Sustainability Obstacles and Solutions of Rural Water Supply in Somaliland

12th Sept 2017

Water Resource management trends

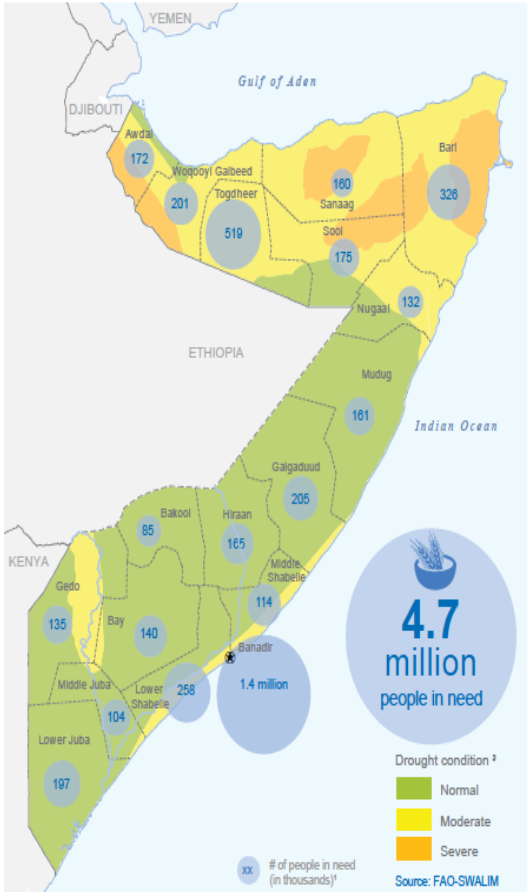
- **Pre- conflict 1970s- early 1980s**
- Mainly Government managed mechanised Boreholes
- Limited community based management
- The 1980s – 1990s armed conflict had a huge impact on the SWRS mainly pre-urban and rural areas.

Post-Conflict

- 1990-2000 – Relief era: quick impact projects
- 2000-2010 – Attempt of developing Sustainable Water Supply sources ,
  - Initiatives of community based water supply management
  - Establishment of community based rural water supply mechanisms
- Autonomous Water Agencies in main urban centres
- Public private partnership (PPP) management model started early 2000

Reoccurring Droughts

- Somalia has suffered devastating famine in 1993.
- Regional Drought 2011 – 2012
- El-Nino induced drought in Somaliland.
- Drought impacted more than 40% of the population.



Shallow well turned into animal carcass dump

Factors: Climate Change, conflict, poverty and fragile ecosystem

Haraad Reeb Project (Oct 2013-April 2016)

- Funded by BMZ – Germany Federal Ministry of Economic Cooperation and Development.
- Aim: to build the resilience of target communities against drought-related shocks.
- The project focused on rural semi-sedentary populations living in small villages spread across the eastern regions – Togdheer, Sool and Sanaag. (Some activities were also implemented in Sahil, Hargeisa and Awdal regions).
- CARE and the Ministry of Water Resources (MoWR) had a robust working relationship throughout—outlined in a joint MoU and applied at national, regional, district and village levels.

Selection of Baseline Findings (Oct/Nov 2013)

- 70% of existing water schemes were dysfunctional
  - largely attributed to reliance on external support for O&M (little local capacity for repairs)
- Most people got their water from unimproved sources
- 11% reported sufficient daily water consumption
- The National Water Act was not known/recognized at local/community levels

Project Design

- The project designers realized that insufficiency of investments is not the core problem facing the rural water supply subsector.
- The core problem was identified as poor strategies to support operation and maintenance of the established systems

Haraad Reeb II program activities

- Rehabilitation and installation of new water points

Haraad Reeb II program activities overview

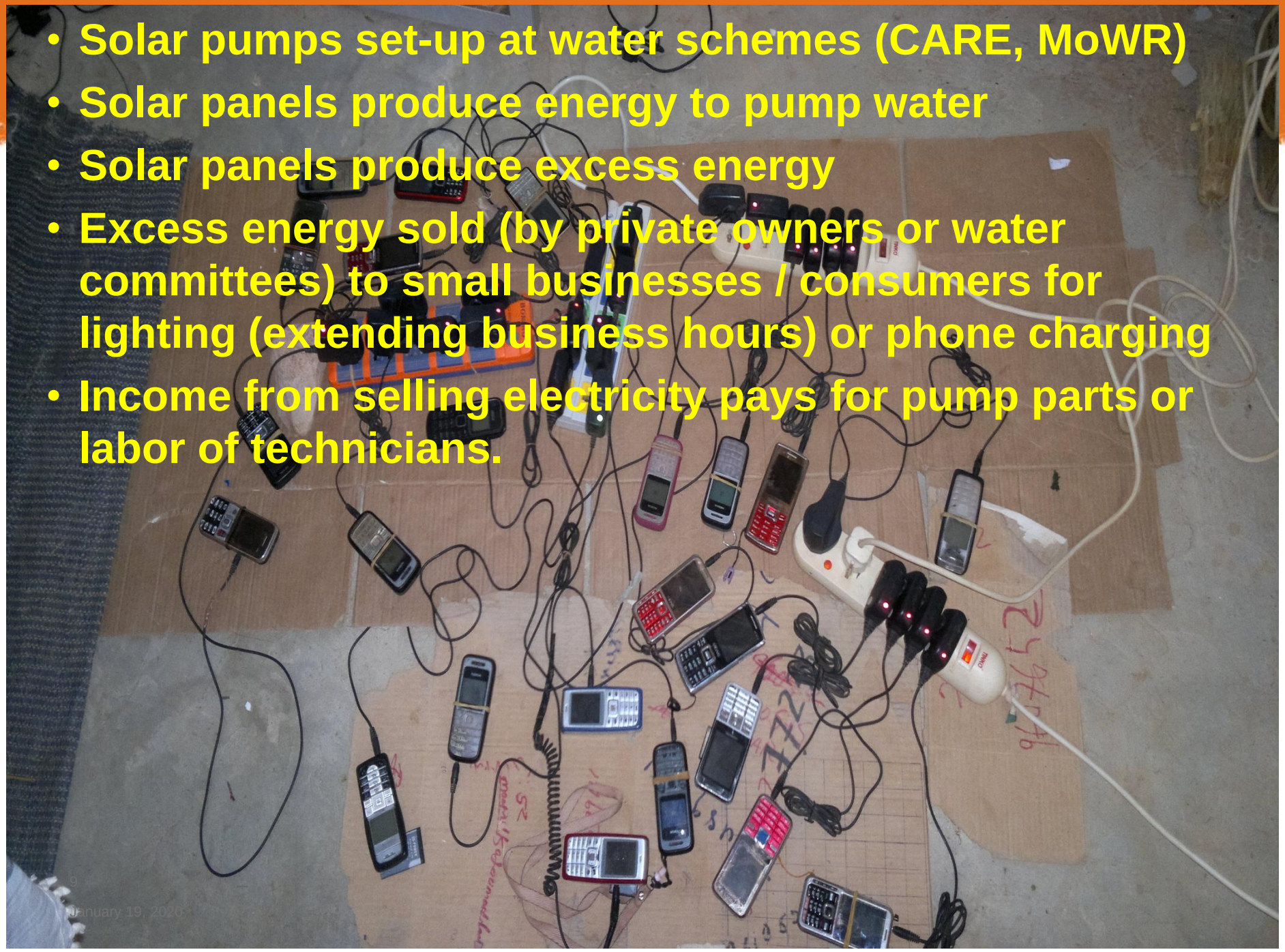
- Revitalized Water Technology Institute (classroom and practical training of village-level mechanics)
- Solar pumps set-up at water schemes
- Distribution of water transportation and water storage materials
- Governance-into-Functionality tool (GiFT) (assessment of governance/management of water schemes)
- Co-development with Ministry of Water Resources (MoWR) of “Rural Water Supply Community-Based Management Manual”
- Action plan developed with MoWR to increase awareness of Water Act among local authorities and water stakeholders
- Learning exchange visit to Kenya (10 MoWR officers)
- Development of drought preparedness plan

Activity and Results

Revitalized Water Technology Institute (WTI) in Hargeisa

- 35 village based water technicians from rural schemes were given scholarships to attend a six month course on operation, maintenance and basic business/finance

- Many technicians deployed during El Niño emergency drought
- WTI continues to train and graduate technicians



- Solar pumps set-up at water schemes (CARE, MoWR)
- Solar panels produce energy to pump water
- Solar panels produce excess energy
- Excess energy sold (by private owners or water committees) to small businesses / consumers for lighting (extending business hours) or phone charging
- Income from selling electricity pays for pump parts or labor of technicians.

Activity and Results

Distribution of water transportation and water storage materials

- Building community assets and collective resilience rather than focusing on individual households; for example, using a work-for-assets model instead of direct donation of materials
- Any projects or programs with sanitation and hygiene promotion components should involve and develop the capacity of the ministry responsible for public health

Activity and Results

Governance-into-Functionality tool (GiFT)

- Assessment of level of functionality: breakdown time / frequency; liters pumped per day; families served, etc.
- Assessment of governance of water schemes: current management and payment structures, private sector involvement, involvement of women on committees, record-keeping, etc.
- CARE and Ministry of Water Resources **conducted joint visits** to 21 water schemes to understand challenges to sustainability

- There was confusion on who was supposed to fix pumps when they broke; confusion on who was supposed to pay for repairs; confusion on management structures; these challenges were recognized by the MoWR and a Manual was developed (*next slide*).

Haraad Reeb II program activities

Co-development with Ministry of Water Resources (MoWR) of "Rural Water Supply Community-Based Management Manual"

- The Manual was developed to define the roles and responsibilities of operators, water point managers, local government officials and the community
- Creation of the Manual utilized findings from the GiFT, FGDs and workshops involving water stakeholders
- Dissemination: Manual distributed and discussed at gatherings across the country, co-facilitated by CARE and senior MoWR staff members; Attendees included participants, regional governors, regional water authority coordinators, mayors, councillors, rural water point operators, village elders, women and youth representatives.

Activity and Results

Learning exchange visit to Kenya

- 10 MoWR officers visited northern (arid) Kenya to understand how they are tackling challenges with water supply and water scheme management and sustainability
- Discussion forms held after the visit for reflection and development of Action Plans

- Multiple annual learning and policy dialogues with communities, private sector and government to see how policies could a) be improved and b) better implemented at local level

Activity and Results

Development of drought preparedness plan:

- Stakeholders including MoWR, National Environment Research and Disaster-preparedness (NERAD), regional coordinators and others contributed to a study on increasing resilience in drought.
- Study led to co-development or improvement of:

1) Early Drought Warning System (and plan)

2) Establishment of Rapid Response Unit

3) National Hydrological Droughts Preparedness Plan Guideline

- Using these tools, CARE and MoWR and NERAD predicted the drought prompted by 2015-2016 El Niño with the collaboration of MoWR and NERAD, and were able to provide timely support to communities

Government Commitment and Collaboration

The project collaborated with three district water officers who committed 30% of their time for the implementation of project activities.

The district water officers conducted monitoring visits to two water points a month and provided technical and management support to project target water points.

- **"*Haraad Reeb* was a realistically designed project that demonstrated more than usual creativity is tacking a difficult problem...it will impact nearly the whole of the rural population in Somaliland through policy shifts."**

  - *Misheck Kirimi, project evaluator*

Technologies Installation

Solar system and Elevated water tank

Putting water closer to users

Thank You

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