Rain Water Harvesting & Community – Based CC Adaptation Project in Rwanda

Trócaire Rwanda

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1: Introduction

- Experience & lessons from a pilot project ongoing since November 2014 in 9 villages from 4 catchment areas;
- 9 villages have altitude between 1500m & 2700m;
- 2 rain seasons with annual rain fall between 1200 mm and 1450 mm;

2.Objectifs / Objectives

- **Educate community members** in CC adaptation practices & planning;
- **Harvest and use ROOVES water** for homestead vegetables gardening;
- **Harvest and use RUN-OFF water** for irrigation (medium size plots irrigation)
- **Recycle and reuse HH waste water** for homestead vegetables gardening;
- **Document lessons from** the technologies & practices for further extension to other areas.

3: Contexte / Context

- ✓ The Country is blessed by 2 rain seasons: **6-7 months per year**
- ✓ Unfortunately about **4.3 km3 of rainfall is lost** as runoff water;
- ✓ In Consequence, runoff water is causing a high soil erosion with
- ✓ Country **is losing 1.4 million tons of soil every year** due to the soil erosion and this represent the **capacity to feed 40.000 people** per year.

4. Méthodes/Methods

- A study to identify the technologies to be used in line with possible rooves water & runoff water quantity + water use at HH;
- Baseline survey to determine the knowledge in climate change by the communities + to identify existing practices in RWH;

➢ Households & Communal levels have been adopted for the Rain Water Harvesting.

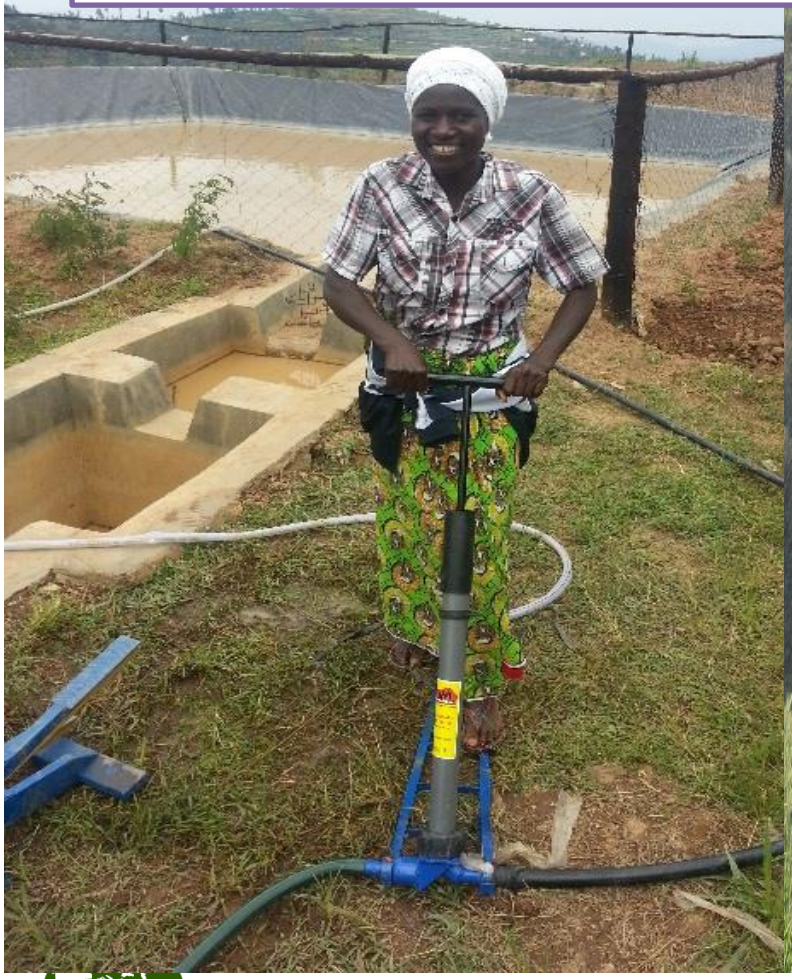
5. Résultats / Results

BASELINE SITUATION

753 HOUSEHOLDS with individual Water Tanks **+ Training in Mgt & Maintenance**

12 Runoff Water Pond in 2 communities

250,000 – 480,00 M3 for 389 members of cooperatives



Waste Water Recycling

BIOSAND FILTER for HH Level waste water Recycling to maximise its use.

6. Analyse / Analysis

- Technologies have been welcomed as they address the priority need across 4 communities;
- Combination of Granting of technologies together with Community Education and planning has added value;
- Cheap technology has been replicated without financial support.

7. Discussion

- **Maintenance & Reparation** fund has been established by each of 4 communities & regular Savings done every month;
- Water & CC committees established for Monitoring;
- There are **advantages, disadvantages, challenges and limitations** associated to each technology. Context analysis is required;
- **Use of rain water for drinking** is an emerging concern. A better and cheap & simple treatment is needed

9. Leçons apprises / Lessons Learned

- When **cheap solutions** are available the adoption by the community is automatic. Ex some HHs have replicated the SUG tanks from their own capacities;
- However the initial demonstration is important;
- Communities want to use the rain water for different domestic activities not only vegetables production.

9. Conclusion

- Pilot project and technologies have been welcomed by communities, Government and other stakeholders. However much better accompaniment to the targeted communities is needed to ensure the sustainability and the replicability of the technologies.

THANKS / MERCI

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