Accelerating Self-supply with the SMART Centre approach
- an example from Tanzania -

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Objective

• Reach sustainable water supply in Tanzania also in small communities or at family level
• Where machine-drilled boreholes are too expensive
• Create supply chains of affordable technologies for Self-supply, produced and sold by local private sector
SMART Centre approach
Simple, Market-based, Affordable, Repairable Technologies

• SHIPO SMART Centre Tanzania since 2003
  – Training and knowledge transfer of around 20 SMARTechs
  – 35 successful entrepreneurs producing and selling quality products
  – 10,000 installed Rope pumps: 5000 for Communal supply and 5000 for Self-supply in rural and peri-urban areas

• Can Self-supply help to reach the goal of access for all?
Case study on Self-supply

• **Assessment of the supply chain**
  - Businesses, entrepreneurs
  - Technologies fit for Self-supply, SMART wells and pumps
  - Motivations and needs of Self-supply water users

• **What are the challenges to accelerate scale-up?**
The entrepreneur (1)

• His customers are
  – NGOs, for (subsidised) rural communal supply
  – Families
    (1) Peri-urban families with communal supply invest in an own well and pump
    (2) Rural families, less money, buy a pump between 2 or 3 families

• Wells and Rope pumps important part of his business: income and job creation

• Supply Chain of materials relatively well developed, bulk supplies from Dar es Salaam
The entrepreneur (2)

- Marketing is bottom-up: Satisfied users and critical mass

- Limitations to scale up
  - Limited business skills / marketing skills
  - No strategy how to grow, approach new customers
  - Few companies doing very well
  - Insufficient capital prohibits smaller companies to grow
The water user (Self-supply)

- 80% of the pumps for Self-supply sold to peri-urban families, middle class and top of BoP (teachers, shop owners, company owners, larger farmers)

- 95% of the families paid upfront, 5% via microcredit (SACCOS)

- Sales via examples at neighbours, health clinics, family, demonstration models at entrepreneur
Motivation to invest in Self-supply

- Convenience: reliable water source nearby, abundant water
- Independency from neighbours
- Avoid waiting time at communal water supply
- Communal water supply, piped system often not functioning
- Easy handling, low maintenance costs, affordable
- Domestic and productive use
  - Irrigation
  - Watering animals
  - Water sales
  - Construction
Sustainability of Self-supply

- Maintenance costs of Rope pumps were few and affordable
- 92% of the private wells / Rope pumps were functional at date of interview
- Users did small repairs themselves (ownership), spare parts for Rope pumps were easily available.
- Up to 35 households used 1 family pump. Water was mostly provided for free to other families
- Pumps sold by local companies, no interference of an NGO
Conclusions / Recommendations

Accelerate scaling up of rural water supply with low cost technologies possible via a market-based approach with actions;

– Create a critical mass in new areas
– Expand training entrepreneurs, include training in Vocational education
– Provide long term follow up on quality, technical and business skills
– Facilitate entrepreneurs in access to capital, social marketing
– Awareness, show families economic benefits and convenience of Self-supply
– Add other inclusive business models to enable Self-supply for poorer families
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