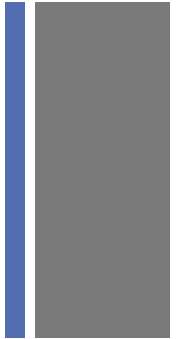




Filling the Resilience Gap: The Ecosystem Dimension in Food Security Strategy and Policy

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- **Democratic membership organization:** 91 states, 127 government agencies, 107 INGOs and 900 NGOs
- New category Indigenous Peoples Organization
- Supported by 11 000 experts in 6 commissions and secretariat of 1000, who work in 160 countries.
- **Mission: A just world that conserves nature**
- Focus: sustainability, resilience, security of people and nature
- Programme: **Natural solutions to development challenges. Including food security.**

The Context



- Food systems \neq farm systems
- Food security > availability.
- Access, utilization & stability matter
- Growing urbanization BUT 80% of food insecure are rural people
 - 50% are smallholders
 - 2/3 are women and children
- Demand for ecosystem services growing:
 - 9 billion people by 2050
 - 50% increase in water use by 2030
- 95% of agriculture in sub-Saharan Africa and 60% in India is under rainfed

Ecosystem Contribution

AVAILABILITY

- Farm productivity
- Pasture & Fodder
- Food

- Tenure, discrim
- Conservation & Dev
- Poor Connectivity
- Poverty
- Conflict
- Pollution



- Water purification
- Soil quality
- Biodiversity: Edible plants, bushmeat, fish
- Biodiversity wild pollinators
- climate regulation
- disease regulation
- Grasslands, forest for grazing & fodder

ECOSYSTEM CONTRIBUTION

ACCESS

- Income from diverse livelihoods
- Price stability
- Supplementary foods

- Inequity
- weak tenure; use rights
- Poor policy
- Connectivity
- Conflict



- Intact, sustainably managed ecosystems
 - Eg forests – loss of certain species
 - land quality and water availability
 - Stability in climate
- Valued social systems - commercialization of IKS; access

Ecosystem Contribution

UTILIZATION

- Energy & Water Availability
- Traditional medicine
- protein, micronutrients

- Deforestation
- Pollution
- Use exclusion
- Inputs & wastes

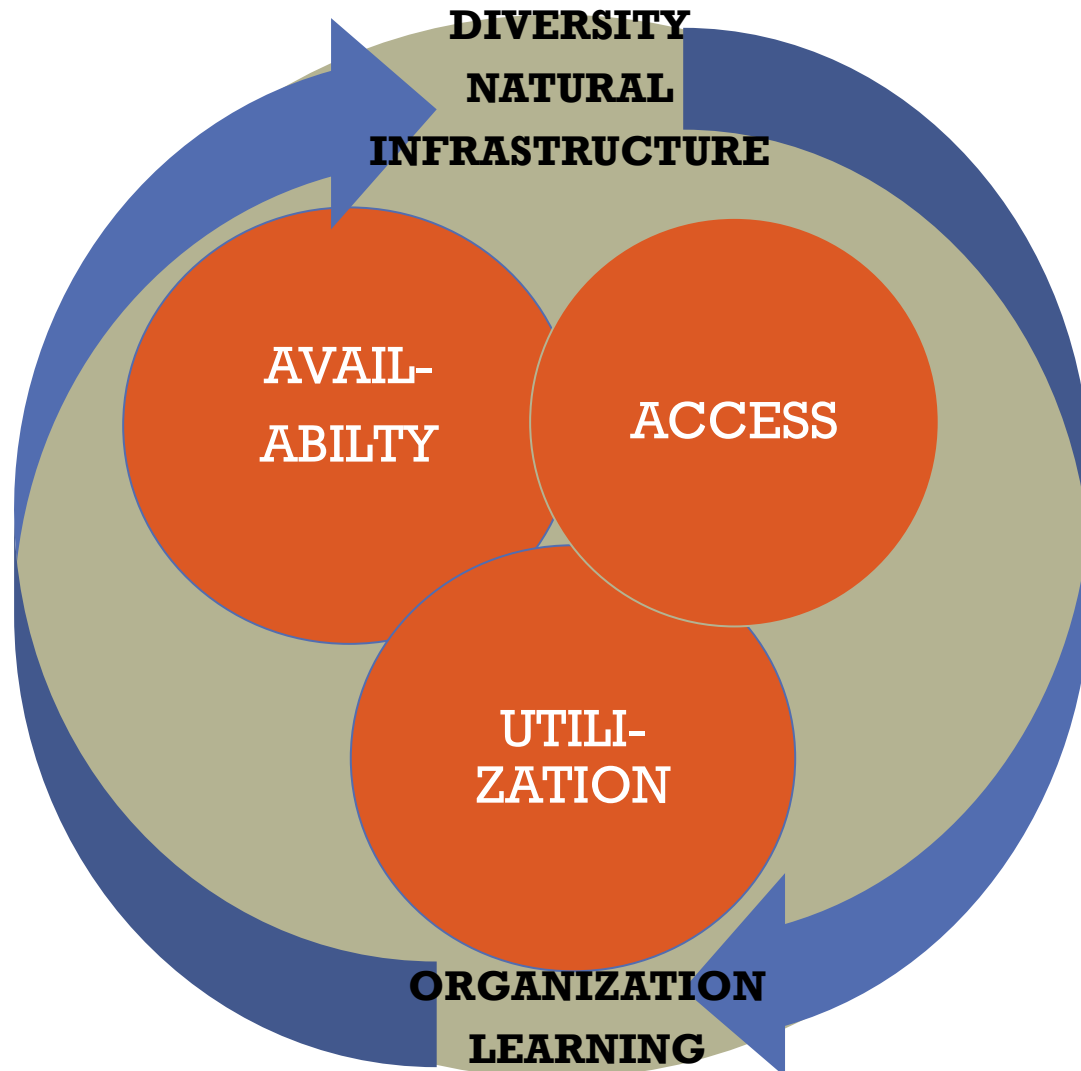
- Functional forests
- Watersheds

Water purification

- Biodiversity - medicine
- Coping strategies: supplementary food sources



+ Ecosystems provide stability



BUT THERE'S A GAP IN POLICY

■ Existing strategies:

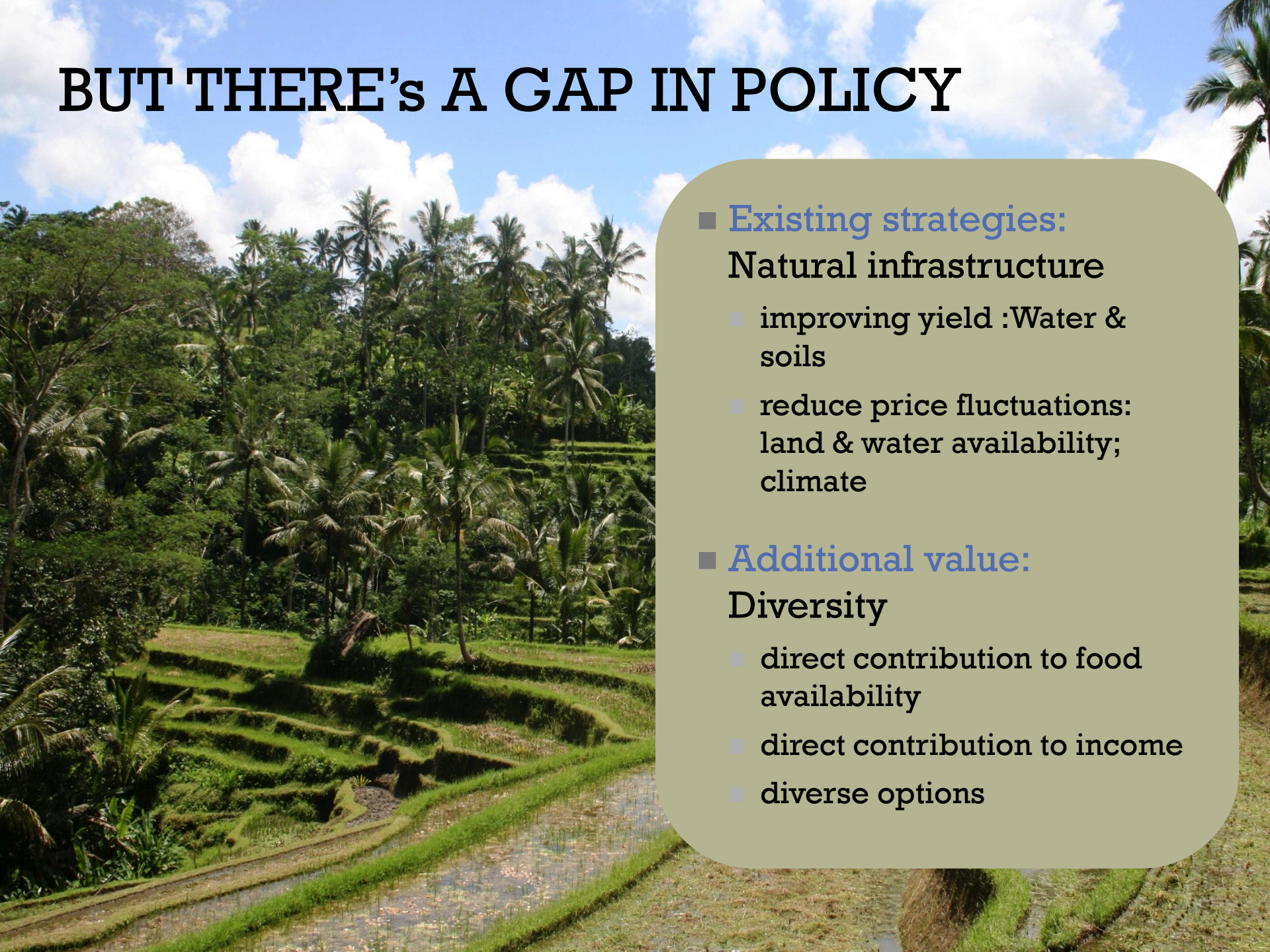
Natural infrastructure

- improving yield :Water & soils
- reduce price fluctuations: land & water availability; climate

■ Additional value:

Diversity

- direct contribution to food availability
- direct contribution to income
- diverse options



ECOSYSTEM GAP IN DECISION-MAKING

- Sectoral decision making: Environment v Development
- Lack of connectivity in policy decision-making. e.g. Energy-biodiversity-food
- Ecosystem resources & services as inputs
- Ecosystem as limitless bin for waste

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WHAT TO DO?

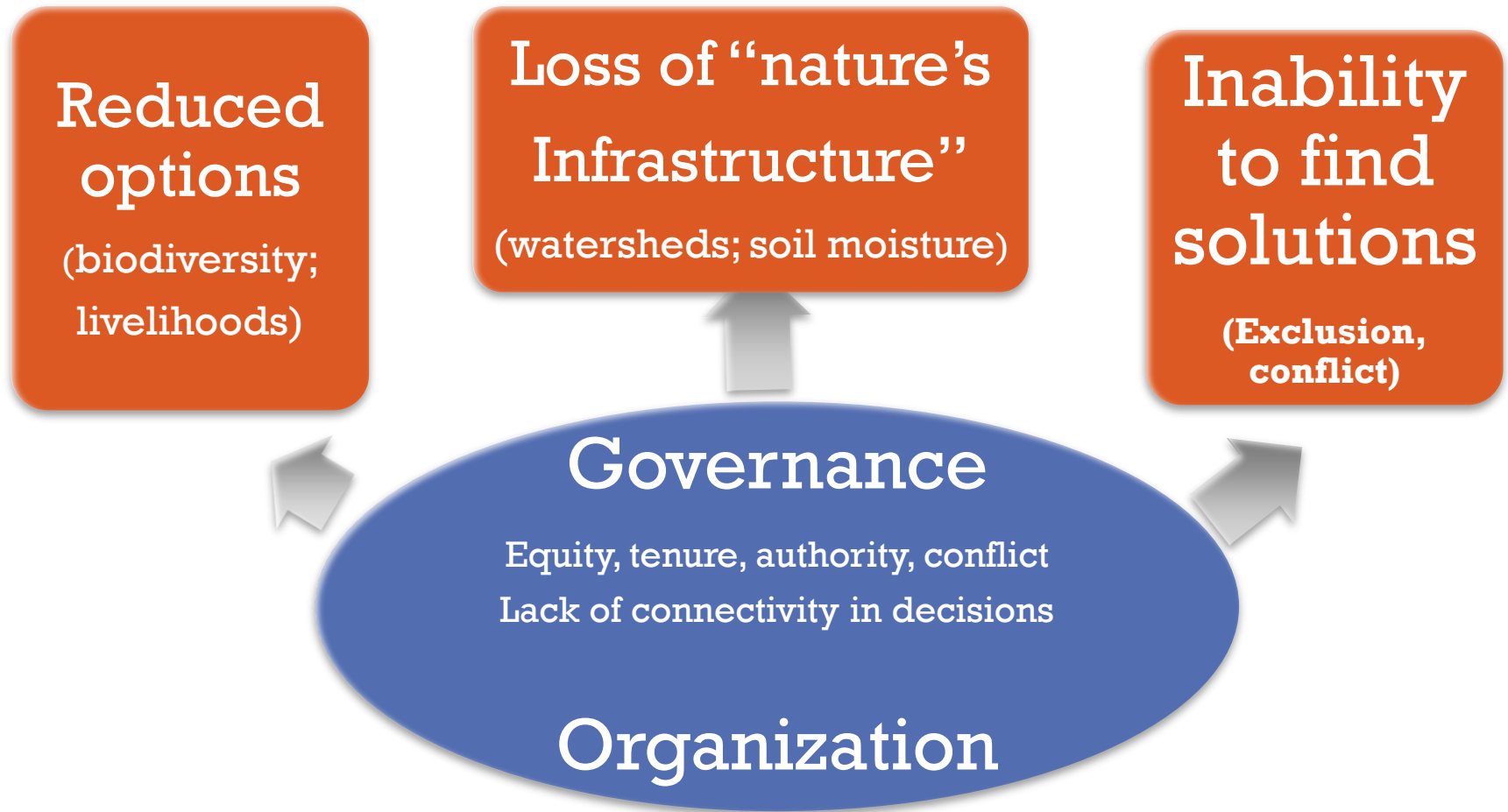
- RETAIN EXISTING BENEFITS
- EXTEND OPPORTUNITIES
- RESTORE



FOCUS ON RESILIENCE

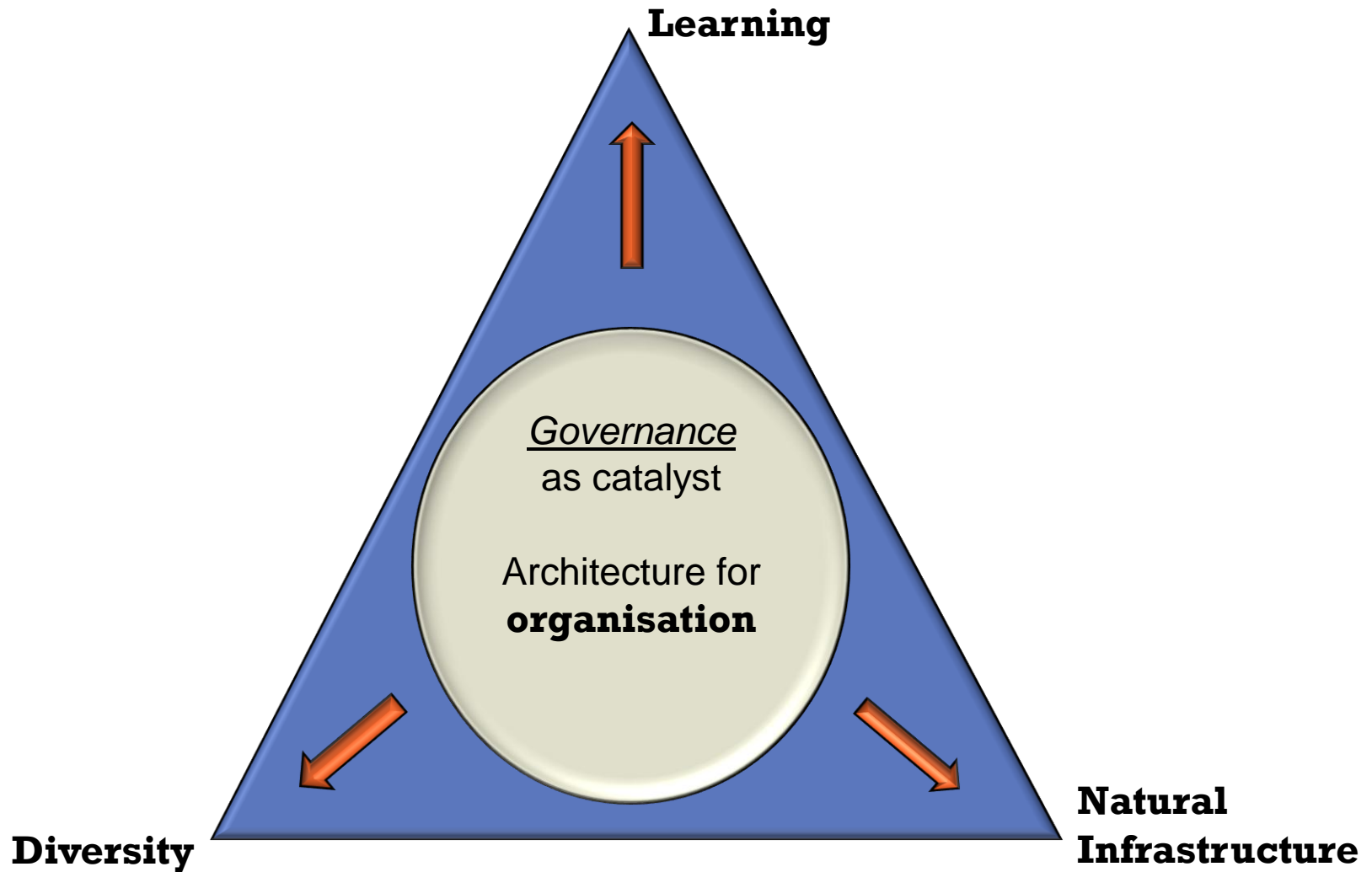
...the capacity to cope with change and to sustain transformations needed to reduce poverty under global change (including climate change)

Address impacts of ecosystem change

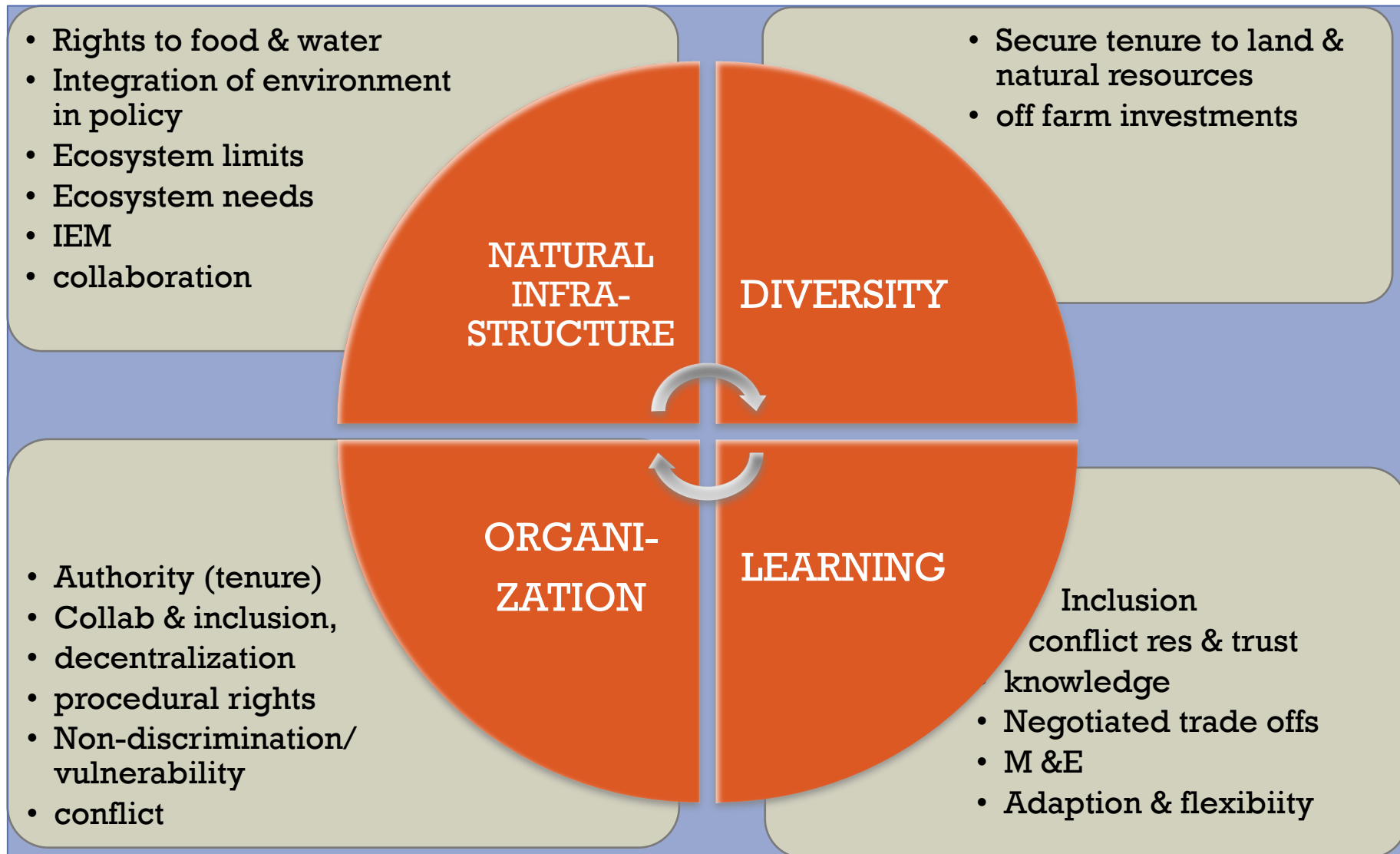


Address underlying reasons

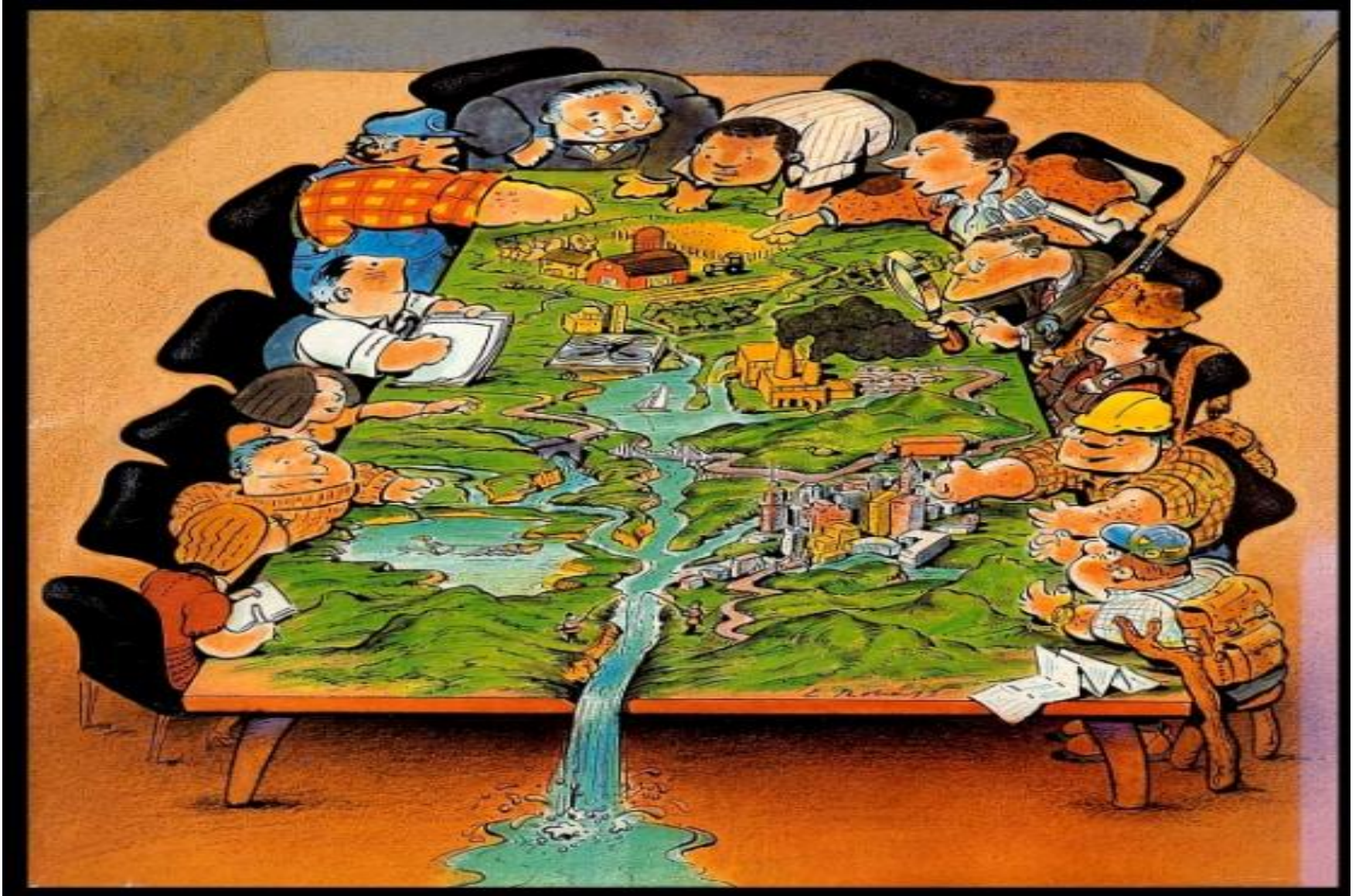
Resilience Components



Governance change is needed



Integrated Water Resource Management



Resilience shift: Tacaná, Guatemala

- **deforested watersheds**
- **degraded farming systems**
- **social upheaval**
- **downstream disaster**
- **weak coordination**



- **local coordination of priorities**
- **landscape restoration & diversification**
- **social entrepreneurship**
- **municipal – provincial liaison**
- **disaster planning**

