ADAPTS Inception phase

Mission report Ethiopia May 2008

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1 Introduction

The current report gives a short overview of the findings of a fact finding mission to Ethiopia, in the context of the ADAPTS project. The main objective of the ADATPS project is to increase developing countries‘s adaptive capacities by achieving the inclusion of climate change and adaptation considerations in water policies, local planning and investments decisions. The project focuses on enhancing existing initiatives and to evaluate those with local partners on sustainability and opportunities for up-scaling. Ethiopia, and specifically the Borona region has been chosen as one of the possible case study areas as already a successful local initiative on water harvesting is currently being implemented.

existing project

In 2007, a project on water harvesting was initiated by RAIN, EHRA and Acacia Water, with implementation through AFD. The project ‘Water Harvesting to improve Livelihoods in southern Ethiopia: from Pilots to Mainstream’ is funded by Swiss-RE, Aqua4All and Plan Netherlands. The project focuses on increasing the access to a reliable source of water for at least 10 villages in the critically dry Borana Zone of southern Ethiopia, through the construction of sand dams (in cooperation with SASOL) and surface runoff plots. Currently 2 sand dams and 3 surface – run off schemes have been completed.

2 Main findings from field reconnaissance and interviews

During the mission the field has been visited and a number of persons/organizations have been interviewed. Short notes on the interviews can be found as annexes.

General remarks

- The construction of sand dams and surface-runoff plots is very successful. The project is well managed, organized, and results looks very impressive. The communities have not been trained yet on the use of the water resources.
- Water harvesting is found historically in this area (e.g. singing wells)

Cisterns

- The impact of the surface-runoff plots is very obvious. The cisterns of 60 m^3 will be filled up after one rainfall event and will store a fixed volume of water in a closed environment. Given the current market prices, the initial construction costs are 1.2 bir/l.
- The applied design has already been successfully tested through another project (Aqua4All). The mission has some doubts about the dimensions of the cisterns; they seem very over-dimensioned. However, the currently construction is very sustainable.
- As many cisterns (of different designs) have been constructed in the region, the communities are very enthusiastic about the construction and trust that they will store the promised volumes of water.

Sand dams

- The sand-dams are not mature as yet; the effectiveness of the storage capacity cannot be estimated. There is also some concern about the amount of clay found just behind the dam. There is some delay in construction due to the drought, and also total construction costs have gone up due to rising market prices of construction material

- Sand-dams are still a relative new concept to AFD and the local community. Only after becoming productive, the dams will be adopted as a potential measure for water storage.

Local community

- They have been successfully involved in the construction. However, due to the serious drought involvement has not been continuously
- Without water harvesting the communities may take up to 2 days to collect water. Also school attendance is under pressure and frequent outbreaks of water related diseases occur.
- Expectations are high for the implementation of the water harvesting structures. It is expected that the quality of life will improve significantly after water will become available at shorter distances.
- When a structure is built, a water committee is elected from the community, for maintenance and devision of water.

Local government

- In general they have a budget and capacity constraint
- Focus on (expensive but proven) groundwater development; i.e. deep wells
- Mandate:
    - Selection of sites for groundwater development and supervise, monitor and evaluate projects
    - Report and evaluate on the groundwater resources and the activities of the NGO's on water harvesting capacities to the regional government
    - Responsible for maintaining the water supply system
- Cooperate closely with NGO's, especially in case of drought relief programs
- Through the pastoral commissions, water harvesting is promoted
- Water harvesting 'only' a feasible option when no groundwater readily available. Nevertheless, the governmentt acknowledges the potential of water harvesting in the district, but leave these developments to the NGOs
- Almost no water quality issues, except in case of a few coffee processing factories in the highland.

Ministry of Water Resources

- The ministry is mainly involved in groundwater development.
- They know about water harvesting. It is a last resort option if groundwater is not readily available. They do not allocate budget for water harvesting.
- The ministry articulated their goals in water management in the document Universal Action Plan (clean water and sanitation for almost all inhabitants), water harvesting is not included in this. As the document is not explicit, it would be possible to include water harvesting.
- Climate change is not mentioned in the Universial Action Plan (UAP)

Regional water office

- According to the interviewed, on this level the broad goals of the federal government are translated into measures on zonal schale. We were not able to meet with people of this office. From the other interviews we got the opinion they focus on groundwater and leave water harvesting to the NGOs.

AFD

- This NGO works on several topics: HIV/Aids, education, water security, drought relief, conflict management, etc.
- They are appreciated by the communities and have been present in the Borona region for a long period
- Is very well organised, good management and sufficient means from several donors. They are active in several regions.

- Focus on implementation of their measures and less on sustainable use of water, but are aware of this.

EHRA

- Focusses on national promotion of water harvesting, an play a key and succesfull role in the Swiss-Re project

- Can play a major role in linking the government to the NGO's on the upscaling issues.

- Suggestion to contact the Ethiopian taskforce on climate change (contact dr. Ababa)

SASOL

- Played an important role in training AFD during SWISS-RE project on siting, design and construction of sand dams in Borona

- Suggestion to include Somaliland as one of the potential areas for upscaling

- Suggestion to use the Association of pastoralists (work in Horn of Africa)

- Suggestion not to focus the project too much on communication and exchange, but also to show the possible results (e.g. field visit to Kitui). This will help to convince donors and possible NGO and governmental partners

- Project should focus on a community driven approach; this makes implementation of water harvesting most successful.

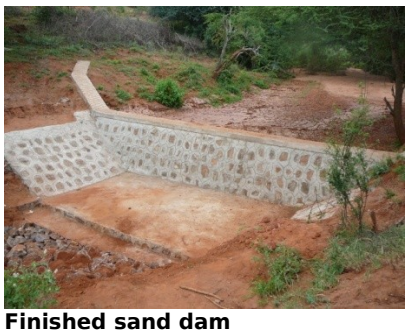
- The major issue in upscaling is institutional and not so much technical

- In Kenya the government has left the rural water supply to the communities. Regional or federal government will therefore not adopt rural water supply interventions, such as water harvesting.

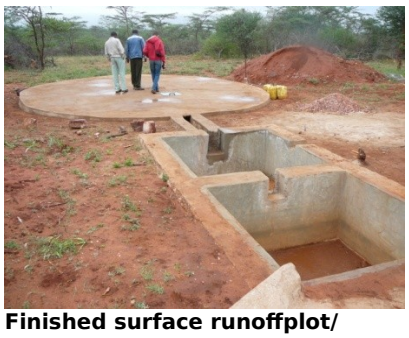
- Only implementation in many different pilot areas might convince the government of the importance. Also documentation might help to convince government and donors.

- Suggestion to include polytechnics and possible universities in the program, with the objective to include water harvesting in the curriculum. This might create a demand for alternative interventions, next to the conventional methods.

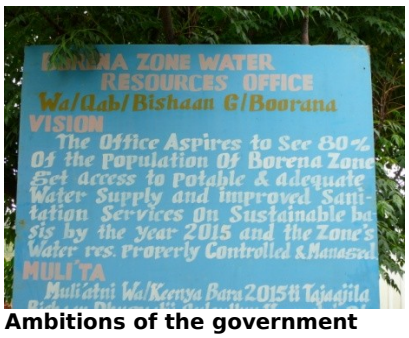
- In the near future Sasol will focus more on community capacity building, instead of a focus on construction. They are available for knowledge exchange, training etc.



Finished sand dam



Finished surface runoffplot/ cistern



Ambitions of the government

3 Project idea following phases ADAPTS

The overall objective of the Adapts projects is to include climate change and considerations for adaptation, in water policies at the different levels. This should be accomplished by establishing a dialogue between the local actors and the national stakeholders, and through local actions.

In terms of water resources, in Ethiopia one can identify two types of approaches. While the government (at all levels), concentrates on groundwater development, interventions to develop alternative water resources are mainly initiated by local and regional NGO's. This implies that the government only develops projects in those areas where groundwater is available, while in all other areas the NGO's are active. Based on these findings it is proposed that the project consists of the following three components.

1. Evaluation of current water harvesting activities in Yabelo and Northern Kenya and improve sustainable use.
2. Upscaling water harvesting to a few other areas in the region.
3. Including water harvesting as a serious alternative to groundwater development in policy papers on the different government levels.

Ad 1.

NGO's in general focus on the construction of water harvesting systems, such as sand dams and surface runoff plots. Also the communities are trained in managing the systems. However, there has been no evaluation in terms of volumes and quality of water, ecological impacts at catchment scale, efficiency of use by the community, possible impacts of increased erratic rainfall and water allocation. It is proposed that these aspects will be investigated and documented. Guidelines could be developed that are of use for future development in addition to the handbook on the construction of the systems, which has already been developed. This will also help to convince the government of the applicability of water harvesting in rural water supply.

Ad 2.

Based on the handbooks and guidelines a number of new initiatives could be developed in other regions. These pilots will serve as learning projects for the involved NGOs and as examples for the communities. It will also give insight in the suitibility of the measure in the specific local circumstances. New regions are possible elsewhere in Ethiopia and Somaliland

Ad 3.

The main focus of the government is (deep) groundwater development. In Kenya, the rural water supply is even left to the local communities; i.e. the governement is offical not involved. Water harvesting is being mentioned in some of the policy papers of the government, but is not implemented by the government. On the relevant governmental levels (federan, regional and zonal), it should be a part of the strategies to reach the goals in the UAP. The ultimate ambition is to formulate an integrated approach for reaching the goals of the UAP in the Borona zone, this should be done in a cooperation of the government and NGOs (AFD, CARE, CISP). In this approach the activities and the regions of action will be devided between the government and NGOs. This cooperastion could serve as an example for other regions in Ethiopia and possible Somaliland.

Itenary

17th: travel amsterdam-Addis Abeba
18th: travel Addis – Yabello
19th field visit
20th field visit
- meeting with community

21st: meetings
- AFD
- Water Resources department

22nd travel Yabello to Addis
23rd meetings
- EHRA – Mr Wondu
- Ministry of Agriculture: Mr. Zeenaw, Mr. Tesfaya
- MS Consultancy: Mr. Mesfin
- AFD and EHRA: Mr. Yoseph Negassa, Mr. Wondu, Mr. Alamo

24rd report writing
25th travel Addis – Nairobi
26th meetings
- SASOL: Mr. Sam Mutiso, Prof Mutiso