

Vulnerability and Resilience for Deltas at Risk



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Vulnerability and Resilience

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- Vulnerability: Conditions which increase adverse impacts.
- Resilience: Capacity to resist or to change to reach and maintain an acceptable level of functioning and structure.

Vulnerability and Resilience

Other concepts:

- Ecosystem dynamics: Resilience is ability to bounce back.
- Climate change: Resilience and vulnerability.
- SOPAC: Vulnerability and resilience are opposites.
- Coastal management: Resilience is one factor of vulnerability.

Other Terms

adaptation

mitigation

adaptive capacity

resistance

capacity

social capital

capability

social-ecological systems

exposure

susceptibility

But: translation? connotation? transferability?

Vulnerability and Resilience

Characteristics:

- Quantitative & Qualitative.
- Objective & Subjective.
- Absolute & Proportional.
- Non-contextual & Contextual.
- Current state & A process with past and future.

Implementation

Coastal floods (relevant to deltas):

- Females have higher mortality.
- Social roles and expectations create vuln.



World
Press
Photo of
the Year,
2004
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Generalized Examples

- Classquake (O'Keefe et al., 1976)
→ genderquake → genderflood.
- 400-year earthquake.
(Oliver-Smith, 1979).
- Levee effect (Burton, 1962).
- Risk transference (Etkin, 1999).

Lessons from Research and Practice

- “Natural disasters” do not exist.
- All disasters are human constructs.
- All disasters are slow-onset.

