Is What Went Right Also What Went Wrong?

The Impact of Political and Social Change on Small Scale Irrigation in Malawi









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What went right?

 Malawi's transition to democracy

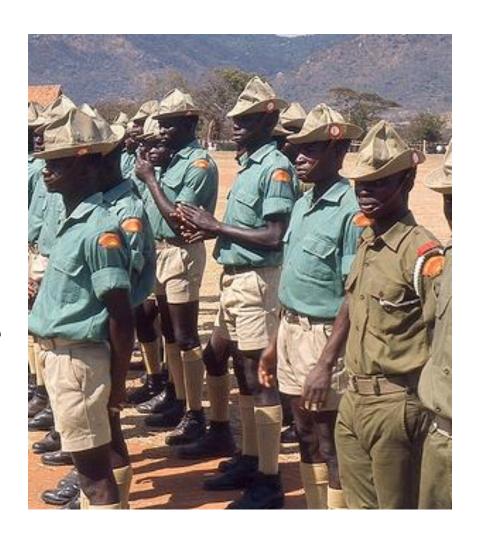
 Improvements in gender equality

 How could democracy be so wrong?



Pre-reform Period in Malawi

- Strong enforcement of environmental law
- Local level presence of the state
- An 'effective' network of traditional leaders and Malawi Young Pioneers
- Land 'grabbing' by the state for estates
- Government ban on cash crops for peasants
- Top-down extension system



Source: Flickr

Factors Sustaining Political Regime



Democracy and the Environment

Three main arguments

- 1. No association
- 2. Association exists
- 3. Democratization

Two main data sources

- Freedom House/Polity index
- Rate of forest change





Study Area: Muona Irrigation Scheme,

Malawi

- Lower Shire Valley
- Constructed 1969-1972
- Forced relocation
- 400ha, 2500 plot holders, 4000 farmers
- Land scarcity
- Mozambican refugees
- Matrilineal + Patrilineal
- WUA managed



Source: USAID

What Changed?

CHANGE	PERCEIVED EFFECT
Market liberalization	More thieves, corruption
Reduction in size of the state	Weak support to farmers, soil damage
Change in agricultural policy	Shift towards cash crops, irrigation
Disbanding of Young Pioneers	Democracy misread? Scheme mismanaged Increased insecurity, theft
Weaker traditional leaders	Conflicts over land
Elected leaders (scheme, district)	Overharvesting of ecosystem services, lack of leadership

Results of regime shift

Deforestation

Stream bank cultivation

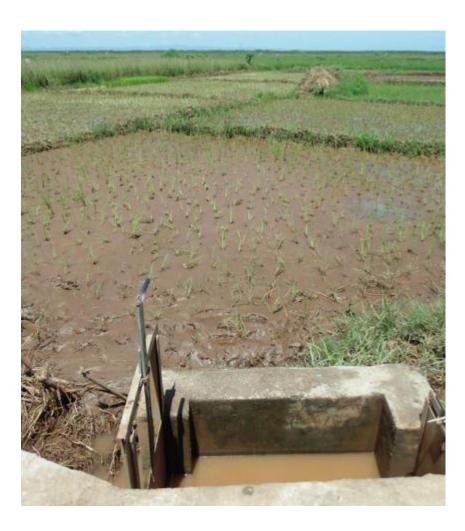
Land use intensification

Siltation of rivers and schemes



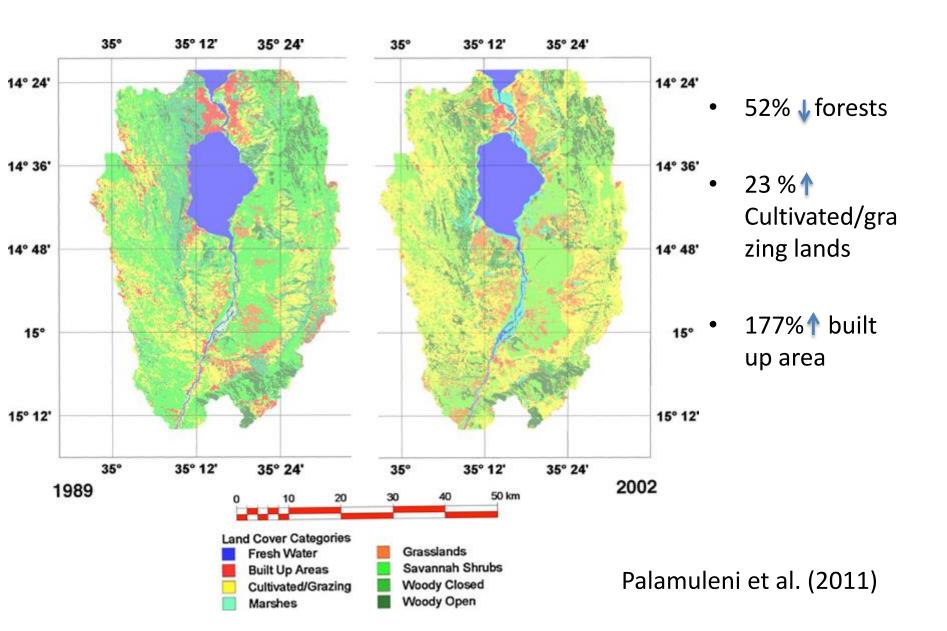


Impacts on Agricultural Resilience





Land cover maps for the Shire Catchment 1989 to 2002

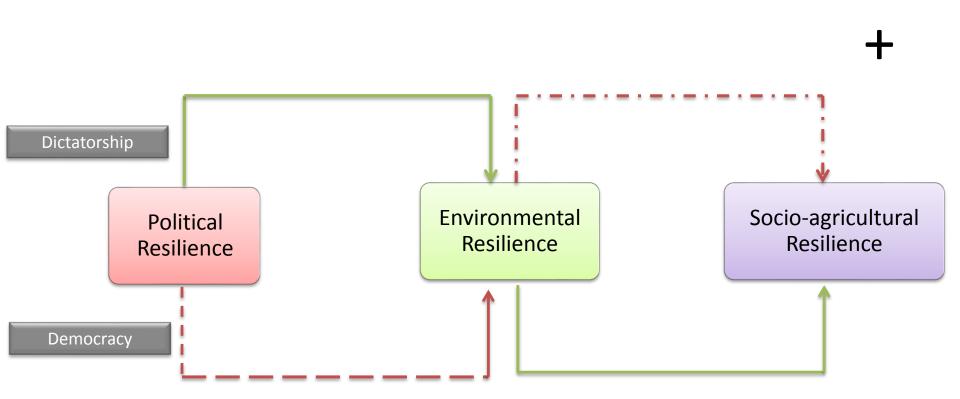


Other Changes

- Population and demographic change
- Stock theft and reduced grazing grounds reduced livestock productivity
- Low manure use and loss of soil resilience
- Failure to manage people
- Land conversion to cropping



Summary



Conclusions

- Environmental policy pre-reform emphasized preservation rather than sustainable use
- Links between democracy and environmental degradation are indirect and complex
- Systems thinking e.g. resilience theory allows for understanding the processes through which impact is produced

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