

Collective Action and Social Learning in Integrated Resource Systems: Evidence from Inland Fisheries in Cambodia

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Background & Objective

75% of Cambodians live in rural areas. Fish is a major part of the Cambodian diet, accounting for 61% of households' animal protein intake, and is the second most consumed food after rice (WorldFish, 2022).

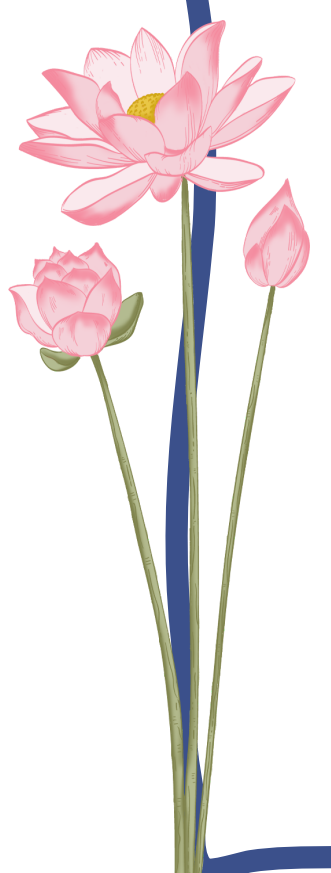


Rice field fisheries in Cambodia account for 70% of inland fisheries catch. It is an open-access resource and a vital source of nutrients and income for Cambodia's rural population. To ensure the sustainability of this integrated system of agriculture, husbandry, and biodiversity conservation the surrounding water bodies need to be managed sustainably. One possible solution is to establish Community Fish Refuges (CFR) with a local committee taking management responsibilities, aiming to ensure the social and environmental sustainability of the fish ponds. CFRs are protected areas within community-owned ponds that provide vital refuges for fish as water recedes from the rice fields in the dry season.



Collective Action (CA)

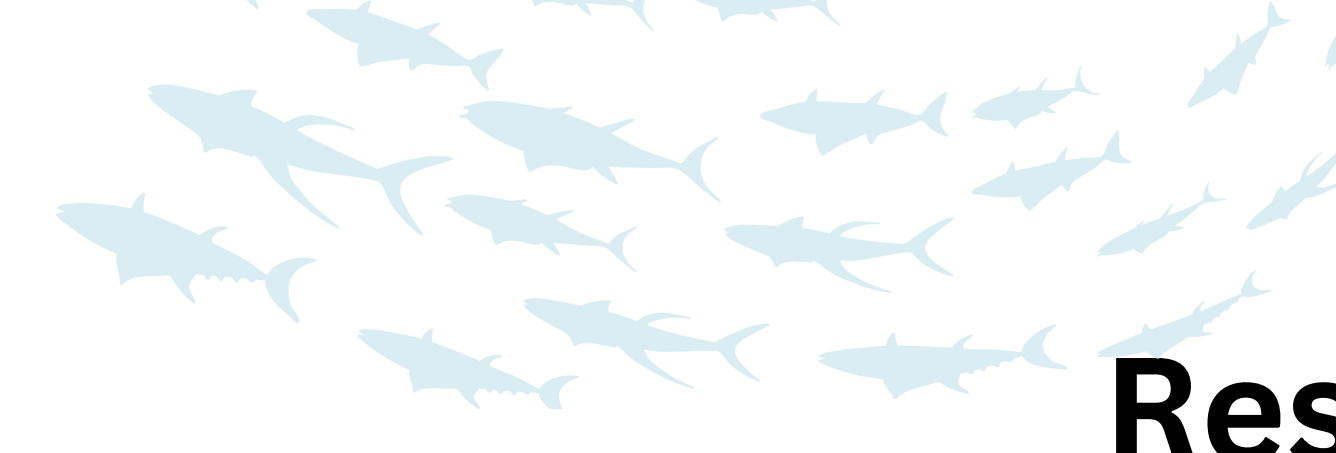
It is the actions of the groups that decide to act together for the management of common goods, and the process by which institutions are created and maintained. It refers to "how humans...actually do construct common interests, cooperate to pursue them, assure each other of their commitments, and coordinate their behavior to act collectively." (Mayer, 2014)



We aim to identify to which extent SL has occurred in villages that have established a CFR and how this has supported the formation of CA for sustainable CFR management.

In natural resource management (NRM), SL and CA are deeply interconnected processes as SL can enable the capacity of a multiple actors network to develop and perform CA. (Maurel, 2003)

Evidence of the relationship between CA and SL is beginning to emerge in the literature, but empirical evidence is sparse. (Assuah & Sinclair, 2019)



Social Learning (SL)

"[T]o be considered 'social learning,' a process must: (1) demonstrate that a change in understanding has taken place in the individuals involved; (2) demonstrate that this change goes beyond the individual and becomes situated within wider social units or communities of practice; and (3) occur through social interactions and processes between actors within a social network." (Reed et al., 2010.)

Qualitative Methods

Data collection (March-May 2023)

- 2 sites in Kampong Thom province.
 - According to a classification by Worldfish, one case is considered good and the other weak management.
- 103 semi-structured interviews:
 - 95 at village level,
 - 8 with NGOs, academics, and state organizations.
- 2 transect walks with local fishermen.

Data analysis

- Software-based content analysis (NVIVO12).

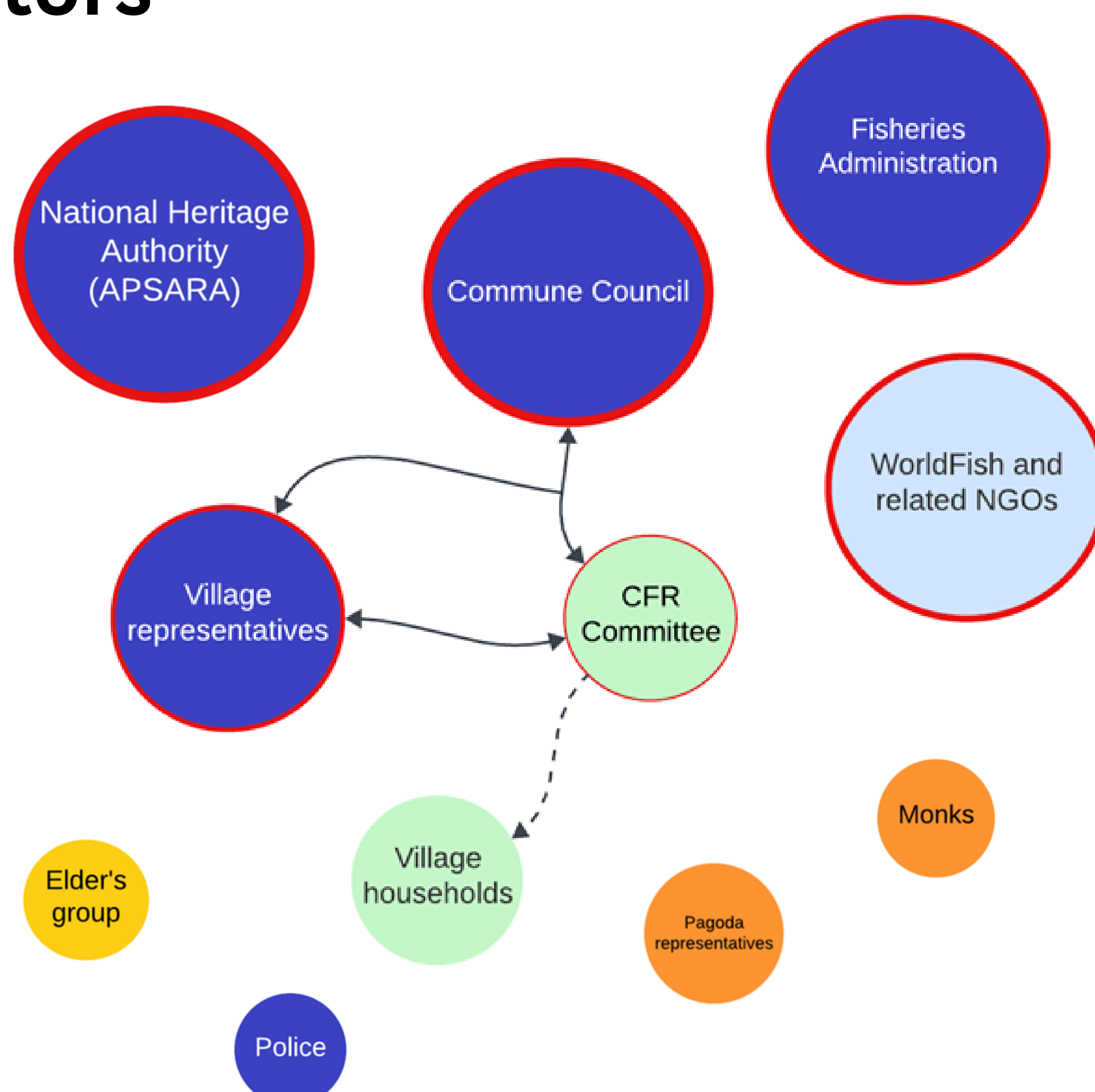
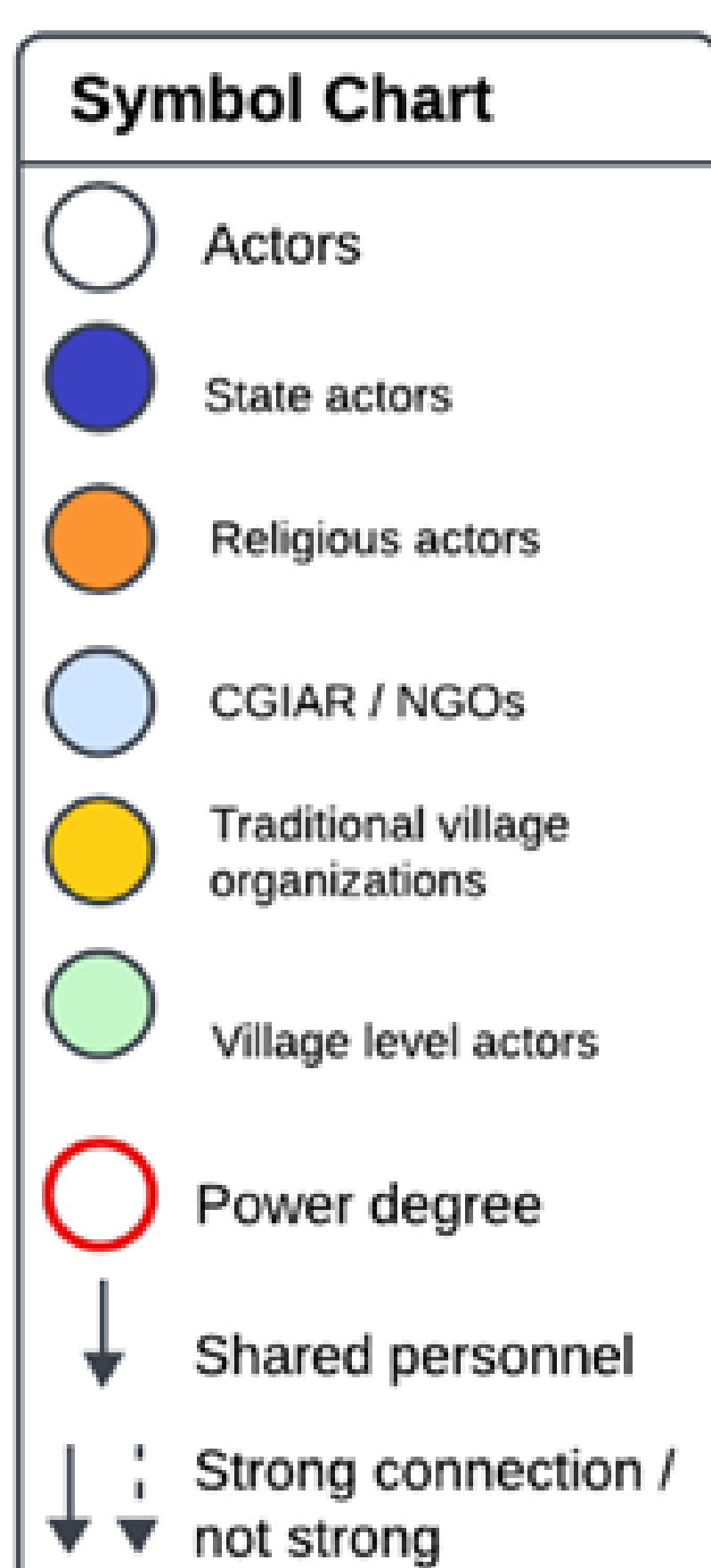
Results & Discussions



- CAs occur in social interaction areas (e.g. road building, religious ceremonies) if initiated by persons of power.
- However, collaborative actions and even the possibility of meeting in groups need permission and initiation from commune/village chiefs.
- The traditional ways of sharing information facilitate disseminating CFR rules but seem ineffective in enabling dialogues between plural voices. Thus, the emergence of SL is limited.

- CFR committee members are appointed by commune and village chiefs. Therefore, CFR-related responsibilities are assumed by state-related actors and their peers.
- **Positive:** CFRs can be inserted in public planning, it is easier to mobilize people for joint action, and members with a salary can contribute to the CFR on a monthly basis.
- **Negative:** Power and responsibilities remain in the same group of people ('elite capture'). Opportunities to discuss, learn, and work on joint NRM remain in the committee.

Influence of actors



Preliminary Conclusions

- Even though CFR projects aim to establish long-term, community-based actions, it seems unrealistic that SL and CA emerge to support this aim. In the studied areas, where power structures are rigid and dominated by national agendas, possibilities for the endogenous emergence of SL and CL outside of traditional activities are limited.
- This in turn highlights the importance of deeper contextual analysis that should shape project design and duration. Project strategies and investments that underestimate the influence of local power structures and the related actors' lived experiences, motivations, and perceptions appear to reinforce the status quo.

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