

CODING BOOK of meta-analysis supporting the study:

***Social movements as key actors in governing the commons: Evidence from community-based resource management studies across the world***

This coding book contains 4 sections broadly corresponding with the theoretical approach of the meta-analysis exercise (sections 1 and 2) and the meta-analysis stages.

### **1. Motivation**

Communities' capacity to manage natural resources via CBNRM regimes and mobilize for the promotion or defense of said regimes are two sides of the same collective action phenomenon (Scholtens, 2016); however, they have so far been studied rather separately by scholars. Little is known, therefore, about whether and how mobilization contributes to better CBNRM. In this paper we address that question via a meta-analysis of 81 cases around the world. The research questions of the study are: How do social movements affect CBNRM? What insights can we gain about the emergence and/or robustness of CBNRM regimes by looking at social movements?

### **2. Concepts**

- Community-based natural resource management: systems of rules, norms, practices, understandings, beliefs and values developed and used by local communities to collectively govern the production, distribution and/or use of natural resources within their local jurisdictions.
- Common pool resources: physical resources that the consumption of which creates rivalry and are difficult to exclude (Ostrom, Gardner, & Walker, 1994).
- Common property regimes: systems of rules devised to govern resources that are produced, distributed and/or used by a group of people, when these are understood to be collectively owned (Ostrom et al. 1994).
- Social movement: "processes of collective action that are sustained across space and time, that reflect grievances around perceived injustices, and that constitute a pursuit of alternative agendas" (Bebbington et al., 2008, pp. 2892)

### **3. Search and screening strategy**

#### **3.1 Key word search**

There has to be at least one of each group (follow order in making combinations)

GROUP 1	GROUP 2
1. Commons	1. Social movement
2. Common pool resources	2. Social mobilization
3. Common property	3. Environmental justice movement
4. Collective management	4. Resistance movement
5. Commoning	

Searches carried in Google scholar®, in order:

1. Commons social movement
2. Common pool resources social movement
3. Common property social movement
4. Collective management social movement
5. Commoning social movement
6. Commons social mobilization
7. Common pool resources social mobilization
8. Common property social mobilization
9. Collective management social mobilization

10. Commoning social mobilization
11. Commons environmental justice movement
12. Common pool resources environmental justice movement
13. Common property environmental justice movement
14. Collective management environmental justice movement
15. Commoning environmental justice movement
16. Commons resistance movement
17. Common pool resources resistance movement
18. Common property resistance movement
19. Collective management resistance movement
20. Commoning resistance movement

### 3.2 Screening 1

Google scholar® displays an excerpt illustrating how the words are used in each of the documents. Use the title of the document and said excerpt to judge whether the document could be codable (potentially containing information about a natural resource management community and its struggles against an external threat). Also, select only documents in the form of reports, working papers, published manuscripts or book chapters, containing the key words in the main text (not in the references) and related to natural resource management in rural areas (i.e., not urban commons)

Google scholar also displays 20 hits per page in order of fit with the search. Some searcher are likely to result in tenths of pages. There is no need to revise all of them. If there are no suitable documents for coding after revising 20 hits, cancel the search and move to the next pair of key words.

### 3.3 Screening 2

Based on the abstract, and a search of the key words in the document assess whether the document could be codable. A case study qualifies for coding if it is empirical and: it reports information about a specific rural community/ies that manage shared resources collectively (i.e., via a formal or customary common property regime), and gets involved in collective resistance actions and/or social movements to defend their rights, interests or values with regard to those resources. In some cases, authors may focus on the mobilizing role of second order organizations (i.e., federations of local user group organizations) or specific mobilization actions without referring to a specific social movement (Paudel et al., 2010; Tyagi et al., 2007). Given our interest on social mobilization, please keep them.

Note: If coded studies refer to other studies that are potentially codable, repeat screening 2 with those.

### 3.4 Synthesis of criteria for screening 1 and 2

Keep if all the conditions below are fulfilled:

#### Screening 1

- a) It is a Journal article/book chapter/report/conference paper
- b) The key words appear in the text (not only in the reference list or in quotations or paraphrases from other authors)
- c) It focuses on natural resources in rural areas
- d) It seemingly contains information about a self-organized community struggling to defend its resources/management regime against an external political economy threat.

#### Screening 2. It is a case if it is an empirical study and:

- e) It refers to a specific community of resource users (local, regional or national)
- f) It refers to a specific CBNRM or common property regime
- g) It refers to specific collective resistance actions feature by the community and aiming at maintaining a particular status quo; and/or the participation of the community in social

movements aiming at social/institutional change. Organizations that are not participated by the community/ies, isolated NGO, or governmental programs would not qualify.

#### 4. Coding

There are two coding forms. The Master coding form is applied to studies. The Design principles coding form is applied to cases. One study may contain multiple cases. Several studies may provide information about a case, in which case each case is recorded in separate rows for later aggregation.

##### MASTER CODING FORM

0. Study id
1. **Search:** Whether the study was found in "google scholar", or in a "reference list".
2. **Case Nr.** (*fill if empirical, otherwise NA*) (1,2,3... if a study describes multiple cases then use a row for each case)
3. **Lead author**
4. **Title**
5. **Year**
6. **Journal**
7. **Focus:** open field to synthesize main goal of the study (*quotation or paraphrase*)
8. **Commons sector:** The main resource at stake, including "water", "forest", "fisheries", "land", "pasture", or others.
9. Conceptualization of **Commons**
  - a. Commons as "common property regime" (whether formally recognized or customary based)
    - Fishers cooperatives or irrigation associations are a paradigmatic example
  - b. Commons as "community" of people who share values/vision and create common property regime ("community"); the commons is about the process rather than about the good/service itself.
    - Indigenous communities are a paradigmatic example
  - c. "not clear"
10. **Methods:** "case study", "large-n/statistics", "comparative case study", "case study review"
11. **Cites:** Whether the study explicitly cites institutional theory of the commons ("institutional"), social movements theory ("movements"), "both", or "none".
12. **Comments:** (free text to add any comments on the coding process)
13. Further potential **entries from Reference list**
14. **Coder:** (add your initials)

*Fields to fill if information available for each case of the study, otherwise = "0". In case information is available fill the corresponding variables below. Be sure that the selection of quotes from the text would allow an outsider to understand the values assigned for each of the variables.*

##### DESIGN PRINCIPLES CODING FORM

1. Study id
2. **Case number**
3. **Country** of case
4. **Scale of commons:** "local" (e.g., a community, town...), "regional" (e.g., involving multiple communities, and/or self-standing geographical area), "national" (multiple locations or regions across a country)
5. **Scale of mobilization:** "local" (e.g., local protests), "regional" (e.g., actions involving multiple communities, and/or reaching across different local jurisdictions), "national" (e.g., appealing to national courts or organizing awareness raising campaigns nationwide), "international".
6. **Threats** against which commoners mobilize. *Write a synthesizing sentence.*

7. **Forms of social mobilization** participated by the community (street protests, occupations, media press, formal requests...). *Open text field.*
8. **Evolution** of social mobilization/movement as participated by the community/ies. *Open text addressing questions: Did the mobilization emerge from the commons organization or was induced from outside? Was it a smooth process? Did the membership of the movement transform? Did it include actors other than the community?*
9. **Impact** of commons management **on social movement**. *Open text addressing question: did the institutions or other aspects of the CBNRM regime contribute to the emergence of the mobilizations? How?*
10. **DP1.a:** Did the movement contribute to clarify/defend the physical boundaries of the resource being used by the community?  
*Physical boundaries facilitate knowing which parts of a resource system are subject to community rules or to externalities. These may take the form of natural landscape elements such as stones, topographic elements or certain tree species, and/or human made signs such as sacred buildings, posts, or fences.*  
*The clarification/defense of boundaries can be formal (e.g., materialized in maps) or informal (e.g., reinforcement of common understanding among community members and/or outsiders)*  
*Movements may not influence understanding about the physical boundaries of the whole system but just a part of it, like when a community confronts the expansion of an extractive project over the boundaries of the community's jurisdiction.*  
*Typical examples of the reinforcement of physical boundaries by movements are the elaboration of maps, restrictions on the expansion of large extractive projects and occupations.*
11. **DP1.b:** Did the movement contribute to clarify/defend the social boundaries of the resource being used by the community?  
*The clarification/defense of social boundaries such as rights or identity can be formal (materialized written documents and/or recognized by public authorities) or informal (e.g., reinforcement of common understandings among community members and/or outsiders).*  
*Social boundaries specify who belongs to the CBNRM or common property regime. This may apply to different social groups within a community (e.g., different castes in a village) or to different user groups (e.g., different communities, firms, public authorities...).*  
*Typical examples of how resistance actions/movements shall affect social boundaries are the recognition of the rights of use of a community/group over a resource, or the reinforcement of group identity and social capital.*  
*Social boundaries can be strengthened independently of physical boundaries, like when a forest or fishing community claims its rights to having access and using a forest or fishing ground.*  
*By the same token, physical boundaries may be strengthened independently of social boundaries, e.g., when the movement contributes to the mapping of a particular territory or defends the community's understanding of the hydrological limits of a basin.*  
*In some occasions physical and social boundaries go together, like when the movement promotes the creation of "exclusive community-use zones", or when the movement reinforces an "pace-based" identity (i.e., an identity linked to particular physical features of the system that distinguishes from other areas).*
12. **DP2.a:** Did the movement promote/defend the proportionality between the costs and benefits of participating in the CBNRM regime?  
*This refers to management rules, i.e., the rules that specify when, how much and how the resource is to be used.*

*Proportionality refers to whether the rules and more generally the participation in CBNRM provide members with sufficient benefits as compared to the costs of doing it (resource use restrictions, maintenance investments, transaction costs...)*

*Proportionality also refers to whether the benefits of the common property regime are distributed relatively equally among groups within the community of users. In general, resistance actions/movements tend to pursue distributive justice goals (e.g., vis a vis non-community users). Information about this external perspective of proportionality also qualifies to code this principle.*

13. **DP2.b:** Did the movement promote a fit between the natural resource management system and local socio-ecological conditions?

*This refers to management rules, i.e., the rules that specify when, how much and how the resource is to be used*

*Ecological fit refers to the ability of the rules to provide for sustainable use of the resource (e.g., one that fits the regeneration rate of the resource, and its quality)*

*Social fit refers to the ability of the rules to fit local customs and practices*

14. **DP3:** Did the movement strengthened the participation of members of the community in the design of the management rules and the organization of activities that affect their use of the resource?

*This refers to operational rules and activities organizing when, how much, and how the resource can be used.*

*It refers to the capacity and effective participation of the community as a whole in the development of the management regime, as well as to the degree of participation of different groups (e.g., women, young members, castes...) within the community.*

15. **DP4.a:** Did the movement promote or contribute to monitoring that users comply with rules governing the use of the resource?

*This refers to the monitoring of compliance with access and management rules, i.e., rules about who, when, how, how much to use the resource.*

*This can apply to rules elaborated by the community (CBNRM regime) or rules devised by other authorities but applying at the community level.*

*It also refers to the behavior of members of the community, as well as outsiders.*

*Enforcement of access rules would rather qualify for design principles 1.a or 1.b, depending on whether those rules speak about the physical boundaries or the specific groups that can use the resource*

*In occasions, community users are more interested in defending a proper use of the resource than limiting who can use the resource. That would qualify for design principle 4.a rather than principles 1.a or 1.b*

16. **DP4.b:** Did the movement promote or contribute to monitoring the conditions of the resource by the community?

*The conditions of the resource are understood as affected by use or externalities, which can be produced by external actors.*

*Monitoring refers to both ad hoc monitoring (e.g., the commissioning of a study to assess the status of the resource) as well as regular monitoring (e.g., the institutionalization of a community monitoring mechanism)*

17. **DP5:** Did the movement contribute to the promotion or defense of a sanctioning system by the community against those who do not comply with the rules governing the use of the resource?

*This refers to the monitoring of compliance with access and management rules, i.e., rules about who, when, how, how much to use the resource.*

*This can apply to rules elaborated by the community (CBNRM regime) or rules devised by other authorities but applying at the community level.*

*It also refers to the behavior of members of the community, as well as outsiders.*

18. **DP6:** Did the movement contribute to the promotion and/or use of conflict resolution mechanisms by the community?

*This speaks both about conflicts between members of the community as well as between the community and other user groups or public authority.*

*Typical example is the use of courts (i.e., to solve conflicts between a community and an external actor)*

19. **DP7:** Did the movement contributed to promote and/or defend the right of the community to self-organize to manage the use of the resource and/or the autonomy of the organization against external intervention?

*In occasions communities are granted rights to access the resource, even in exclusivity (DP1b), but not necessarily to form an autonomous organization to manage the resource within a given jurisdiction (DP7).*

*The recognition of self-organization does not have to be formal. In occasions authorities do not explicitly recognize the right to self-organize and manage but the organizations are created and tolerated.*

20. **DP8:** Did the movement facilitated that the community reach or organizing into multiple levels of governance for decision making, enforcement, conflict resolution or other resource management activities?

*In general resistance actions/movements are able to voice interests in decision making at supra-community levels and even influence decision making. If there is evidence that such participation is somehow institutionalized/sustained over time/materialized in an organization, that would qualify for design principle 8; otherwise it would not.*

Answer options for the questions 10-20

- a. Yes impact, positive.

- *An improvement, even if not totally fulfilling the expectations of the movement or the author of the study is considered a positive impact; such improvement, however needs to be evident: e.g., the promotion of conflict resolution mechanisms like courts would not be an improvement per se unless the author provides information that shows that such use would not have taken place without the movement.*
- *To use this code and the codes of the “yes impact, negative”, and “yes impact, positive and negative”, one does not need to know whether the movement had the intention to have an impact. For example, movements can improve the inclusiveness and quality of community decision making while organizing the community to claim the government recognition of its access or management rights.*

- b. Yes impact, negative

- c. Yes impact, positive and negative

- *This code requires evidence of both positive and negative effects; negative effects can be secondary or unattended effects.*

- d. Yes intention, no effect

- *Intention refers to either the plans and/or the actual actions of the movement to accomplish them. For example, many movements emerge to revert government decisions that restrict community rights but fail to do so.*
- *Importantly, that a movement fails to have an effect with regard to a principle (see particularly principles associated to rights, like DP1b and DP7) does not mean that the movement could not have an effect with regard to other principles (see, for example, the strengthening of monitoring or the improvement of community collective choice).*
- *Similarly, that a movement fails to have an effect in a principle via a particular pathway (see the strengthening of DP1b via the defense of community use rights) does not mean that it cannot have it via a different pathway (see the strengthening of DP1b via the reinvigoration of community identity).*

- “No effect” is not the same as “no information”. The former requires evidence (i.e., quotes); the latter does not
- e. Yes intention, no information
- f. No information
  - Whenever there is doubt about whether a piece of information is sufficient or not to apply a code, be sure to copy paste the quote in question to revise the coding, even if the chosen value is “No information”.

## 5. References

- Bebbington, A., Humphreys Bebbington, D., Bury, J., Langan, J., Muñoz, J. P., & Scurrah, M. (2008). Mining and Social Movements: Struggles Over Livelihood and Rural Territorial Development in the Andes. *World Development*, 36(12), 2888–2905.  
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- Ostrom, E., Gardner, R., & Walker, J. (1994). *Rules, Games and Common Pool Resources*. Michigan: Michigan University Press.
- Scholtens, J. (2016). The elusive quest for access and collective action: North Sri Lankan fishers’ thwarted struggles against a foreign trawler fleet. *International Journal of the Commons*, 10(2).