Case Study: Kavango-Zambezi Transfrontier Conservation Area

Presented by:
Keith Lawrence, CI
Report Author:
Prof. David Cumming
Project Contact: Leo Braack, CI

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Presentation Outline

- Background: KAZA TFCA

1. Getting started / Vision
2. Assessing the ecological landscape
3. Assessing protection and conservation status
4. Assessing resources and policies
5. Designing an integrated landscape
6. Developing and prioritizing strategies

Kavango-Zambezi TFCA

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KAZA TFCA

- 400,000km^2
- Globally significant wetlands (e.g. Okavango Delta)
- Large portions of the Miombo-Mopane & Kalahari-Namib Wilderness Areas
- 1.5 million people. Population densities of <5 people / km^2
- Largest elephant population in the world

CI's KAZA TFCA work

- Desk study on large scale conservation planning:
  - Priorities – ranking of PAs
  - Resilience of the KAZA TFCA system to climate change
- Aim to inform governments and partner NGOs
- Treaty planned
- Borders not yet agreed on

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December 2006 MOU

"To establish a world-class transfrontier conservation area and tourism destination in the Okavango and Zambezi river basin regions of Angola, Botswana, Namibia, Zambia and Zimbabwe within the context of sustainable development."

Objectives

1. Trans-national cooperation in ecosystems & cultural resource management
2. Alliances & partnerships
3. Harmonize natural resource management approaches & tourism development
4. Mechanisms & strategies for local communities to participate
5. Cross-border tourism to foster regional socio-economic development

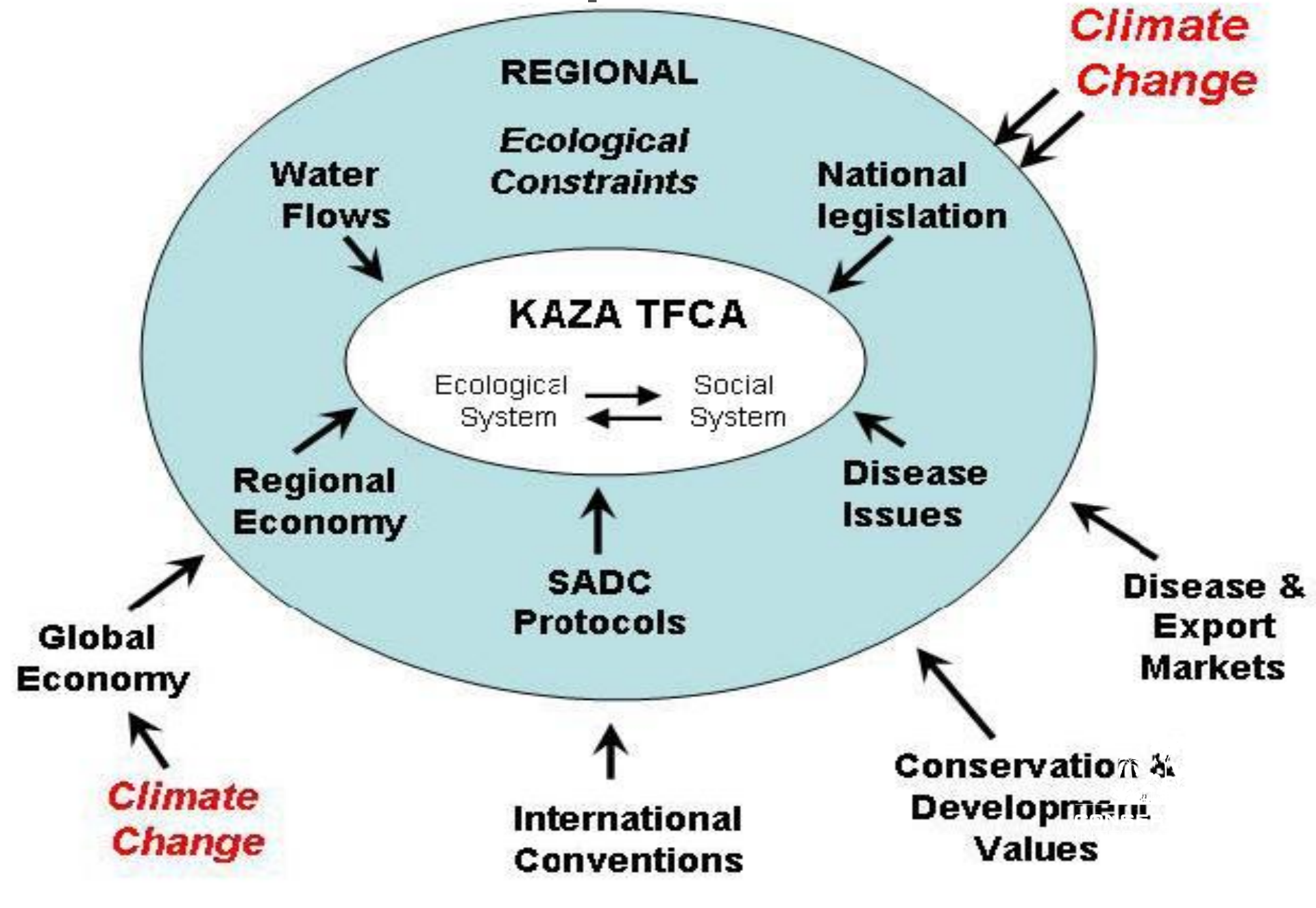
2. Assessing the ecological landscape

3. Assessing protection and conservation status

- 11 types of conservation area
- 22% of area fully protected, no human settlement
- 54% settled hunting area / community conservancy
- Remainder is communal land
- Currently ineffective & underfunded

- PAs scored to produce prioritisation of where to work
  - Biological value (diversity, wetlands, endemism, ecosystem processes)
  - Conservation effectiveness
  - (Threats)

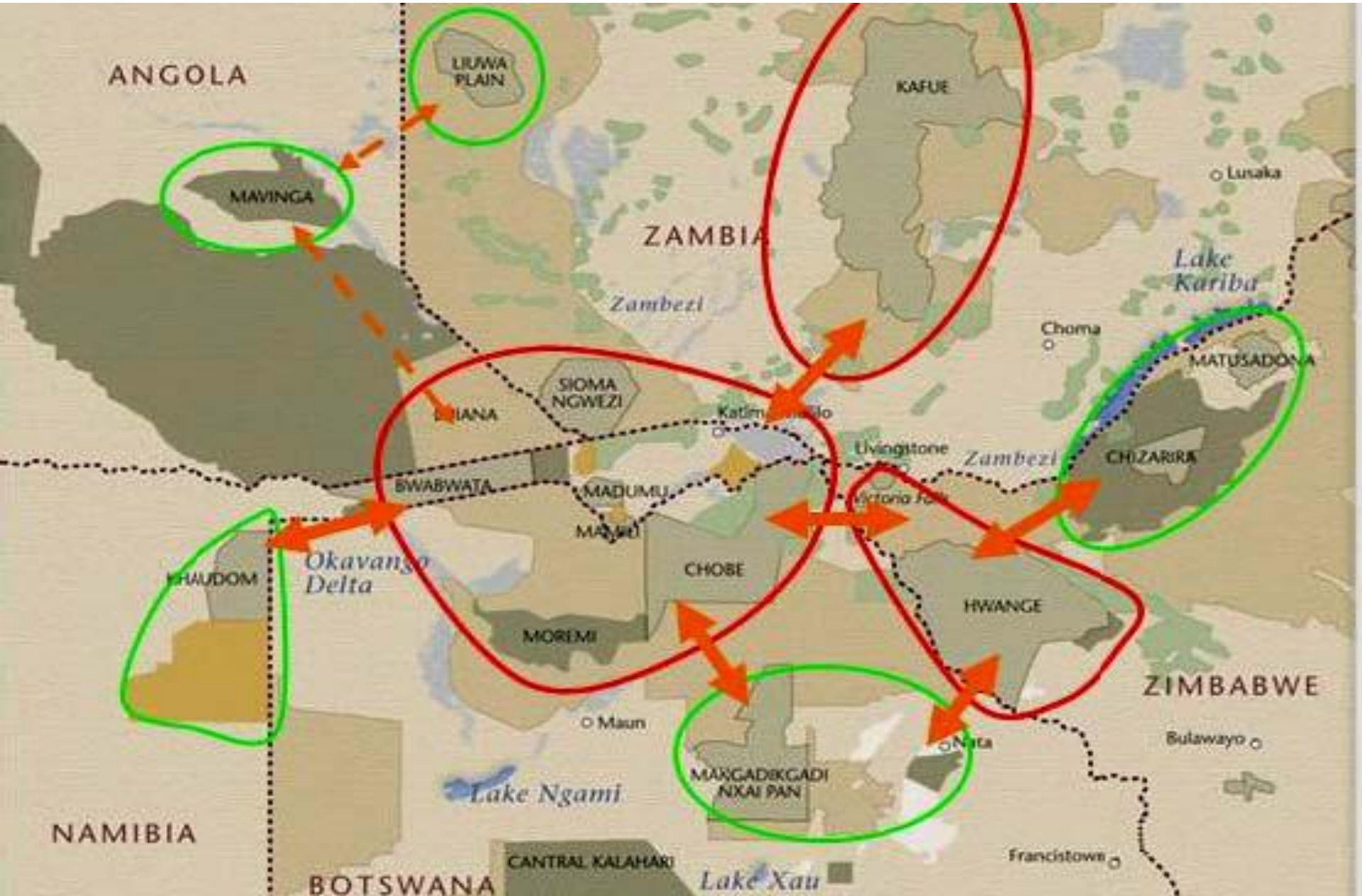
4. Resources and policies



5. Designing an integrated landscape

- Migration corridors
  - Limited evidence of migrations
- Dispersal corridors
  - e.g. allow elephants to spread away from high-density areas
  - BUT there are dangers of this
  - AND need to preserve some modularity
- Adaptive response corridors
  - Allow movement in response to climate change

5. Designing an integrated landscape



6. Developing and prioritizing strategies

I. Water flows and wetlands
II. Natural resource governance
III. Diversification & adaptive co-management
IV. Biodiversity linkages & conservation planning
V. Information & participatory science

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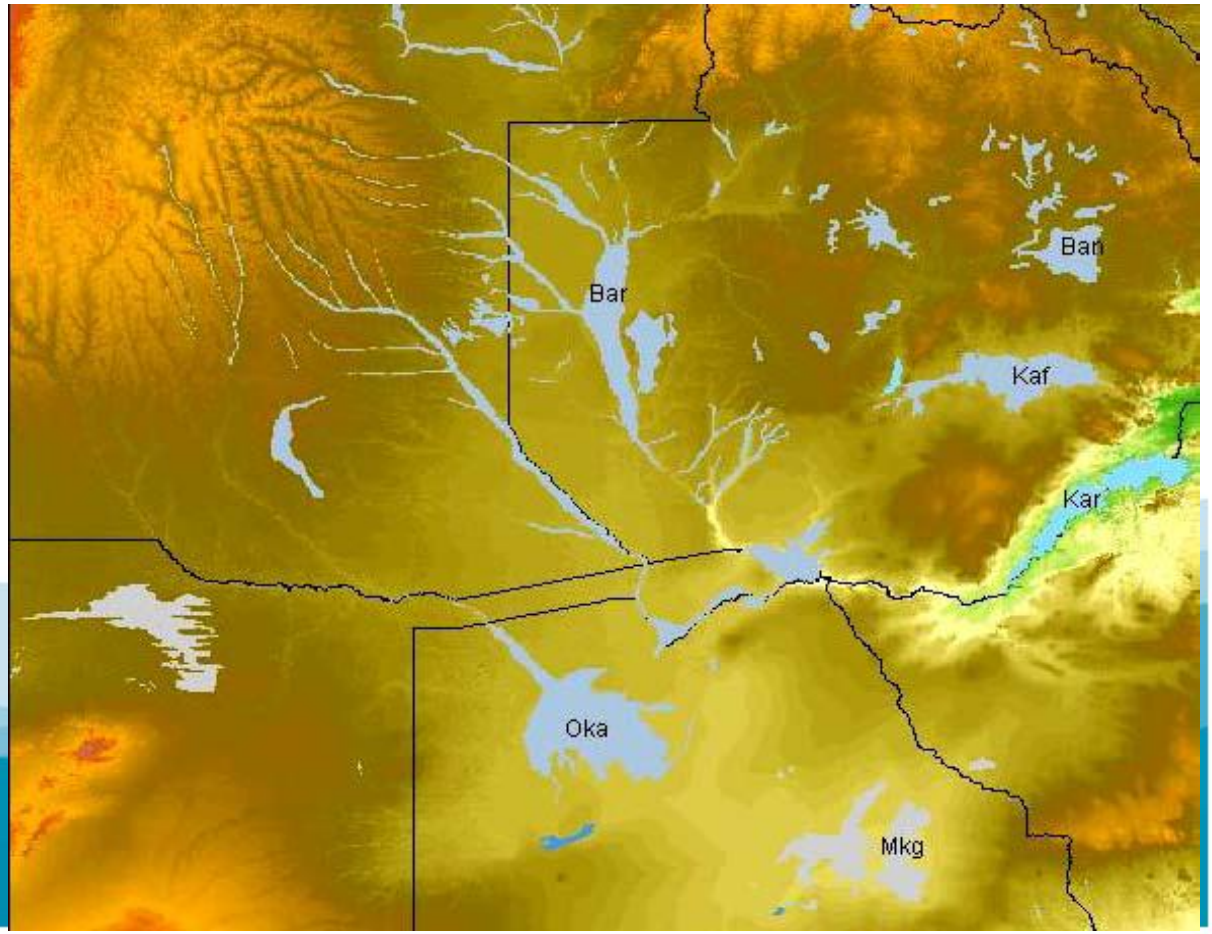
I. Water flows and wetlands

- Threats: Climate change & upstream flows
- Integrated catchment management
- Incentives to upstream land users (PES?)
- Don’t degrade wetlands



II. Natural resource governance

- Resources undervalued & people living there unable to realize the benefits
- Land tenure & access rights reforms needed
- Mechanisms for benefits to reach local communities

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III. Diversification & adaptive co-management

- Diversity (ecological & cultural) → Resilience
- Human land uses, elephants & fire → Homogeneity
- Need policy frameworks that encourage experimentation, diversification & adaptive capacity

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Levin's 8 commandments for sustainability

1. Reduce uncertainty
2. Expect surprise
3. Maintain heterogeneity
4. Sustain modularity
5. Preserve redundancy
6. Tighten feedback loops
7. Do unto others as you would have them do unto you

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IV. Biodiversity linkages & conservation planning

- Adaptive response corridors
- Systematic conservation planning
- Allow for ecosystem processes

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V. Information & participatory science

- Shortage of information on biodiversity, PA status, ecosystem services …
- Wiki of PAs?
- Participatory culture needed to share info between governments, NGOs, private sector, academia etc.

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Join CORNET: the Corridors Network

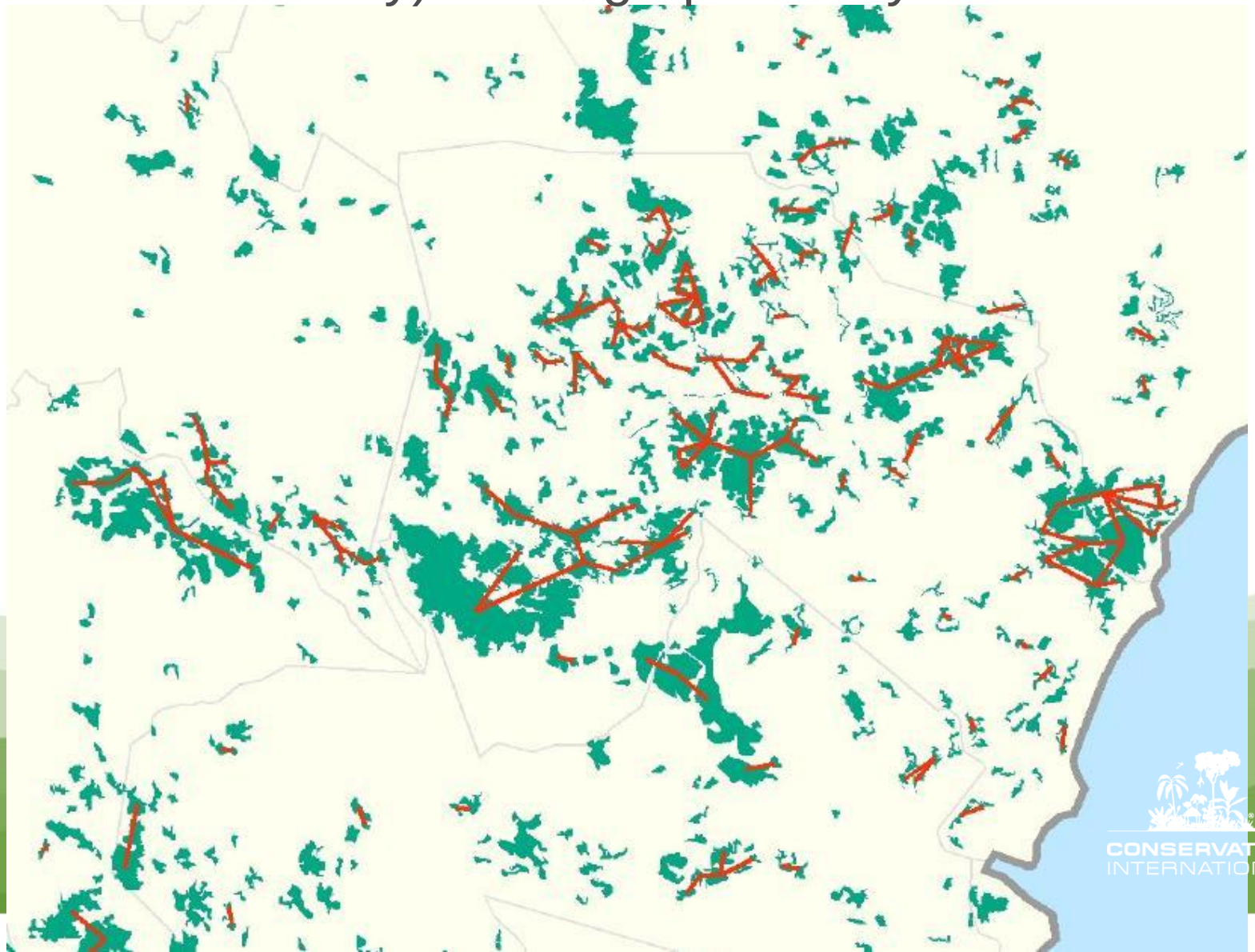
New **email discussion list** on conservation in corridors/landscapes

- ask questions
- hear about new publications / events
- promote your work & publications
- an open space to express opinions
- discussions on specific topics

http://corridors.conservation.org

klawrence@conservation.org

Atlantic Forest, Brazil: Connectivity determined by species population dynamics (as opposed to ecological or functional connectivity). Uses graph theory.



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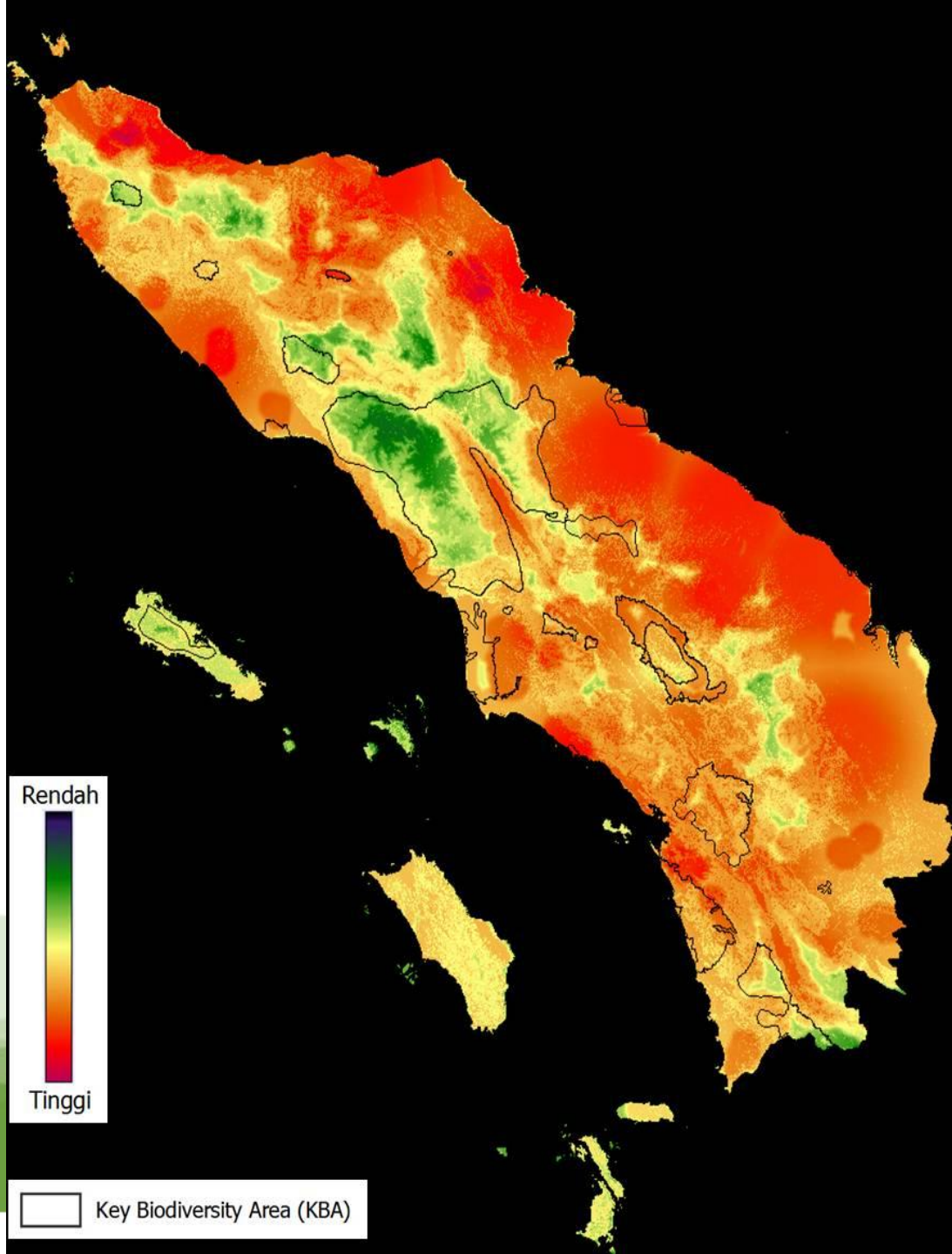
Spatial modeling

- Multiple land uses in landscape
- Insert biodiversity & economic priorities to influence decisions
- Platform to facilitate collaboration and negotiation
- Northern Sumatra & Papua provinces, Indonesia



Other Examples

- **Greater Cederberg Corridor. South Africa**: has both interesting design aspects & tangible actions on the ground. Roibos farmers' adaptations to climate change
  - Step 7 (implementation)
  - Step 2 (assessing landscape, setting goal)

- **BONGOLAVA CORRIDOR, Madagascar**: This has a vision; a stakeholder approach; governance; community capacity & monitoring; and various human wellbeing aspects (carbon, health, ecotourism, linking conservation to development)
  - Covers most of the steps

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Thank you!

Keith Lawrence
k.lawrence@conservation.org

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