



Vulnerability and Climate change from a North-South perspective – Concepts and challenges

International Workshop on "Climate Change and Vulnerability. Perspectives from the Social Sciences", Kassel 18.11.2010

Structure

1. General definition and core question
2. Different concepts and approaches
3. Blind spot: capturing the "political" in vulnerability research
4. Conceptual requirements and analytical challenges for social science research on vulnerability
5. Why vulnerability is relevant in social science research on climate change

General definition

- Vulnerability conveys the idea of susceptibility to damage or harm from external stress (Liverman 2001)

Core question:

- What are the causes and consequences of that susceptibility?

Conceptualisations I: Biophysical vulnerability or vulnerability as outcome

Characteristics:

- linear result of projected impacts of climate change
- represented quantitatively as monetary cost, change in yield, human mortality, ecosystem damage
- function of biophysical risk factors, e.g. future emissions trends and the potential for loss of a specific exposed population or ecosystem

Research and intellectual lineage:

- Risk-hazard approaches: what are we vulnerable to, what consequences might be expected, where and when will those impacts occur

Areas of application:

- *Hot spots* of climate change, most vulnerable regions and countries, NAPAs

Conceptualisations II

Social vulnerability

Characteristics:

- dynamic condition, independently of climatic stress, embedded in complex relations of power and resource distributions
- underlying societal, socio-political, cultural, economic causes
- explains differential exposure to hazards and capacities to cope, e.g. Liverman (1990), Adger (2001)
- main categories: poverty, social inequality, institutional structures, distribution of entitlements

Research and intellectual lineage

- Political-Economy research, entitlements research

Conceptualisations I + II

Critical reflections

Core shortcomings in both concepts:

- Biophysical vulnerability has no comprehension for social dimensions of vulnerability (dualistic framing of climate change)
- Social vulnerability has no comprehension of the specific materiality of the climate crises

Consequences and critique

- ⇒ interactions and interrelations between social, political and institutional changes with the changes of the global climate are not being reflected sufficiently
- ⇒ How the scope of action for social groupings are being altered through this *interrelated social-ecological changes* can not be captured adequately

Conceptualisations III

Contextual vulnerability

- Processual, multidimensional & multi-scalar view of *climate – society interactions* (O'Brien, Eriksen et.al 2007)
- Vulnerability is influenced by:
 - changing climate conditions,
 - dynamic and historic specific social, economic, political, institutional structures and processes
 - anticipation of climate change,
 - Different processes interrelate in complex ways,
- e.g. climate change, land tenure system, agricultural politics ⇨ the restructuring of rural social relations in Nicaragua

Research and intellectual lineage: political ecology

Power and relations of domination

Capturing the "political" in vulnerability research

- Power and relations of domination gain only recently momentum in vulnerability and adaptation research, e.g. equity, fairness
- Vulnerability is a politicised phenomena, because
 - relations of power and domination frame the causation of vulnerability at varying scales, e.g. through institutionalised distribution patterns, clientelistic relations
 - Vulnerability depends on the ability to promote interests in decision making processes regarding access to required resources and adjustment options under varying contexts

Conclusions

Vulnerability is a dynamic (in time and space), context specific, multi-scalar, complex and relational concept

Two main observations:

a) Vulnerability is influenced in an interrelated manner by

- categories of social inequality (class, gender, ethnicity)
- power relations at different scales (decision-making, discourses and knowledge)
- political-economic and institutional structures and
- by changing climate conditions
- apply for South and North equally

b) Relations between nature and society are constitutive for vulnerability

⇒ material practices are refracted back in forms of conditions of vulnerability (Oliver-Smith 2004)

Four Conceptual requirements and analytical challenges

Vulnerability is socially and spatially embedded and multi-scalar

- ⇒ contextualised analysis, taking into account different spatiotemporal scales as well as nested scales of interaction
- ⇒ How do broader economic and political structures and processes influence in interaction with climate change the context of vulnerability?
- ⇒ Case study research

History leaves its traces

- ⇒ historic specific social-nature-relations produce enabling as well as impeding social-ecological conditions
- ⇒ analysis need to apply a historical research perspective

Conceptual requirements and analytical challenges

Vulnerability is politicised

- ⇒ Politics matter! power and relations of domination structure the promotion of interests
- ⇒ Who decides What and Where? Who gains access to decision making processes? Who is excluded and why?
- ⇒ requires power sensible and process oriented analysis

Discourses influence the understanding and constitution of vulnerability

- ⇒ Discourses matter and need to be considered
- ⇒ How do discourses on climate change and adaptation influence the context of vulnerability?

Thank you for your attention!