



Networking Climate Change in Peru: Coalitions and Synergies between Adaptation and Mitigation

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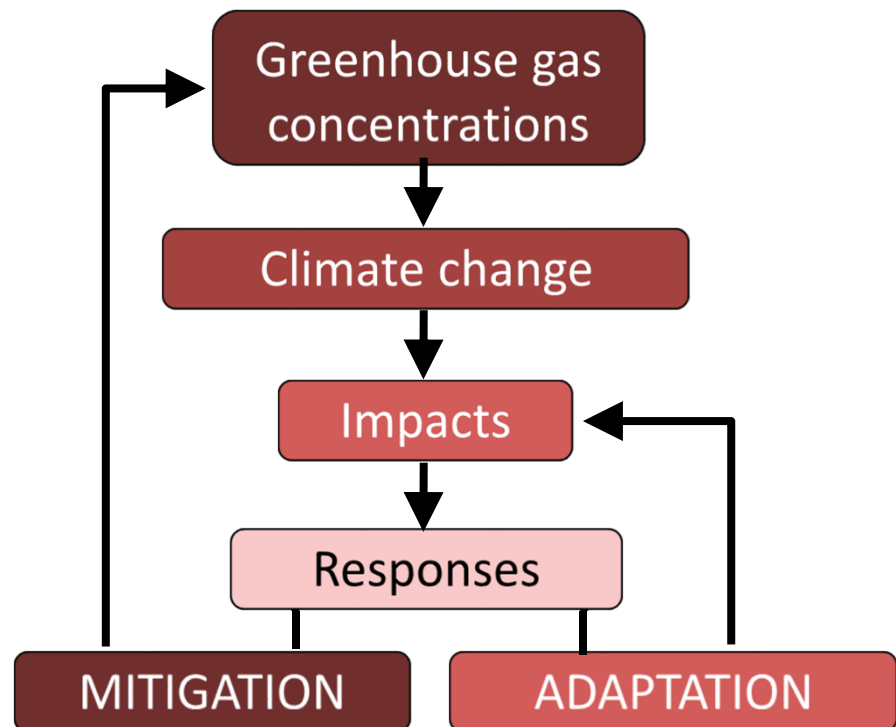
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Climate change needs responses at multiple levels

- Local: Adaptation (reducing vulnerability)
- Global: Mitigation (reducing greenhouse gases)





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

Question & Methods

Info exchange & collaboration

How do the adaptation and mitigation networks compare and what scope for policy integration?

Density, centralization, core/periphery

Homophily, power, brokering

Structured organizational interviews (2015): 76 actors involved in national climate change policy, focus on land use and ecosystems.

4 questions (2 per network on info exchange & collaboration) + question on perception of influence.

Analysis on 3 levels: network, group, actor. SNA methods (UCINET 6).

[illegible]



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)

Results: Network level measures

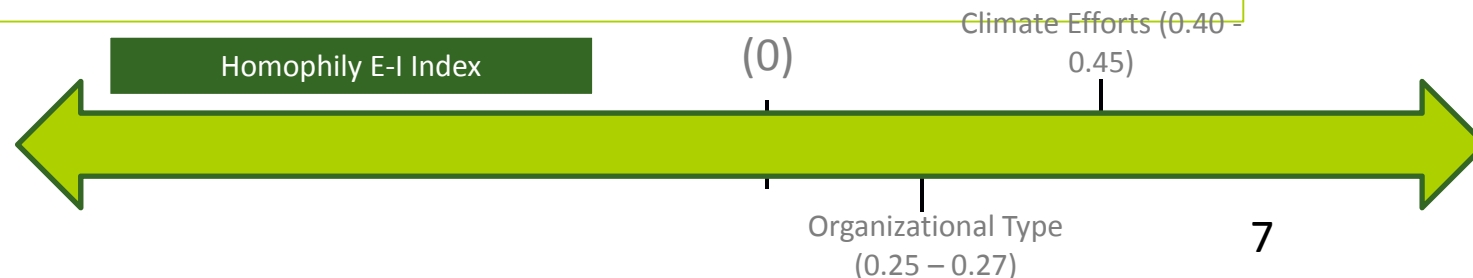
- Mitigation vs adaptation networks
 - Mitigation more dense, centralized, higher average degrees;
 - Also more pronounced core/periphery structure;
 - *Mitigation more established policy field!*

Network Name	Density	Avg Degree	Centralization	Connectedness	Closure	Nodes in core	Av.InDeg Core	Av. InDeg Periph
Mitig Info	0.178	13.3	0.319	0.921	0.425	27	17.7	11
Adap Info	0.152	11.4	0.251	0.842	0.382	16	11.8	11.3
Mitig Collab	0.097	7.3	0.293	0.787	0.286	32	10.5	5
Adap Collab	0.089	6.7	0.274	0.740	0.275	27	9.2	5.3

Group clustering (k-means)

- **Climate champions:** important orgs & prog. under ministries (Env., Agr., Finance), IGOs/donors, some big NGOs.
- **Mitigation specialists:** important orgs, IGOs/donors, some big NGOs.
- **Adaptation enthusiasts:** regional gov., NGOs with a lot of local-level work (only 1 donor!)
- **Secondary:** Private sector (N=6) in secondary.
- No marked homophily by org type or climate efforts.
- By density only:
 - Gov. orgs within group and with IGOs/donors.
 - Higher intensity of exchange towards gov. orgs and IGOs/donors, as well as towards Climate Champions.

Group	Description
Clim. Champ (N=16)	Strong rep. & efforts in both A&M
Mitig. Specialists (N=21)	Strong rep. & efforts in M.
Adap. Enthusiasts (N=23)	Medium rep. in A., variable efforts.
Secondary (N=16)	Weak rep. A&M., variable efforts





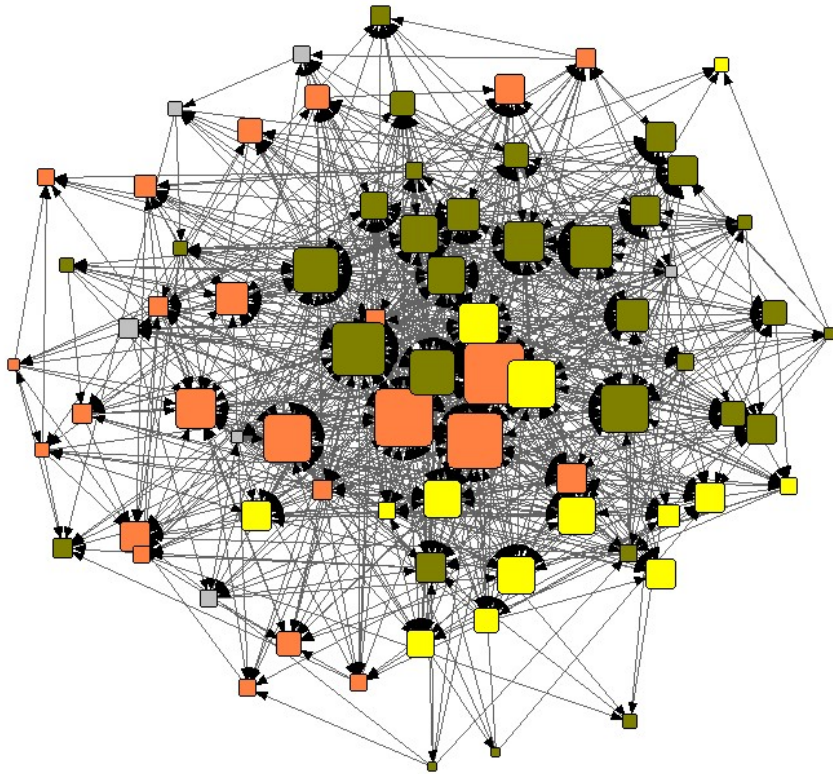
Prominent Actors: high indegree centrality

- Mostly **national gov. orgs** and **IGOs/donors**.
 - Also have high reputational power.
 - Most are also important brokers (next slides).
- Some civil society orgs central only in mitigation
- Agriculture actor only in adaptation.
- Many powerful actors with forest focus or a lot of work in this sector (PNCB, SERFOR, SERNANP, GIZ, IIAP, CIFOR etc.).
- The **CC Commission** is missing! General Climate Change Directorate (DGCCDRH) seems to be filling this role.

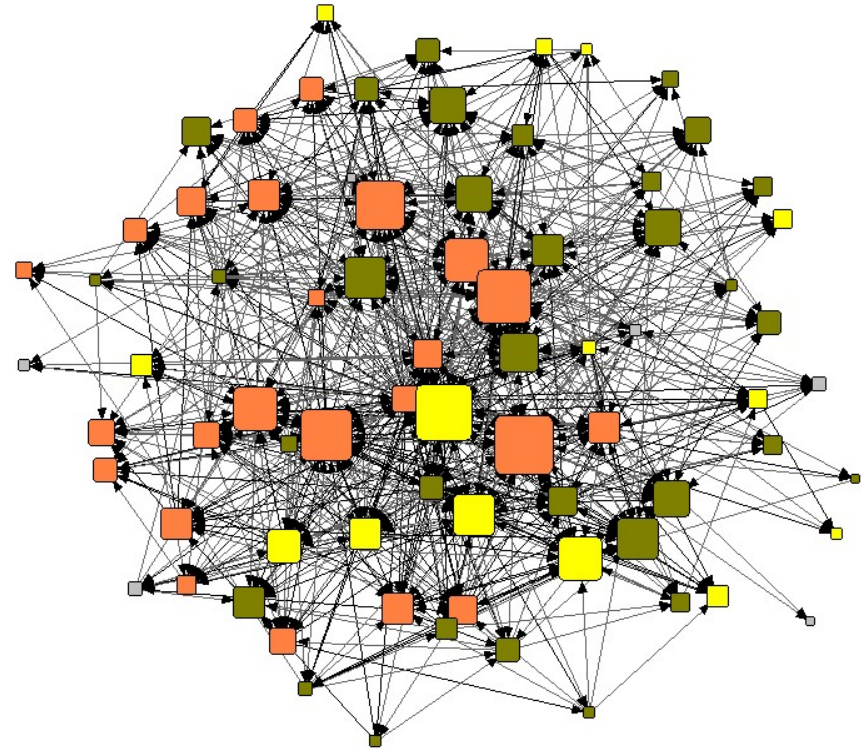
Info Exchange

Most powerful: Government , IGOs/Donors & in M powerful NGOs

Mitigation



Adaptation



Government

IGOs/Donors

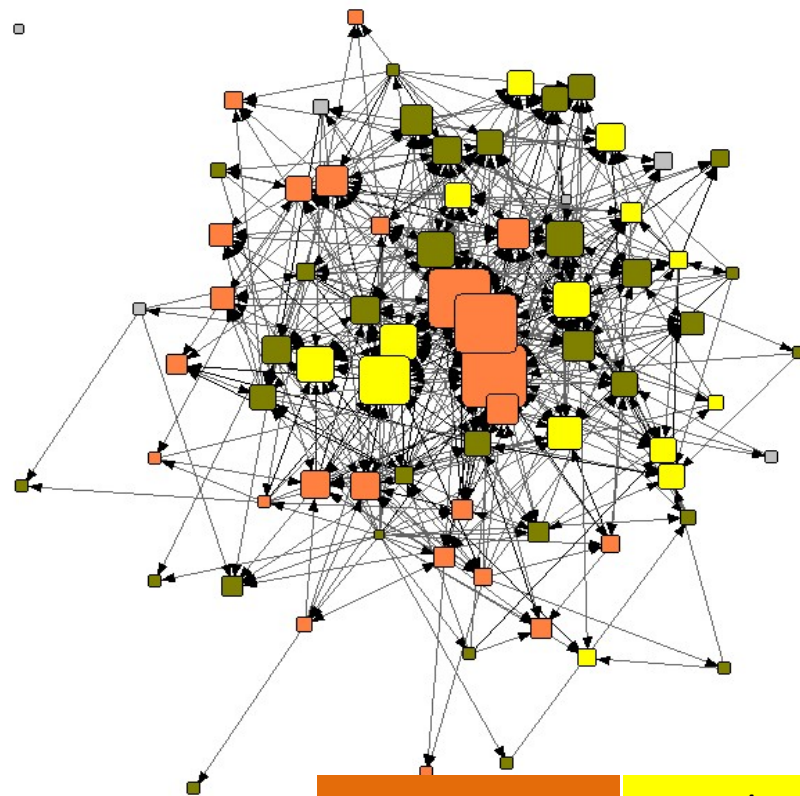
Civil society

Private sector

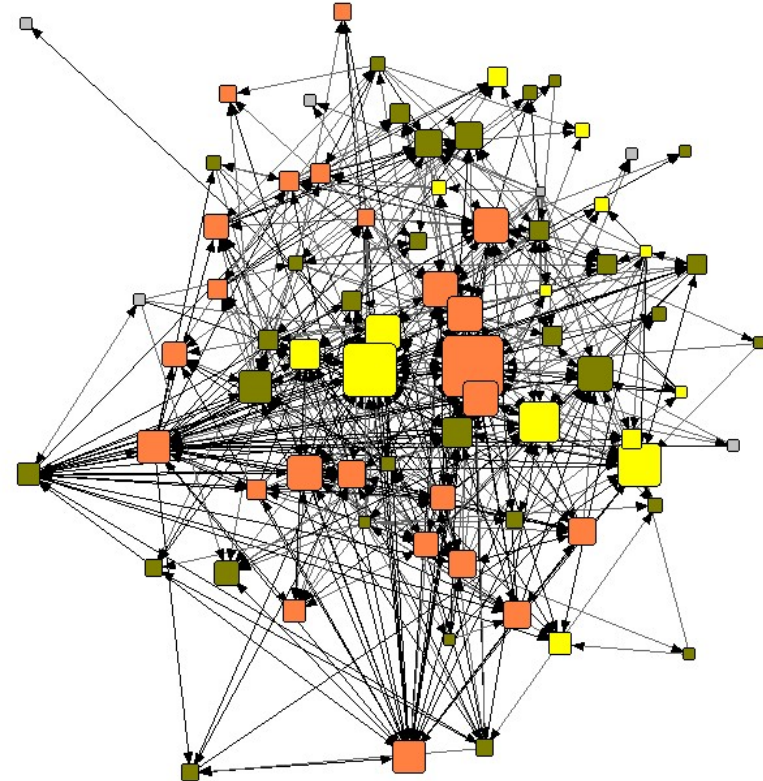
Collaboration

Most powerful: Government , IGOs/Donors & in M powerful NGOs

Mitigation



Adaptation



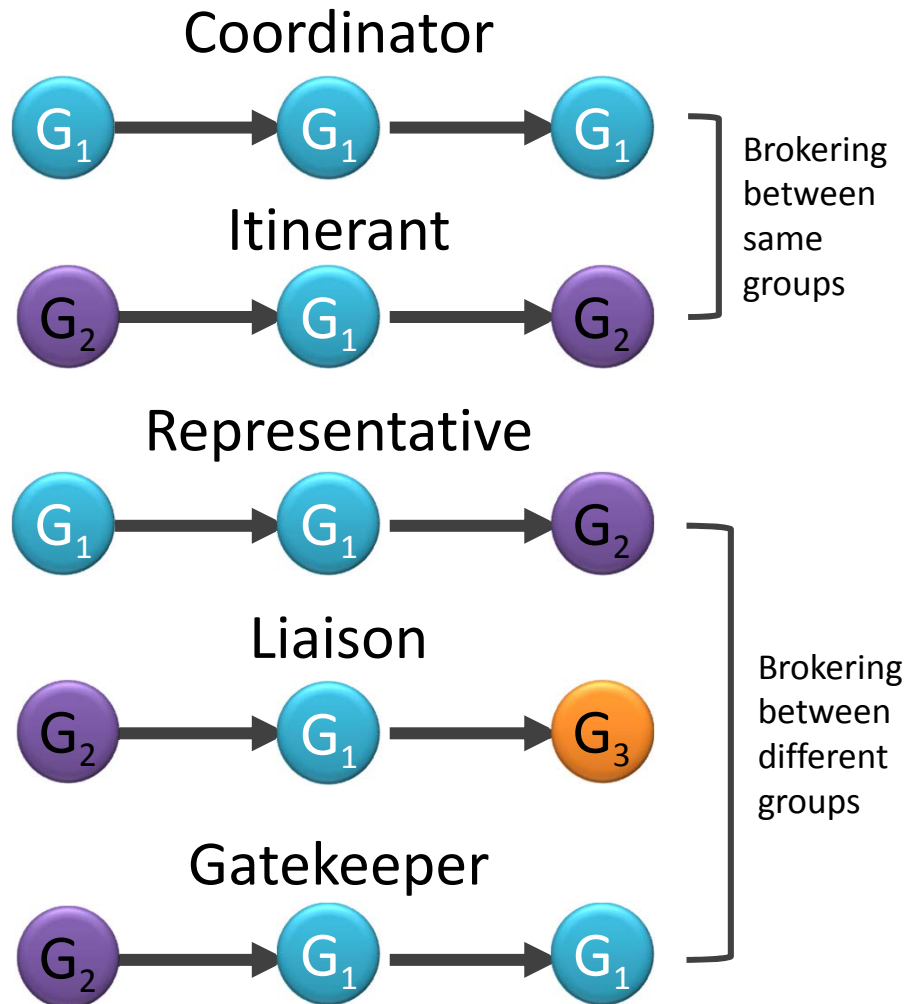
Government

IGOs/Donors

Civil society

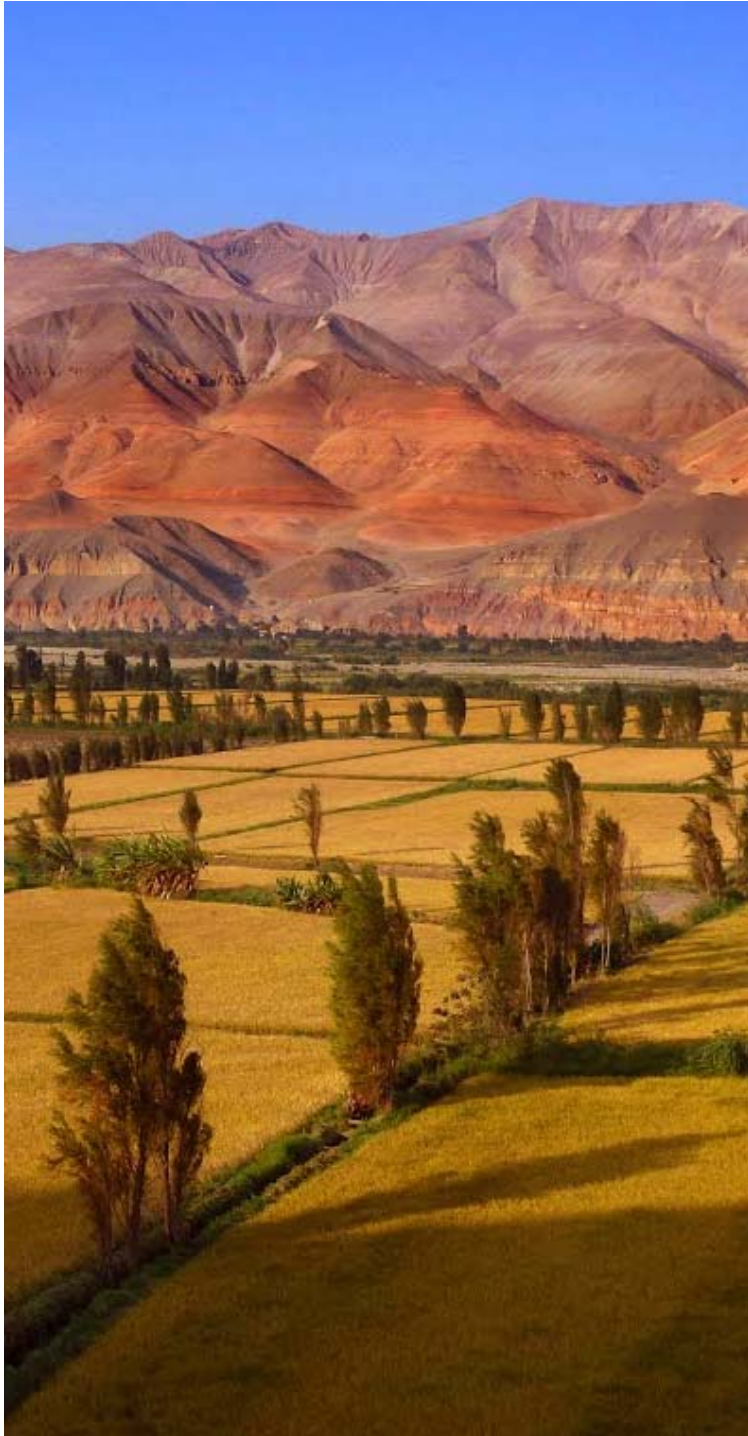
Private sector

Weighted brokerage scores among and between 'Climate Effort' groups



- More than 50% of actors in position to broker at least once in all 4 networks.
- **Most frequently encountered role (by far!) in Liaison.**
 - E.g. sum of all scores for Liaison is 1,183 in Mitigation Information Exchange.
- A lot of **brokerage** between **adaptation** and **mitigation specialist** groups and between them and **Climate Champions**.
 - Very little involving the Secondary group.

(Typology by Gould and Fernandez, 1989)



Top Brokers

- Most **brokers** with high scores ($>90^{\text{th}}$ p) have high in-degree scores in at least one network and are **Climate Champions**.
- Predominantly **national gov. orgs** with some **IGOs/donors** & few **civil society**.
 - Civil society mostly in mitigation: CIFOR, National REDD Group, Association for Research and Integral Development (AIDER).
- Some **actors** in good position to **foster policy integration** → good brokerage positions in both A&M networks, high in-degree in at least 1 network:
 - Climate Change Directorate MoE, GIZ, Ministry of Finance, Forest Service (SERFOR), National Protected Areas Agency (SERNANP).



Key Messages & Recommendations

- Mitigation networks more established
 - Predominance of the forest agenda, has attracted a lot of funding.
 - Civil society mostly power in mitigation.
 - **Harness mitigation networks for synergies?**
- **Tendency towards cross-groups interactions** (heterophily) and Climate Champions acting as brokers.
 - Opportunities for policy integration.
- **Gov. actors with special responsibility:**
 - Apply network perspective to improve policy processes and foster connections and integration.
 - State programs such as the PNCB can contribute directly to creating policy networks that span across domains.
 - Improve science-policy interface and stakeholder engagement.



Thank you!

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Further reading

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