelihoods, food security and shared growth, based on household rainwater harvesting reservoirs;

- Mobilising poor households to become self reliant through rediscovering their own potential and self worth;
- Mobilising civil society for development, through practical partnerships between NGOs, CBOs and government;
- Training and skills development; and
- Strengthening policy on multiple uses of domestic water supplies, multiple water sources and support to resource poor farmers; and improving implementation guidelines.

More specifically, this follow-up phase to the first pilot rainwater harvesting projects will:

- Evaluate previous (pilot) projects;
- Develop best practice and lessons learned documentation;
- Improve existing policies and guidelines;
- To develop procedures and implement frameworks for the selection of households that will benefit from the provision of rainwater harvesting tanks.
- To develop procedures and implement frameworks for monitoring and evaluation.
- To improve on existing designs and construction methods of RWH tanks.
- Roll-out of rainwater harvesting projects on a larger scale and mainstreaming rainwater harvesting approaches in projects aimed at assisting resources poor (irrigation) farmers.

Approach

The main component of the project, roll-out of rainwater harvesting projects, leans heavily on the lessons learned from previous projects:

1. Firstly, an evaluation will be conducted to develop lessons learned and best practice case studies. This will be done by evaluating previous (pilot) projects together with other ALEs involved in the DWAF rainwater harvesting project, and any other organizations that might have been active in this field. International best practice will also be assessed during this phase.
2. Based on the evaluations, policies, guidelines and frameworks on rainwater harvesting will be updated, and existing designs and construction methods of tanks will be improved.
3. An extensive roll-out plan for rainwater harvesting projects will be developed, broadly focusing on:
 - a. Site selection – preferably the three sites where The Mvula Trust has already worked (Eastern Cape, Mpumalanga and Limpopo), supplemented with possible new (rural) sites in the Western and Northern Cape.

- b. Mobilisation of community awareness, participation and training – setting up a project steering committee, training in financial management, household food security, building and construction methods and participatory decision making.
- c. Facilitation of household selection – based on improved frameworks to select qualified (poorest of the poor) households.
- d. Establishment of intensive gardening methods.
- e. Design of rainwater harvesting tanks.
- f. Construction of tanks, including training and supervision.

Ongoing activities will include

- household mentoring support and monitoring;
- evaluation and reporting; and
- relationship building with (among others) DWAF Regional Offices, Department of Agriculture, municipalities, CBOs and local NGOs.

The projects will aim at rolling out the project in phases: first 150 tanks, then 400 tanks and lastly 450 tanks (a total of 1000 tanks per community).

Timeframes

Phase 1 – Lesson learning and documenting best practice: Year 1.

Phase 2 – Improving policies, guidelines and frameworks: Year 1 and 2.

Phase 3 – Extensive roll-out of rainwater harvesting projects: Year 2, 3, 4 and 5.

Phase 4 – Monitoring and Evaluation, and project closure: Year 5.

Outputs

The expected outputs that will be generated are listed below, though it has to be stressed that this list should by no means be regarded as exhaustive.

- Lessons learned documentation;
- Best practice documentation (e.g. including a dvd);
- Updated policies, guidelines and frameworks;
- Improved rainwater harvesting designs and construction methods;
- Households in several communities having received rainwater harvesting tanks;
- CBOs and local NGOs trained in financial management, household food security, building and construction methods, etc.