UNIVERSITY^{OF} BIRMINGHAM



Organización de las Naciones Unidas para la Educación, la Ciencia y la Cultura



Workshop Drought Vulnerability

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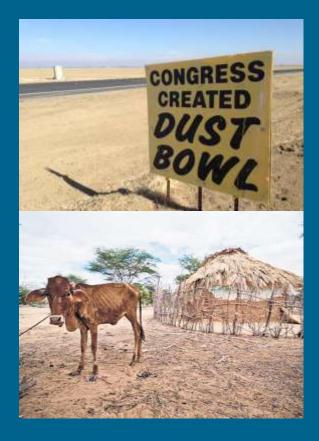




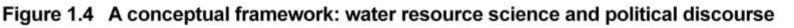
Time	Training Programme
9am-9.15am 9.15am-10am	Welcome and summaries of day 2 Session 1: Theory and policy context Presentation: Adaptive governance and drought
10am-10.30am	Discussion: Adaptive practices and tools at the nexus
10.30am 10.45am-11.15am	Coffee Session 2: Qualitative vulnerability analysis Presentation: Policy tools for drought vulnerability
11.15am-11.45am	Discussion: Vulnerability stressors impacting your case
12pm-12.30pm 12.30pm-1pm	Session 3: Improving current policies for drought Presentation: Crafting adaptive policies for drought Discussion: Barriers to adaptive policies
1pm-2pm	Lunch
2.15pm- 5pm	Session 4: Chilean case and agricultural vulnerabilities Groupwork: Pick-up from Tuesday
	Learning logs

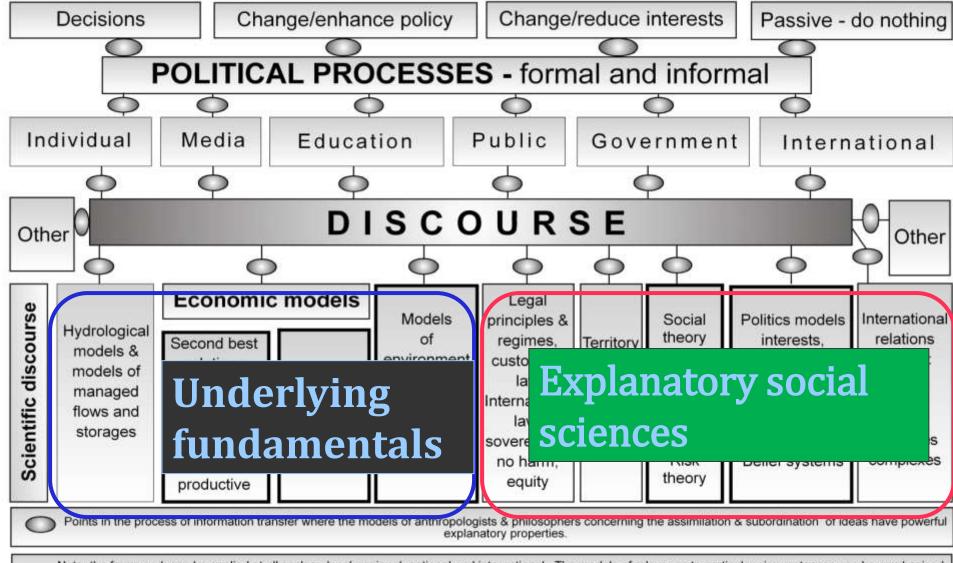
Drought poses sustainability challenges

- Hydrological and social 'stability'
- Conflict over water resources
- Utility of 'top-down' policies
- Drought as 'crisis'
- More attention on hydrological systems, societal needs, and what is politically feasible
- Risk and uncertainties...









Note: the framework can be applied at all scales - local, regional, national and international. The models of relevance to particular circumstances can be emphasised.







Drought as 'wicked' problem (Rittel and Webber 1973)

- Poorly formulated and complex issues
- A multiplicity of actors or stakeholders
- □ Competing value systems
- Ambiguous terminology
- Spatial and temporal interdependency, and
- □ Lack of clear end points



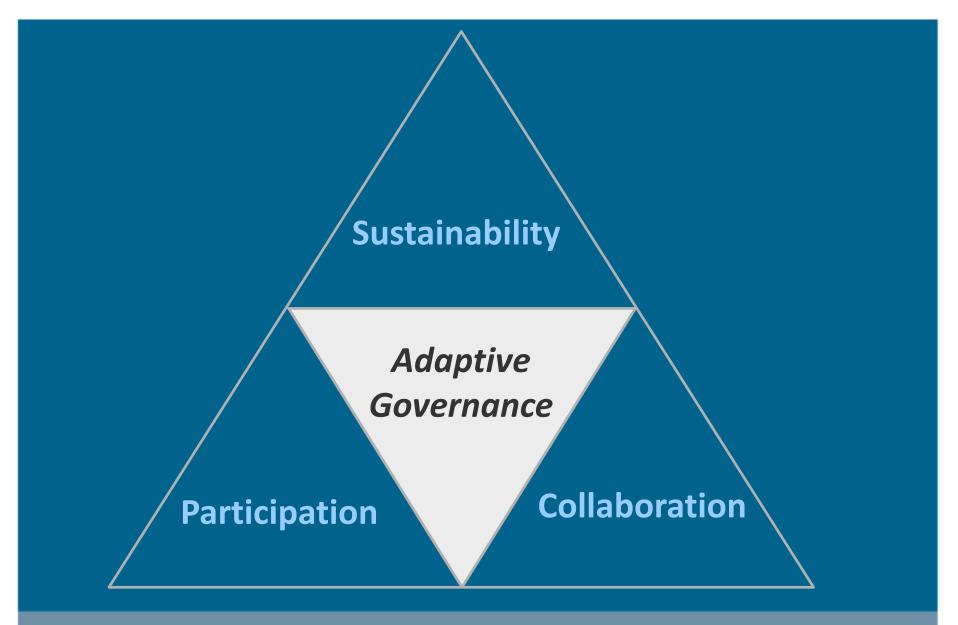


Risk, uncertainty and adaptive governance

AG: a form of environmental governance that seeks to address sustainability challenges confronting socio-ecological systems by being dynamic and responsive enough to adjust to complex unpredictable feedbacks between system components











Sustainability

Resilience/vulnerability Multi-dimensional Critical thresholds Multiple stakeholders

Adaptive Governance

Participation

Local; forward-looking Outcome and evidence-based Learning: new responsibilities

Transparency

Collaboration

Anticipatory; multi-scalar Knowledge co-generation Iterative improvement Polycentric: self-organizing







Adaptive Governance

Each of the three dimensions requires an *evidence base* to describe key socioeconomic and hydrological outcomes and their progress over time

Sustainability

Resilience/vulnerability Multi-scalar and multidimensional

ritical threshold

Adaptive

Governance

Participation

Local; forward-looking

Outcome and evidence-based

Learning: new responsibilities

Transparency

Collaboration

Anticipatory; multi-scalar

Knowledge co-generation

Iterative improvement

Polycentric: self-organizing







Adaptive Governance and sustainability Achieving sustainability means stakeholders have access to information and are part of decision-making and decision-taking processes

Sustainability Resilience/vulnerability Multi-dimensional

Critical thresholds

Adaptive Governance

Participation

Forward-looking Outcome and evidence-based Learning: new responsibilities

Transparency

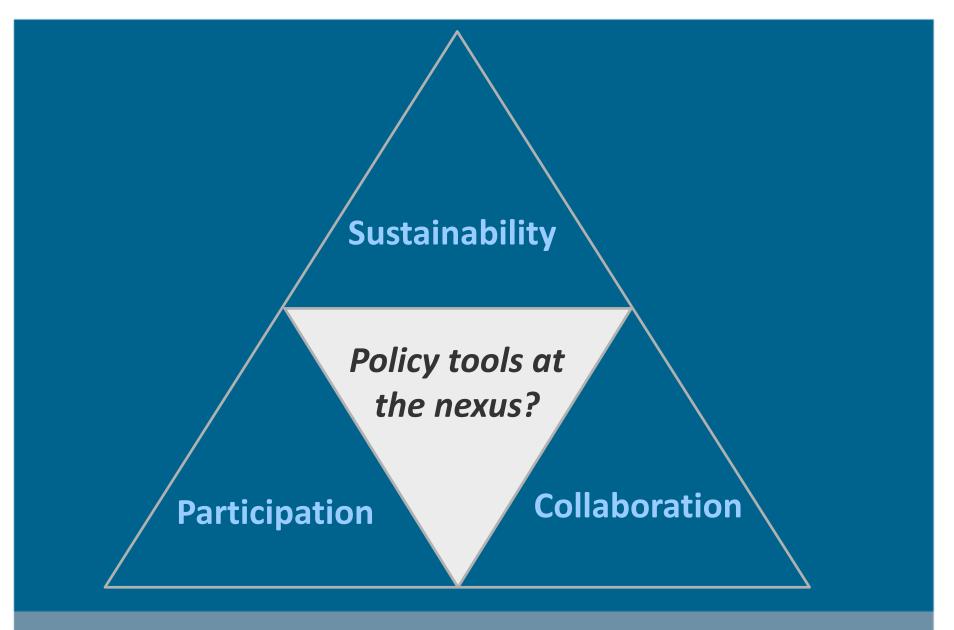
Collaboration

Anticipatory; multi-scalar Iterative improvement Knowledge co-generation















AG and policy tools at the nexus

□ AG priorities:

- local level leadership and trust building among stakeholders
- bridging various decisionmaking levels, and developing networks that span scales from the local to bioregional to higher scales
- networks to communicate and integrate scientific and local knowledge
- networks to encourage diversity and mobilize social capital





Discussion



Based on your sector, what types of project tools are needed to encourage participation and collaboration over drought?

How might these tools promote resilience and adaptability to drought?

