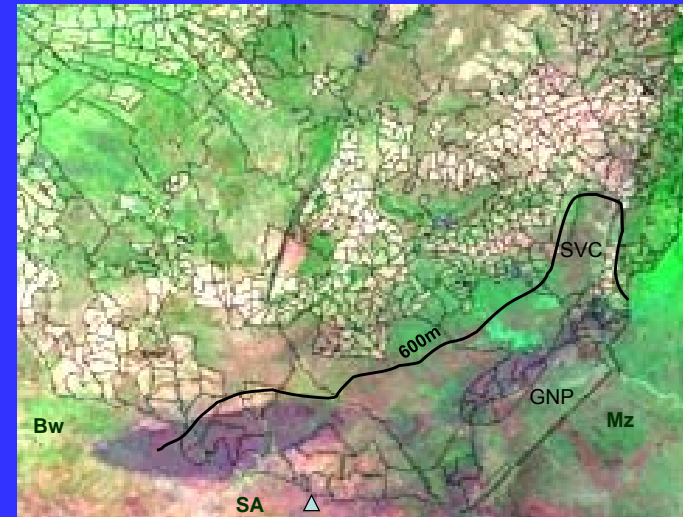


Further AHEAD-GLTFCA related activities in the South East Lowveld of Zimbabwe:

SELCORE
Limpopo Project
Resilience Analysis

David Cumming

South East Lowveld of Zimbabwe - Context



Area:
c. 50,000 km²

Altitude:
300-600m

Rainfall:
<400mm,
CV >35%

Temp:
25-27.5° C

Growing season:
c. 90 days

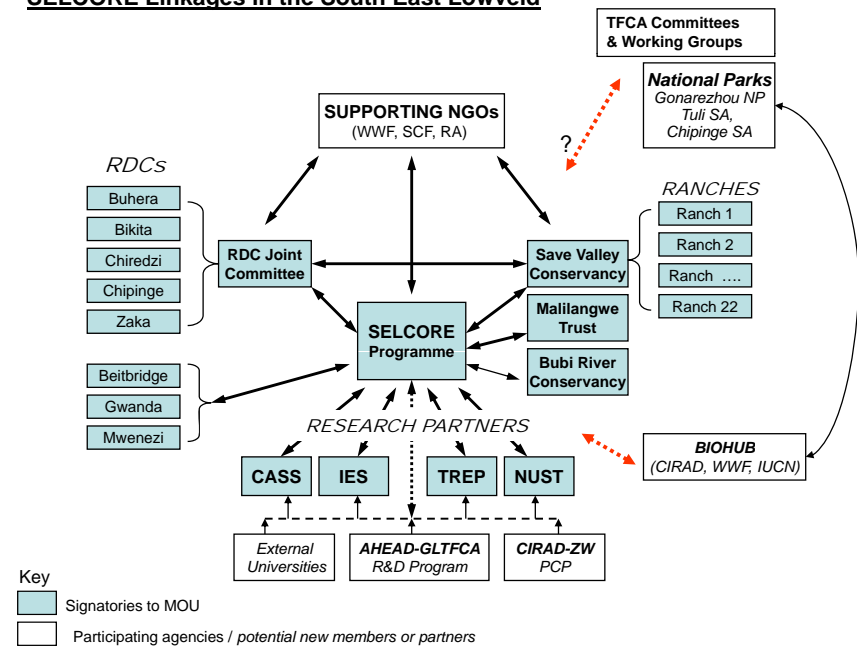
Satellite Image from S. Prince – University of Maryland, 2000

SELCORE - Key Objectives

- To foster an inter-disciplinary, participatory research and monitoring programme that will enhance landholders understanding of ecological and social systems in the SEL and thereby improve:
 - Adaptive management for the sustainable use of the region's natural resources
 - Policy frameworks for integrated management and conservation of natural resources
 - Resource management capacity, adaptability and resilience of linked social-ecological systems of the SEL,

➔ *In order to ultimately enhance the livelihoods and environmental security of people living in the SEL*

SELCORE Linkages in the South East Lowveld



SELCORE – Some Outputs

- Series of workshops exploring, natural resource management problems, needed research
- Examination of research needs in three main sectors (wildlife & tourism, agro-pastoral and large-scale irrigation) and the linkages between sectors
- Options for extension of wildlife based tourism across land tenure regimes through joint ventures & partnerships
- Options for the development of irrigation through linkages between large and small scale irrigators in Runde catchment (Proposal to EU)
- Review of past research on natural resources
- Preliminary analyses of resilience and adaptability in SEL

CESVI Limpopo Project

Goal: *Improve the standards of living of people adjacent to protected areas and living within the in the GLTFCA*

Purpose: *Contribute to the development of sustainable land and natural resource use systems in target areas adjacent to the GLTFP, and within the GLTFCA, and help communities to make the best use of the potential “value added” opportunities the TFCA has to offer.*

CESVI (IUCN) Limpopo Project

Output #1: Development of enabling policy frameworks for transboundary natural resource management by communities facilitated

Output #2: Ecological, economic and social advantages (value added) of TBNRM identified and interventions to realise value added opportunities developed

Output #3: Targeted natural resource management projects in each of the partner countries implemented

Output #4: Project management established and operational

Total budget: € 5 million over 3 years
Starting: ?

Resilience

Considerable confusion in the literature over stability and resilience

Holling 1973:

“... the ability of systems to absorb changes of state variables, driving variables and parameters and still persist.”

Pimm 1984:

“A measure of how fast a system returns to an equilibrium after a disturbance.”

Resilience

Walker et al 2006

"Resilience is the capacity of a system to experience shocks while essentially retaining the same function, structure, feedbacks, and therefore identity."

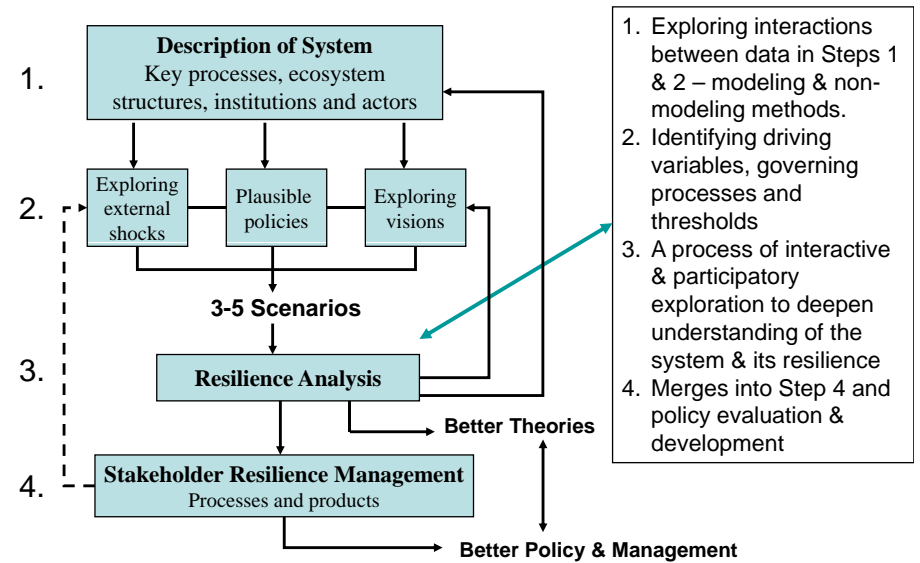
→ Adaptive management

Grimm 1992

"Returning to the referential state (or dynamics) after a temporal external influence (disturbance) has been applied"

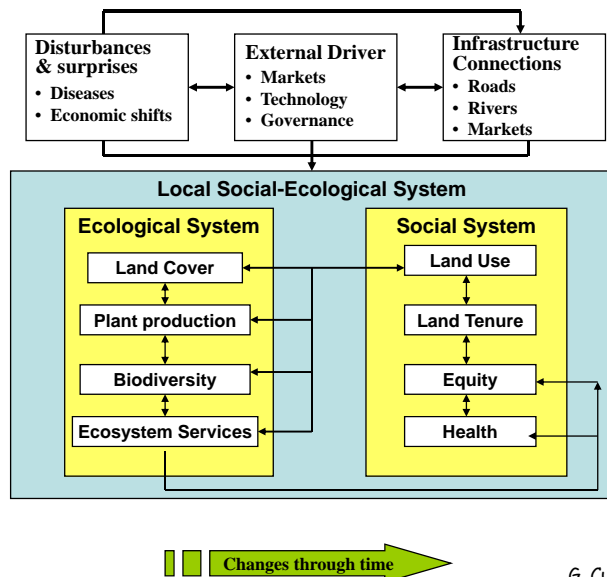
→ MSY, Command & Control

Resilience Analysis



Adapted from Walker et al (2002) Cons. Ecol. 6(1)art 14

Key components (boxes) and relationships within a study system



G. Cumming et al 2005