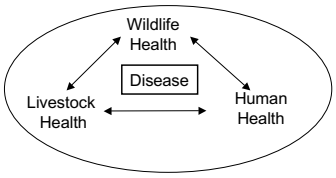
Conceptual Framework(s)

for the

AHEAD-GLTFCA Program

1. Parks Congress
2. Concept Paper
3. Skukuza Workshop
4. Where to now?

Sept 2003: Initial view of "system" boundary (World Parks Congress?)



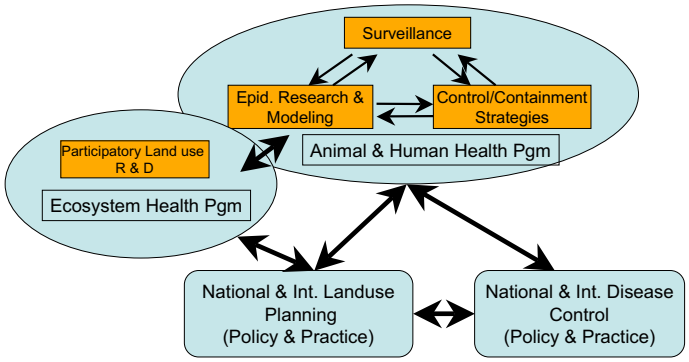
Spatial Boundaries:

Mozambique: Limpopo – Banhine – Zinave and intervening areas (Eastern boundary of KNP & GNP)

South Africa: Kruger NP and fuzzy western boundary (Escarpment ?)

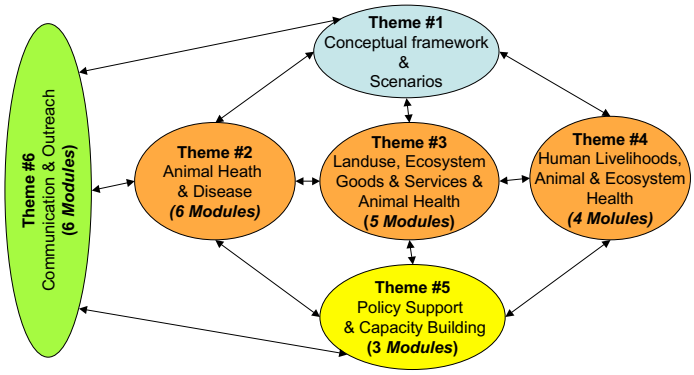
Zimbabwe: Gonarezhou NP, Conservancies and fuzzy north-western boundary (Biosphere Reserve westwards to Shashe-Limpopo TFCA?)

Pretoria – Nov. 2003: Concepts for an integrated approach (cont.) – Programme Integration



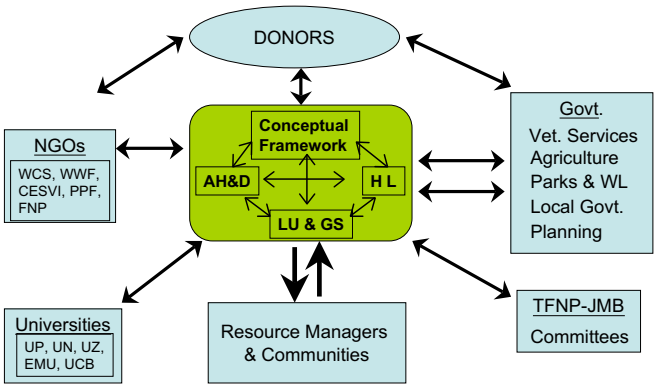
Pretoria – Feb 2004: Concept Paper

"Sustaining animal health and ecosystem services in large landscapes"

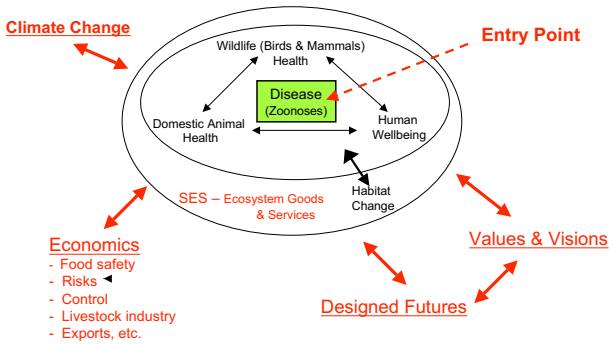


+ 3 countries, 6 provinces, 10+ Districts, etc.

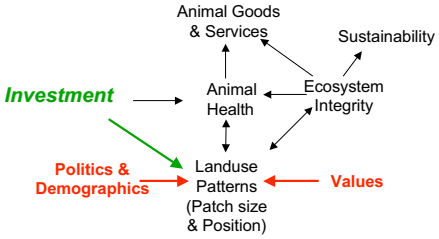
Theme # 6: *Communications and Outreach*



Modified version of "system boundary" *(May 2005 Framework Meeting)*

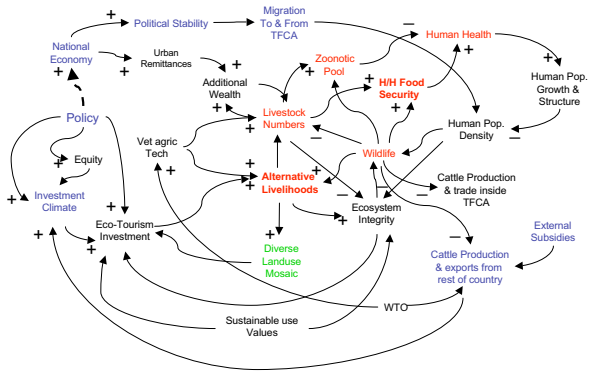


2. Landuse, Ecosystem Goods & Services, and Animal Health

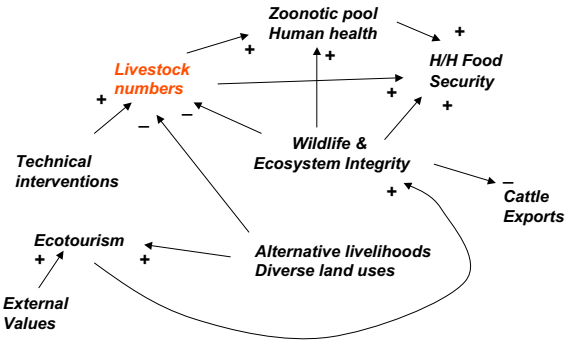


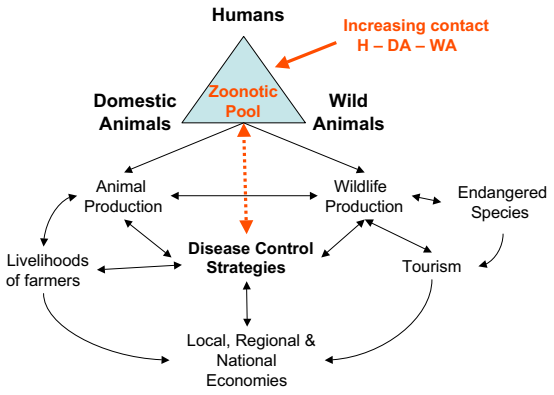
- ***Boundaries between animal production systems & value systems***
- ***Supply and demand for ecosystem services***
- ***Land tenure, animal health and goods and services***

White Board Sheet #10 – TFCA agro-pastoral system

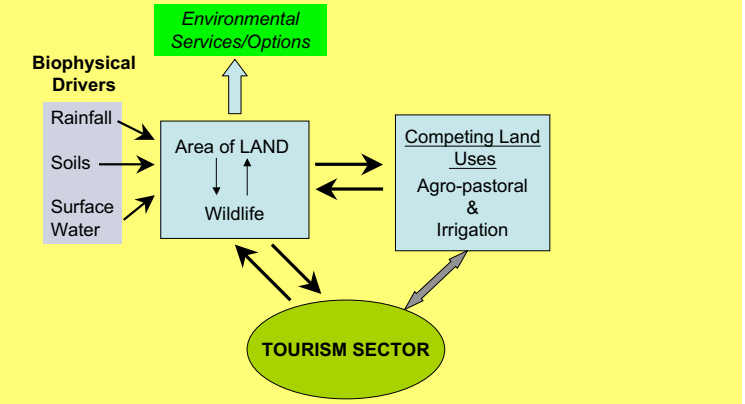


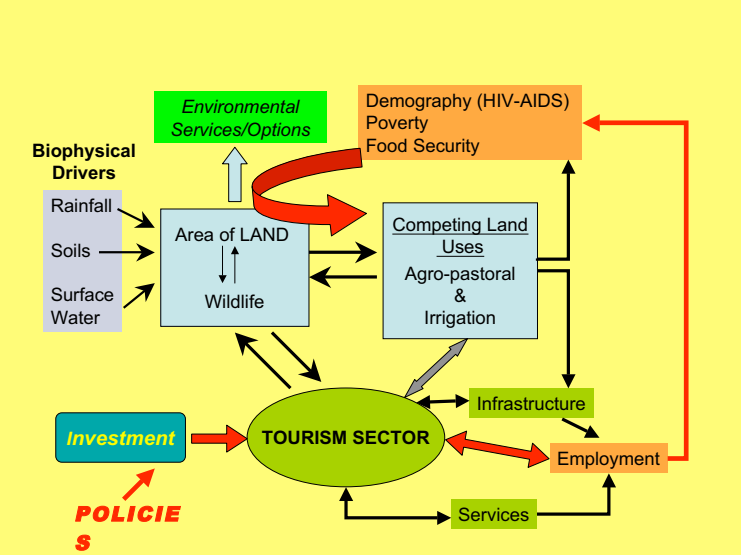
Cross-scale interactions?

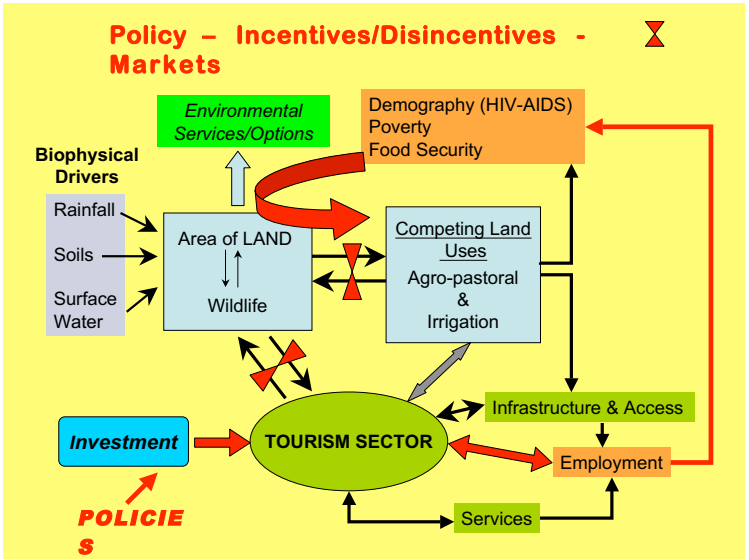


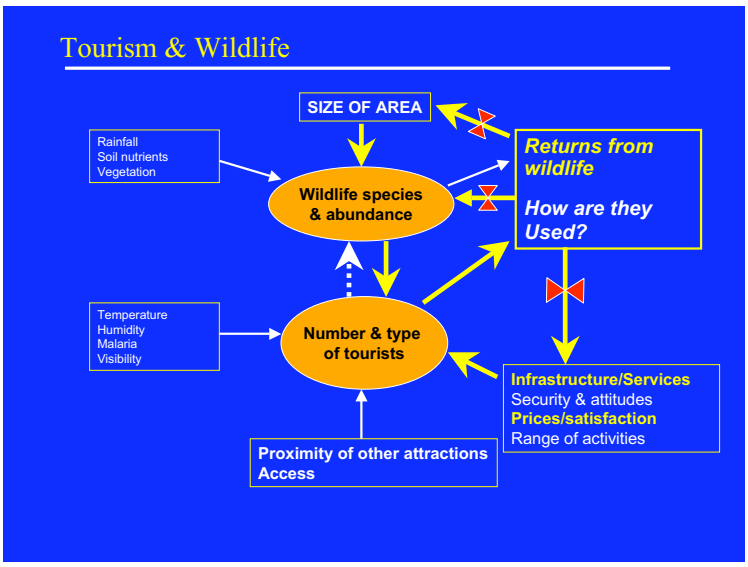


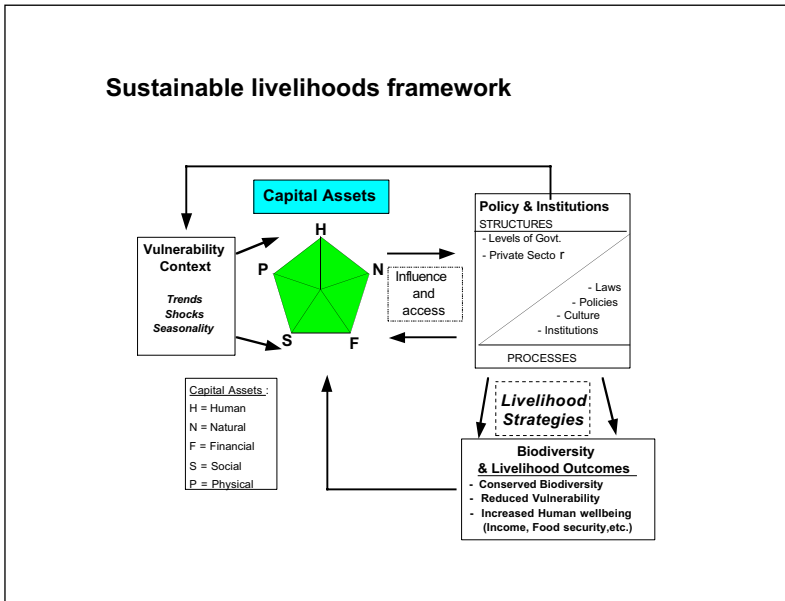
Conceptual Framework/Model

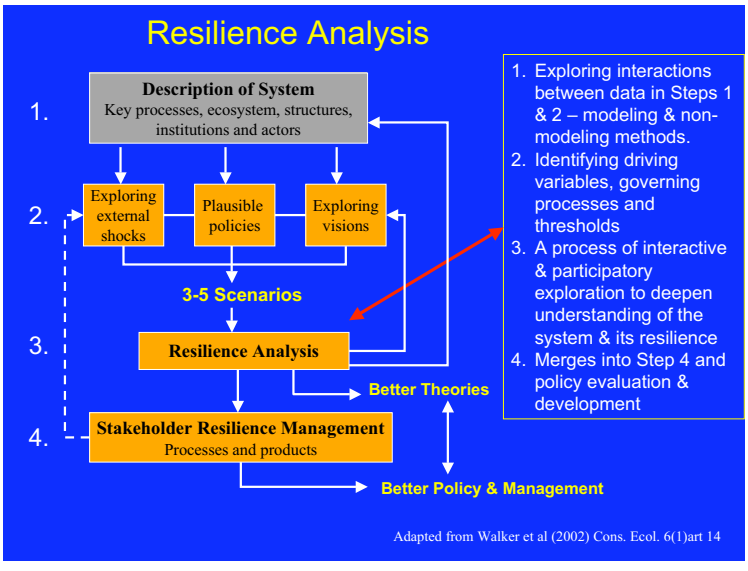


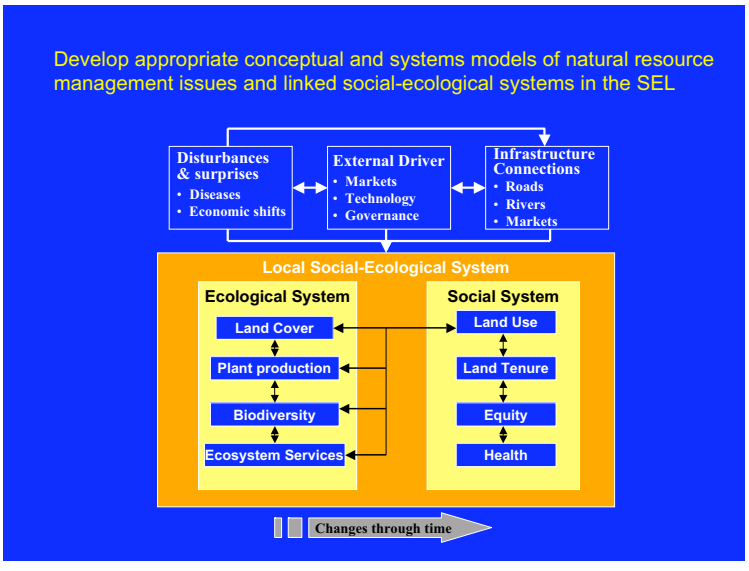

Environmental Services/Options
Demography (HIV-AIDS)
Poverty
Food Security
Biophysical Drivers
Rainfall
Soils
Surface Water
Area of LAND
Wildlife
Competing Land Uses
Agro-pastoral & Irrigation
Infrastructure
Investment
TOURISM SECTOR
Employment
Services
POLICIES


Policy – Incentives/Disincentives - Markets
Environmental Services/Options
Demography (HIV-AIDS)
Poverty
Food Security
Biophysical Drivers
Rainfall
Soils
Surface Water
Area of LAND
Wildlife
Competing Land Uses
Agro-pastoral & Irrigation
Infrastructure & Access
Investment
TOURISM SECTOR
Employment
Services
POLICIES


Tourism & Wildlife
SIZE OF AREA
Rainfall
Soil nutrients
Vegetation
Wildlife species & abundance
Returns from wildlife
How are they Used?
Temperature
Humidity
Malaria
Visibility
Number & type of tourists
Infrastructure/Services
Security & attitudes
Prices/satisfaction
Range of activities
Proximity of other attractions
Access


Sustainable livelihoods framework
Capital Assets
Vulnerability Context
Trends
Shocks
Seasonality
H
P
N
S
F
Influence and access
Policy & Institutions
STRUCTURES
- Levels of Govt.
- Private Sector
- Laws
- Policies
- Culture
- Institutions
PROCESSES
Capital Assets :
H = Human
N = Natural
F = Financial
S = Social
P = Physical
Livelihood Strategies
Biodiversity & Livelihood Outcomes
- Conserved Biodiversity
- Reduced Vulnerability
- Increased Human wellbeing (Income, Food security,etc.)


Resilience Analysis
1.
Description of System
Key processes, ecosystem, structures, institutions and actors
2.
Exploring external shocks
Plausible policies
Exploring visions
3-5 Scenarios
3.
Resilience Analysis
Better Theories
4.
Stakeholder Resilience Management
Processes and products
Better Policy & Management
1. Exploring interactions between data in Steps 1 & 2 – modeling & non-modeling methods.
2. Identifying driving variables, governing processes and thresholds
3. A process of interactive & participatory exploration to deepen understanding of the system & its resilience
4. Merges into Step 4 and policy evaluation & development
Adapted from Walker et al (2002) Cons. Ecol. 6(1)art 14


Develop appropriate conceptual and systems models of natural resource management issues and linked social-ecological systems in the SEL
Disturbances & surprises
• Diseases
• Economic shifts
External Driver
• Markets
• Technology
• Governance
Infrastructure Connections
• Roads
• Rivers
• Markets
Local Social-Ecological System
Ecological System
Land Cover
Plant production
Biodiversity
Ecosystem Services
Social System
Land Use
Land Tenure
Equity
Health
Changes through time