

MICRO IRRIGATION - THE STORY OF LCDI IN LESOTHO

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Why LCDI

- Most people are poor, but have garden
- Enough rain or sources to capture water from
- Inadequate water main reason for agriculture failure
- We believe in business approach to supply affordable implements profitably
- The urban and rural poor willing to invest in devices that work
- Large and medium irrigation schemes proved unsustainable and had no positive results

Context: Lesotho 2000

- Small-scale farmers and poor households in Lesotho need fundamental support to invest in agriculture and contribute to food security, wealth creation and development
- Availability of specific devices and services for large social groups can contribute to transformation of the agricultural sector
- New and positive perceptions of small scale farming by politicians, youth, farmers and public are a prerequisite for change

Project Focus

Designed and started in January 2001

- Objective: introduce tested, affordable LCDI devices for small scale farmers and poor households
- Driven by demand and market forces

Context LCDI

- World-wide irrigated areas short of water (Bucks 1995)
- Growing competition for water between agriculture and rapidly expanding cities
- Water saving technologies in dire need (Postel 1992)
- Drip irrigation most efficient
- Currently covers < 1% of global irrigated acreage
- Main obstacle: capital cost (US\$ 1000/acre – row crops)
- Drip irrigation not accessible to majority of farmers in developing countries
- **Lesotho ⇨ LCDI is not (yet) on the market**

Business Promoted by Helvetas Since 1998

- Machobane farming system
- Mountain agriculture for small scale farmers
- Water Management and micro-irrigation
- SWAP
- Platform for sustainable mountain development (IYM)
- Responsible tourism
- BDS development
- Strategic projects: seed potato

The Initiative

- Taken in September 2000
- Design of 2-year testing phase on LCDI
- Fits well with water management, key process in <H> NRM programme
- Joint project with MoA (government), <H> (iNGO, Maseru Pumps & Plastics (private sector))

Expected Deliverables

- At least two LCDI model kit devices are designed, tested on field conditions and ready for the market
- Marketing studies for each device are done
- At least one assembler launches the production of at least two devices
- A System of distribution & decentralized sales services and client advice is launched
- MoA is supporting the tested devices through its field service (extension) system

Ground Covered Since 2000

- Step 1: Identify committed institutions
- Step 2: Agree on definitions, objectives, interests
- Step 3: Start from “as-is” situation
- Partnership with
 - (1) MoA as the institutional memory for irrigation in Lesotho
 - (2) Agrinet (SA) – regional provider of irrigation and other farming devices with programme to develop LCDI in the region
 - (3) MPP – local enterprise interested in promoting LCDI (assembling, marketing, distribution)
 - (4) Helvetas – facilitator, service/product developer
- Step 4: Decision if action plan for LCDI between stakeholders possible
- Step 5: Clarify, negotiate & agree on action plan
- Step 6: Implementation of plan

Milestones Summary (2000 – 2002)

- August 2000: SDC (U. Heierli) encourages Helvetas to launch LCDI in Lesotho
- October 2000: Commitment

Expected Outcome – 2007

- At least 5'000 households and farmers irrigate 0.1 acre with LCDI ↑ 500 acres are irrigated
- At least M600.00 profit per irrigate field per year ↑ M3 mln Maloti added value per year with ↑ tendency
- The devices are assembled in Lesotho by a private company on a for-profit basis
- The devices can be purchased from major towns on the country

The Action Plan – Helvetas Lesotho

1. Testing of devices (mid 2002)
2. Marketing studies (mid 2002)
3. Assembler is ready for production (end 2002)
4. System of distribution & service is launched (end 2002)
5. MoA (crops & field Services departments) supports new products (2002)

Challenges

- Very slow procedures at MoA. Lack of personnel & time for follow-up.
- Zero-budget project: good for ownership, but not so good for a timely managed process
- Resources to monitor the testing programme are very limited (<USD 2'000)
- The transition phase of MoA from implementor to facilitator is still in its initial phase
- Helvetas is in phasing-out stage (2005)