Policy networks on climate change and ecosystem services in Peru and Brazil

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Climate change needs responses at multiple levels

- Local: Adaptation (reducing vulnerability)
- Global: Mitigation (reducing greenhouse gases)
Ecosystem services for both adaptation and mitigation

1. Product diversity
   - Provisioning services
   - Regulating services
2. Trees in agriculture
3. Watershed regulation
4. Coastal protection
5. Urban microclimate
6. Regional climate
   - Carbon sequestration

Local adaptation
Meso-level adaptation
Regional adaptation
Global mitigation

(Pramova et al., 2012)
Adaptation and mitigation are separated

- In international negotiations and agreements
- In national policies

- Even though some sectors (land use and ecosystem management) influence both

- Risks:
  - Adverse affects:
    - mitigation can increase local vulnerability
    - adaptation can increase global emissions
  - Missed opportunities
  - Policy incoherence
Questions

Do policy actors with different climate change agendas interact on specific topics in Peru and Brazil?

National level actors related to land use and ecosystem (forestry, agriculture)

Adaptation agenda or Mitigation agenda

Exchange information or collaborate

Adaptation (local) or Mitigation (global)

To what extent do they interact?

Are some actors facilitating interactions in the networks?

How to reduce the separation between adaptation and mitigation policy domains and support mutual learning and integration of policy processes?
Theory on interactions in policy networks

Why do policy networks matter?
- Dense and well connected networks facilitate flows of information, mutual influence, policy learning (and policy coherence?)

Homophily and coalitions
- “Birds of a feather flock together” (McPherson, 2001)
  - Similar actors tend to interact closely = Homophily
- Presence of a policy coalitions (Weible & Sabatier 2005; Ingold 2011)

Important actors in a network
- Central actors:
  - Actors sought after for their power or knowledge (Bavelas 1950, Knoke and Burt 1983)
- Brokers (mediators):
  - Actors able to connect other actors (Gould and Fernandez, 1989)
Methods

Identification of key organizations

What level of efforts on adaptation and mitigation?
With whom do they interact? (4 questions on A / M, information exchange / collaboration)

Grouping of organizations based on efforts

Network analysis, Homophily, Brokers
Results

Peru, all interactions (information + collaboration) on all topics (adaptation + mitigation)

Groups
- Adaptation-focused org
- Both adaptation and mitigation
- Mitigation-focused org
- Limited climate activities

Density: 42% of pairs of org are directly connected!

Density of interactions on mitigation > adaptation

Density of information exchange >> collaboration
**Stronger links inside groups than outside**

Organizations focusing on adaptation or mitigation interact much more with organizations with the same focus.
Interactions between adaptation- or mitigation-focused groups are mostly internal

More internal interactions (inside groups)

For collaboration (-0.28)

On the topic of adaptation (-0.25)

Coalitions

Homophily

For information sharing (-0.18)

On the topic of mitigation (-0.18)

More external interactions (between groups)

Homophily measured with E–I index (Krackhardt and Stern, 1988)
Brokers focusing on both adaptation and mitigation (4), on mitigation (2) and on adaptation (1).

Brokers: government (3), international organizations (3) and national forum on REDD+ (1).

The seven (10%) organizations with largest brokerage role

(Peru)
Role of brokers in connecting organizations among and between groups

Coordinator

Gatekeeper

Representative

Itinerant

Liaison

Most important brokers in Peru network

Coordinator

Gatekeeper

Representative

Itinerant

Liaison

National forum on REDD+

International cooperation and donors

Ministries and related organizations

(Typology by Gould and Fernandez, 1989)
Comparison with Brazil

Similar to Peru:
- Network indicators (e.g. 39% of pairs of org are connected).
- Importance of governmental organizations as brokers as in Peru.

Different from Peru:
- Lower homophily than in Peru.
- Absence of international organizations as brokers.
Conclusions

- Separation adaptation-mitigation in policy arenas?
  - There is homophily
    - A org tend to interact more with A org
    - M org tend to interact more with M org
  - But dense and well-connected networks, cross-interactions and a lot of organizations working in both A and M

- Are brokers mandated to act as brokers between A and M?
  - Yes, some (e.g. Ministry of Environment)
  - International organizations and donors don’t do a good job at breaking barriers between A and M

- Policy recommendations:
  - Support key organizations acting as brokers to improve policy coherence
Thank you!

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Further reading

Pour en savoir plus


Para saber más


