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Sustainability of Small Water Infrastructures (SWIs) in Limpopo Basin: Past interventions and Lessons learnt (part 1)

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Session: Basin [Limpopo] and Learning to Innovate, Benefit Sharing Mechanisms



INADEQUATE ENGAGEMENT OF SMALL-SCALE FARMERS AND LACK OF TRAINING IN THE OPERATION AND MANAGEMENT OF THIS DRIP IRRIGATION SYSTEM IN MABALANE, MOZAMBIQUE RESULTED IN THE FARMERS ROLLING OUT THESE EXPENSIVE DRIP LATERALS AND REVERTING BACK TO THE USE OF HIGHLY INEFFICIENT AND LABORIOUS FLOOD IRRIGATION SYSTEM.

Key Message

Sustainability of SWIs in the Limpopo Basin is a recognized problem. Most of the SWI developed within the basin fail within the first decade of operation. Alternative and innovative approaches are needed ranging from the planning and designing processes to operational, participatory monitoring, ownership and management of the SWIs.

Summary

Previous interventions on SWI in Limpopo Basin have been reviewed and synthesis reports analysed to document the reasons for success and failures of these SWIs. The synthesis identified five key areas that impact on the sustainability of SWIs. These include:

- Technical and design aspects
- Institutional arrangements and end-user/beneficiaries involvement
- Policy environment and
- Socio-economic issues
- End-user training in the operations and management of the established SWI

Maintenance and operations aspects have also been highlighted as important factors for sustainability of SWIs.

Alternative approaches for future planning of SWI in Limpopo basin have been proposed. These include:

- Active engagement of end-users in the planning stages and ensuring that various role-players own the structure and understand their roles and responsibilities towards the sustainable utilization of the SWI
- Adopting the design approaches of SWIs that ensure the SWI meets the multiple needs of the local communities
- Ensuring the SWI generates sustainable local economic activities through creating access to markets, information and adequate extension services