

Merging Catchment Management with Irrigation Development

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Promoting Growth in SS Irrigation in Malawi

- Agriculture faces multiple challenges
- Irrigation as strategic entry point for building resilience
- How does irrigation adapt to climate change?
- Policies do not always “speak” to each other



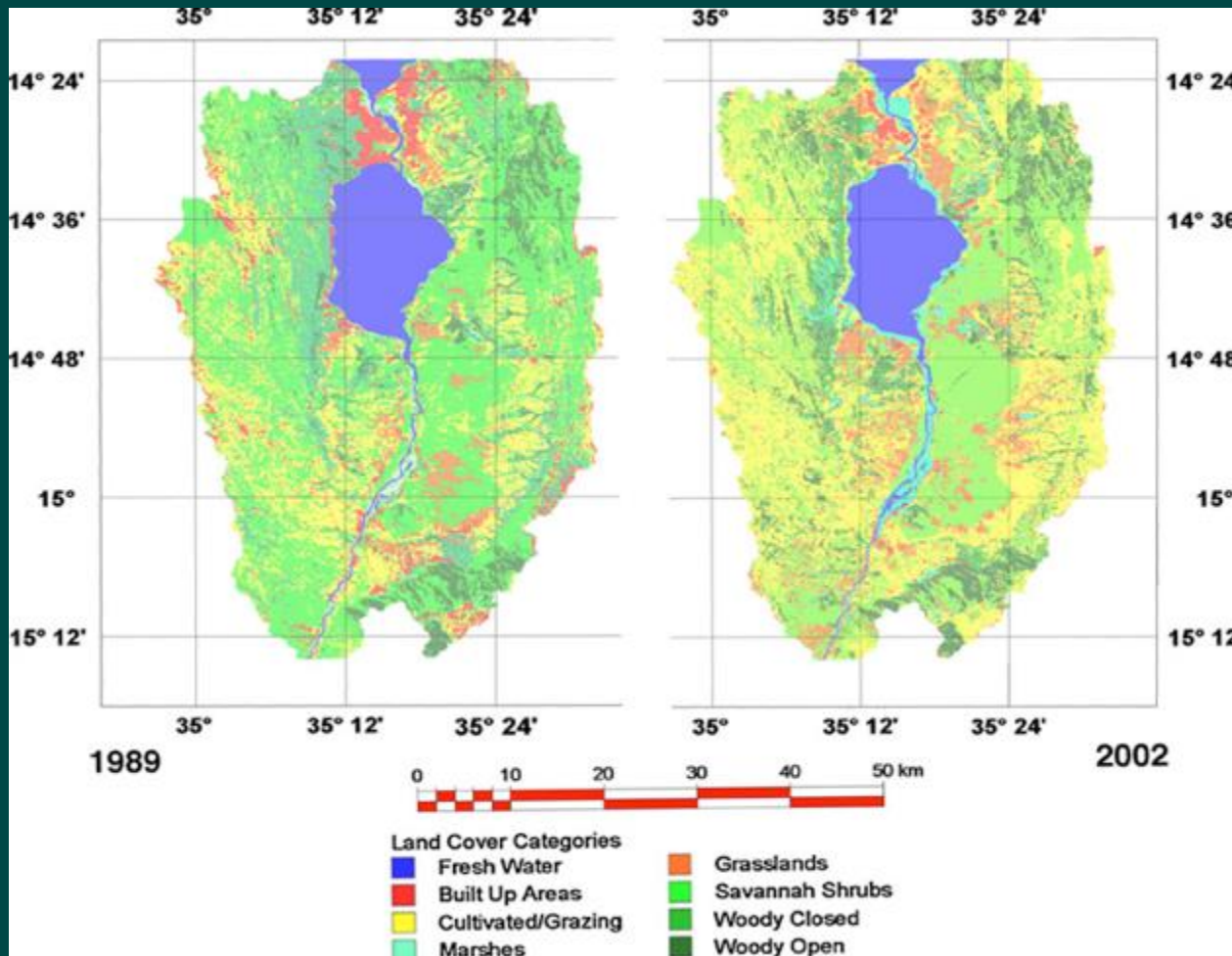
“Increasing resilience of food production systems to erratic rains by promoting sustainable dimba production of maize and vegetables in dambos, wetlands and **along river valleys**”

Malawi National Adaptation Plan of Action pp. xi. GOM, 2006

- Ethnographic research covering Muona and Chitsukwa Irrigation Schemes (2013-2014)
- 152 household questionnaires
- Key informant interviews
- 12 focus groups
- Participant observation
- Photo-elicitation
- ⁴Literature review



Land cover maps for the Shire Catchment 1989 to 2002



- 52% ↓ forests
- 23 % ↑ Cultivated/grazing lands
- 177% ↑ built up area

Catchment Challenges



“The problem lies with our friends in the uplands, they do not have irrigation like we do here, so they resort to charcoal production and stream bank cultivation. These activities are contributing to siltation of rivers and affecting our schemes down here ”.

Farmer in Muona Irrigation Scheme

“We don’t have the funding for coordinating with the upland districts”.

District Official, Nsanje

Drivers of Change



Local targets, catchment impacts

“We thought we were increasing land under production, but now we realize that we actually reduced it by letting them farm along rivers”



Extension Officer, Nsanje

The Case of Muona Irrigation Scheme

- Large scheme 450ha
- Rice and maize
- 2260 plot holders, 4000 families supported
- Derives water from Tangadzi River
- Fell into disrepair



Local Problems



“The water was such a problem so much that I bet you couldn't fill a bucket”



- Competing priorities
- Changing context
- New intake structure
- No to levelling
- Some canals cleared
- Protection bund to “protect investments made by project”



Impact outside Project Area



“They told us to talk to our donor to put a bund for us”.

“The new scheme in Makhapa has made us poor even before it has started working”

Key Messages from our research

- There are significant barriers to irrigation development that exist beyond the level of the schemes and these reflect a lack of coordination at the catchment level.
- Building resilience for some through irrigation may have the unintentional effect of increasing vulnerability for others, especially when donors focus only on “their” scheme.
- Important to understand upstream-down stream interactions in planning irrigation and livelihood interventions
- Shared vision, shared burden and shared glory

“It is through stories that we are able to reconstruct the past...it is these stories that have shaped Africa.” Credo Mutwa 1966



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Catchment management options?

- Farmer level management of stones in the fields to reduce soil loss by erosion
- Harmonizing afforestation/reforestation with river bank protection

