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Article

# River Commoning and the State: A Cross-Country Analysis of River Defense Collectives

Jaime Hoogesteger <sup>1</sup>, Diana Suhardiman <sup>2</sup>, Rutgerd Boelens <sup>1,3</sup>,\*, Fabio de Castro <sup>3</sup>, Bibiana Duarte-Abadía <sup>1</sup>, Juan Pablo Hidalgo-Bastidas <sup>1</sup>, Janwillem Liebrand <sup>4</sup>, Nuria Hernández-Mora <sup>5</sup>, Kanokwan Manorom <sup>6</sup>, Gert Jan Veldwisch <sup>1</sup>, and Jeroen Vos <sup>1</sup>

- <sup>1</sup> Water Resources Management Group, Wageningen University, The Netherlands
- <sup>2</sup> Royal Netherlands Institute of Southeast Asian and Caribbean Studies, The Netherlands
- <sup>3</sup> Centre for Latin American Research and Documentation, University of Amsterdam, The Netherlands
- <sup>4</sup> International Development Studies, Utrecht University, The Netherlands
- <sup>5</sup> New Water Culture Foundation, Spain
- <sup>6</sup> Faculty of Liberal Arts, Ubon Ratchathany University, Thailand
- \* Corresponding author (rutgerd.boelens@wur.nl)

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#### **Abstract**

Grassroots initiatives that aim to defend, protect, or restore rivers and riverine environments have proliferated around the world in the last three decades. Some of the most emblematic initiatives are anti-dam and anti-mining movements that have been framed, by and large, as civil society versus the state movements. In this article, we aim to bring nuance to such framings by analyzing broader and diverse river-commoning initiatives and the state—citizens relations that underlie them. To study these relations we build on notions of communality, grassroots scalar politics, rooted water collectives, and water justice movements, which we use to analyze several collective practices, initiatives, and movements that aim to protect rivers in Thailand, Spain, Ecuador, and Mozambique. The analysis of these cases shows the myriad ways in which river collectives engage with different manifestations of the state at multiple scales. As we show, while some collectives strategically remain unnoticed, others actively seek and create diverse spaces of engagement with like-minded citizen initiatives, supportive non-governmental organizations, and state actors. Through these relations, alliances are made and political space is sought to advance river commoning initiatives. This leads to a variety of context-specific multi-scalar state—citizens relations and river commoning processes in water governance arenas.

### **Keywords**

grassroots scalar politics; river commoning; state-citizens relations; water collectives; water justice movements

#### Issue

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### 1. Introduction

River systems are fundamental for preserving our planetary health and social well-being. Most rivers are intensively used and abused to meet human freshwater demands, reduce flooding risks, enable navigation, generate hydropower, and dispose of large quantities of sewerage and industrial waste. Many still free-flowing rivers are imperiled by plans and projects that aim to use the river's water flows more intensively to meet the demands of specific human populations or, in particular, powerful corporate interests and centralist intervention schemes. These plans affect riverine human and ecological communities, including the river-related lives, livelihoods, cultural and leisure activities of mostly vulnerable groups, such as fishermen, smallholders, and



non-human riverine communities. Therefore rivers often become arenas of contestation, where various governing forces, ranging from top-down state-led development policies and projects to grassroots socio-environmental justice movements coalesce, interact, network and are at odds with one another (Boelens et al., 2016, 2022). In line with the main questions that inspired this thematic issue, we set out to understand riverine local self-governance initiatives and how these relate to state institutions and actors. In doing so we focus specifically on how grassroots actors advance their wished-for rivers through different strategies of engagement with state and non-state actors.

We inform our analysis on the notion of governance understood as the processes that define "how organization, decisions, order, and rule are achieved in heterogenous and highly differentiated societies" (Bridge & Perreault, 2009; p. 476). This leads us to understand river governance not as the governance of rivers per se, but as the processes of governance through rivers. Such governance proceses are shaped by the functions of government and the relations between government, non-governmental, and civil-society actors (Perreault, 2014; Whaley, 2022). These express as a patchwork of closely interlinked socio-ecological systems around which actors and institutions create, sustain, and reproduce practices, relations, institutions, and laws that coalesce as specific modes of ordering. River-territorial diversity and pluralism emerge, in particular, as a response to vertical state-and-marketbased, norm-setting, and rule-implementation (Duarte-Abadía & Boelens, 2019; Hidalgo-Bastidas, 2020). To challenge the latter, local actions and strategic alliances of self-governance emerge. These manifest as local subversive practices and grassroots socio-environmental justice movements (Cumbers et al., 2008; Martinez-Alier et al., 2016; Shah et al., 2021; Suhardiman et al., 2017).

Water governance scholars have discussed and analyzed spaces of political engagement and institutional emergence (Cleaver & de Koning, 2015; Whaley, 2022) in the context of resource contestation and social movements, or the lack thereof (Hirsch, 2020; Miller et al., 2019). In the context of riverine socioenvironmental sustainability, very different collective responses and instances of self-governance in defense of rivers have been studied and analyzed (Duarte-Abadía et al., 2019; Flaminio, 2021; Hernández-Mora et al., 2015; Suhardiman et al., 2022). We expand on this literature by building on the notions of "communality" (Hoogesteger, Bolding, et al., 2023), "grassroots scalar politics" (Hoogesteger & Verzijl, 2015), "rooted water collectives" (Vos et al., 2020), and "water justice movements" (Boelens et al., 2022). Through these concepts, we explore different ways in which collectives engage in river commoning struggles and strategically relate to different manifestations of the state. We look specifically at how, through individual and collective action, alliances, networks, and emergent institutional arrangements, river and water-centered collectives struggle for river and livelihood-related integrity. We analyze how the relationship between these collectives (citizens) and the state-centered water governance structures, processes, and outcomes are mediated and relate to each other at multiple interrelated scales. We do so by analyzing different river commoning initiatives in Thailand, Spain, Ecuador, and Mozambique.

The case studies are based on ethnographic qualitative research. Different research methods were used and consisted mainly of open and semi-structured interviews with leaders and ex-leaders of the river commoning initiatives, river and water users, policy-makers and state officials, staff from development agencies, and technical staff of non-governmental organizations supporting these initiatives. The interviews were recorded through personal notes and audio when permitted by the interviewees. Field observations were likewise recorded in the researchers' notes. These were supplemented by participatory observation during the researchers' fieldwork periods. Aside from these primary sources of information secondary material such as news reports and websites were analyzed. Also, earlier results and publications about these initiatives were reviewed and used in this analysis.

In the next section, we present the theoretical groundwork that informs our analysis. Then we analyze instances of river commoning initiatives in Thailand, Spain, Ecuador, and Mozambique, respectively. Finally, we compare the four cases and pull theoretical insights from their comparison. We pose that the theoretical notions elaborated in this contribution offer insightful openings to study, better understand, and theorize river commoning initiatives and their relations to different manifestations of the state in divergent contexts.

### 2. River Commoning and the State

# 2.1. River Commoning Collectives and Their Scalar Dimensions

The collective management, care, and protection of rivers have received relatively little academic attention (Jackson, 2017; Krause, 2022; Wantzen et al., 2016), despite a large number of everyday practices, grassroots initiatives, collectives, and movements that engage in different forms of individual and collective action for the defense of rivers, riverine landscapes, and related livelihoods (Flaminio et al., 2021; Hommes, 2022; Sneddon & Fox, 2008). We conceptualize the latter as river commoning initiatives defined as "collective practices of place and community making, wresting rivers away from influences that enclose, commodify, or pollute" (Boelens et al., 2022, p. 3). These initiatives aim to make the different dimensions of rivers such as their resources, space, biodiversity, quality, and other material and immaterial dimensions a common good for the enjoyment and use of the commons. Following Boelens et al. (2022, p. 8) we define river commons as "networked socio-ecological



arrangements that embrace and mobilize the social and the natural—human and non-human—and practice river stewardship based on their mutual interdependence on shared riverine livelihood interests, knowledge, and values." We depart from the notion that river commoning initiatives are rooted in local notions of "river." These grounded notions are based on how the people that engage in these commoning initiatives see, conceptualize, and relate to what they conceive of, and define as, "their river." These notions are rooted in collective imaginaries (Asara, 2020; Hoogesteger, Konijnenberg, et al., 2023) and related water assemblages (see Reyes-Escate et al., 2022). It refers to the broader worldview or cosmologies in which people's actions and perceptions are framed, including concepts of commoning, communality, resistance, fairness, and rightful shares amongst others (see also the notion of moral ecological rationality developed by Cleaver, 2000).

To fully appreciate the richness of political reactions "from below" we elaborate on the notion of river commoning and expand it to the analysis of its multi-scalar dimensions. To grasp the relations between local (individual and collective) place, community-making practices and initiatives, and the broader multi-scalar dimensions of several river-commoning struggles, we borrow from the notion of communality as developed by Hoogesteger, Bolding, et al. (2023). This notion, which was originally developed for the analysis of the sustainability of irrigation systems, poses that locally there is a strong interrelation between the commons (the resource users and their institutions for collective action) and the community (which manifests above all as a sense of place-based belonging, identity, and related responsibility). Based on either one or both of these interrelated precepts, people engage in individual, ad-hoc collective, and/or institutionalized actions, and practices aimed at the protection of "their river." These actions can be very local and invisible in character but can also relate to the development of polity, which the authors define as "the capacity to mobilize resources (and others) to advance their interests vis-'a-vis state agencies and other external actors" (Hoogesteger, Bolding, et al., 2023, p. 204). In this context, acts of resistance and commoning are not only about the result of (organized) economic or political action; they (also) are embodied in strategically routinized practices of water use and "compliance" with dominant (state) influences. Such a conceptualization of commoning and agency is particularly important for understanding dynamics in contexts where the state presence in the water governance domain is ephemerous (weak states) such as in many parts of Africa. In these and other contexts, water and river users' practices need to be understood as deeply ingrained in—and informed by—cultural norms (see Cleaver, 2018).

In other contexts, the growing realization that the defense of "their river" and related livelihoods are embedded in wider regional and national politics, water policies, legal frameworks, and projects has led river-

ine communities and civil society river collectives to engage in networks and create alliances with other communities, urban-rural civil society collectives, multistakeholder platforms, governmental institutions, and non-governmental institutions. The engagement with these actors and networks often enables local initiatives to overcome their spatial constraints to the agency by "upscaling their struggles" (Brenner, 1998; Perreault, 2003).

The notion of grassroots scalar politics (Hoogesteger & Verzijl, 2015) is insightful to further explore the scalar dimensions involved in strategies through which local actors pursue and advance their interests vis-à-vis external actors (polity). They do so by engaging with others in differently-scaled networks, alliances, and institutions (McCarthy, 2005; Swyngedouw, 2004). This engagement increases the capacity of collectives to access political, institutional, logistical, and/or other support, as well as access to decision-making spaces and processes (Cambaza et al., 2020; Hoogesteger et al., 2017). According to Hoogesteger and Verzijl (2015, p. 15), this is achieved through: "(a) the consolidation and control of new scaled spaces and place(s); (b) the consolidation of networks with actors at different spatial scales; and (c) the discursive and material bending and appropriation/rejection/contestation of existing scales and their configurations." With these strategies, river-centered grassroots collectives shift between actors and institutional alliances, seeking those that have the potential to help them advance their demands. To achieve this, river collectives continuously switch from networks and alliances that cannot help them with the demand at hand, to those that can. This is done through a dynamic process of up-scaling and/or down-scaling aimed at finding the necessary political space (Hoogesteger et al., 2017). The latter rests on the recognition that the flows of power and agency in scalar verticality run in both directions, that is, from the local to the global and vice-versa (Leitner & Miller, 2007)—a process that creates opportunities as well as pitfalls and traps for commoning movements (Dupuits, 2019; Dupuits et al., 2020).

Finally, the notion of rooted water collectives (Vos et al., 2020) points out that river commoning initiatives are not necessarily based on those that directly manage or live off and from a river or a related resource. River commoning initiatives can manifest as social movements or loosely related networks with urban, urbanrural, or even transnational roots (Hoogesteger, 2017; Sneddon & Fox, 2008). Their strategies can be very broad and often aim at political advocacy for initiatives that are not specifically tied to a specific river ("their river") but at broader concerns and demands for riverrelated socio-environmental justice (Shah et al., 2021; Tanasescu, 2013). A last notion that rooted water collectives bring to the fore is the close relation that a lot of these commoning initiatives have with state actors and the importance of political room to maneuver (civil and press freedoms) in different socio-political contexts.



# 2.2. State and State—Citizens Relations in River Commoning

States, according to Brenner et al. (2003, p. 11) are "dynamically evolving spatial entities that continually mould and reshape the geographies of the very social relations they aspire to regulate and control." Here, the state is not only an overarching power structure, politically, and administratively, but also a set of discursive constructs and everyday socio-political relationships, beyond its apparatus (Trouillot, 2001). Rather than positioning state power as something absolute and monolithic, we view it as constantly co-produced and open for contestation at different scales. Linking this with relational approaches to space (Harvey, 1996; Massey, 1998), we position state-citizens relations in a central position in our endeavor to better understand river commoning initiatives and the inter-scalar power dynamics that (re)shape various forms of resistance including within state spaces (Kenney-Lazar, 2020). We look at the state's multi-dimensionality across the temporal and spatial scales.

Most states are organized through spatially distinct hierarchical scales such as municipalities, provinces, states, and the national government. This multi-scalar institutionalism exercises agency through its temporal stability in practices, hierarchical power structures, and legal frameworks (Swyngedouw & Heynen, 2003). These scalar fixes shape hierarchies that bind social, economic, political, and environmental practices and relations. Though this multi-scalar apparatus is often organized legally and institutionally, this does not mean that it functions as a monolithic and coherent whole. Often different interests and political projects are advanced or contested within the state apparatus. This creates conflicts and negotiations between different ministries at one scale and/or between the different scales of the governmental institutions. As a result actors from within the state as well as from the outside engage in bringing about or resisting transformations by re-creating, challenging, transforming, or sustaining and controlling specific forms of scalar fixity (Hoogesteger et al., 2017; Swyngedouw, 2007) aimed at crafting and reconfiguring riverine hydrosocial territories (Boelens et al., 2016; Hommes et al., 2022; Hoogesteger et al., 2016).

The multiplicity of interests that live within state institutions at different scales offers (formal and informal) openings for grassroots initiatives to create spaces of engagement with and/or within the state. This is especially so when grassroots interests align with those of bureaucrats or politicians at a specific scale or around a specific topic (Hoogesteger & Verzijl, 2015). In these cases (temporal) alliances are forged around a shared concern. Vos et al. (2020, p. 4) pose that these are enhanced or severely curtailed depending on "the strength and involvement of the state bureaucracy" and "the strength of civil society and room for maneuver, including civil rights and press freedom."

Therefore, rather than focusing on the spectrum of strong and weak states, we argue that the shaping of political spaces of engagement occurs in conjunction with the different manifestations of state-citizens relations, and how these are in turn (re)shaped by various actors' and institutions' strategies. Therefore we argue that political rights, authority, and how local communities view these concerning their idea of citizenship, also play an important role in (re)shaping state-citizens relations. This includes not only how local communities view state power but also how the state presents its power position vis-à-vis the wider public and/or within a particular governance context. Our concern is above all to understand how river commoning initiatives engage with the state or part of the state through context-specific strategies, coalitions, and networks as is further explored in the next section through the four case studies.

#### 3. River Commoning Practices and Struggles

# 3.1. The Establishment of the Mekong People Forum in Thailand

The Pak Beng hydropower dam is to be constructed in Pak Beng district, Oudomxay province in Laos, though its impacts would be felt by local communities living along the river in both Laos and Thailand. As one of the 12 planned hydropower dams on the mainstream of the Mekong River, the Pak Beng dam project has undergone regional consultation processes, as stipulated in the Procedure for Notification Prior Consultation and Agreement (PNPCA) led by the Mekong River Commission (MRC; Mekong River Commission for Sustainable Development, 2017; Suhardiman & Geheb, 2022). This consultation does not oblige the company to compensate villagers' livelihood impacts from the dam, especially when these villages are not identified as potentially impacted areas in the Resettlement Action Plan prepared by the company. In Thailand, the developers and Thai government overlooked many villages that will be impacted by the project. In response, these communities have engaged in regional and national consultation processes surrounding the dam construction. The PNPCA for Pak Beng started in December 2016 and was followed by a series of meetings, including a regional consultation meeting conducted in February 2017, and a visit to the field site in April 2017.

Local communities in Thailand responded strongly through various institutional pathways and procedures (formal and informal) to negotiate their access to decision-making processes surrounding the Pak Beng Dam. Local communities' strategy to exercise pressure is closely anchored in their close relationships and thus strategic alliances with civil society organizations (CSOs) networks, international NGOs, and Thai academics. Such alliances have increased local communities' bargaining power by engaging in and using local, national, and transboundary decision-making processes and venues.



In these spaces, local communities reconfigured rules, practices, norms, and relationships introduced by the company in its transboundary environmental impact assessment report and the way the consultation was conducted. This reconfiguration is most apparent in the way local communities brought national policy-makers in Thailand and the MRC into the negotiation processes, shifting decision-making power from the company to these national and inter-governmental decision-making bodies. In doing so they have flattened the existing power asymmetry between local communities and the company, while also creating new spaces for negotiation through more open policy dialogues and additional consultation meetings. At the same time, CSO leaders have established informal relations with state officials that sympathize with the social cause the CSO is focusing on (e.g., to create an equal playing field in hydropower decision-making and convey the voice of the poorest and most marginalized). These state officials often inform the CSO leaders about important steps in hydropower decision-making (e.g., when the company would conduct public consultations). This way, the CSO leaders could use the information to inform their grassroots and plan mobilizations and street protests accordingly. This informal relation occurs as a response to Thai centralized development planning in which the central government decides on every step of hydropower decisionmaking. This leaves state officials, especially those at the (sub)district level, without negotiation power or even the ability to officially convey any feedback to the plans. In response, they navigate this situation through informal alliances with CSO leaders.

However, consultation meetings in Thailand did not satisfy CSO networks and local communities. Similarly, the review that showed major shortcomings in the transboundary environmental impact assessment report did not result in any follow-up assessment. To address this issue, local communities together with CSO networks, international NGOs, and Thai academics came up with the idea to establish the Mekong People's Forum which could serve as an alternative discussion platform in transboundary water governance and in particular related to hydropower decision-making processes. On 1–2 December 2020, the Mekong People's Forum was launched with its first event attended by more than 100 participants from various backgrounds (the media, international development agencies, local communities, and the CSO network). Key ideas that were discussed included (a) the need to set up the forum as an alternative platform for local communities to better negotiate with states, inter-governmental organizations, and key donors influencing development pathways through large-scale infrastructure projects in the Mekong and (b) the need to strengthen and empower the local communities ability to protect the river and bring to light their role in knowledge production processes surrounding river ecosystems in general and social and environmental impact assessments in particular.

The establishment of the Mekong People's Forum illustrates that river commoning initiatives have responded to the existing power asymmetry in hydropower decision-making and applied an inter-scalar approach as part of their strategies to pressure the company and the state. Villagers view the Forum not only as an alternative platform to push for more open and meaningful discussions surrounding hydropower planning but also as new ways to access information and share this information more openly.

### 3.2. The Nueva Cultura del Agua Movement in Spain

Spain's rivers have been intensively modified by human intervention. Today, almost 30,000 hydraulic infrastructures dam, divert, channel, or otherwise alter Spanish rivers (Belletti et al., 2020). Starting in the 1990s, new voices and discourses emerged around the contentious National Hydrological Plan which proposed building over 100 new dams and transferring water from surplus basins to deficit ones, especially along the Mediterranean coast (mostly in Northern Spain). Regional governments and political parties actively promoted a discourse of water as part of regional identity and territorial rights (Hernández-Mora et al., 2015). For their part, academics, environmentalists, and rural populations affected by the construction of the proposed infrastructure organized in the Coordination of People Affected by Large Reservoirs and Transfers (COAGRET). COAGRET, as part of a much broader coalition of citizen-led initiatives, questioned Spain's unsustainable hydraulic policy and related river de-commoning processes, leading to massive mobilizations against the National Hydrological Plan and growing into a national water justice movement known as the New Water Culture movement (Parés, 2010). Led since 2002 by the Fundación Nueva Cultura del Agua, this movement shared an understanding of water as a common patrimony and proposed an alternative paradigm based on ecological and democratic water management sensitized with identity and culture, affective values, commitment to intergenerational development, and social equity (Martínez-Gil, 1997).

The new water culture paradigm shift spread across scales (locally, regionally, and nationally), advocating that water decisions should no longer be just in the hands of technocratic expertise but rather recognize and incorporate plural values and interests, demanding participatory debates to build a more democratic water culture rooted in riverine commons. The interconnected coalition of scholars, activists, and practitioners, that make up the New Water Culture movement (Bukowski, 2007), have evolved in response to changes in the institutional context, scales of action, emerging discourses, and arenas of contestation (Hernández-Mora et al., 2015). For instance, the approval of the Water Framework Directive in 2000, with its focus on the river basin as the scale for river basin management, resulted in the articulation



of basin-wide water justice networks that were able to forge alliances with other local river commoning struggles within and across the basins—for instance, the Tagus Network for a New Water Culture, the Jucar Network for a New Water Culture, and the regional Andalusia Network for a New Water Culture (Hernández-Mora et al., 2015).

These networks express and claim political rights, pluralistic authority, and new forms of river-based citizenship while building site-specific strategic alliances to force the state and private sector actors into fundamentally new directions. They rely on a variety of tools—social mobilizations, legal actions, technical reports, scientific publications, and visualization tools—to advance their alternative views, their understanding of water and rivers as commons, and reach and influence different decision-making arenas (local, national, or the European Union; see Del Moral et al., 2020). The New Water Culture movement has also forged alliances with other water-related commoning struggles such as the antiprivatization movement and the defense of the human right to water (García & Del Moral, 2020).

An illustrative example of multi-actor river defense is that of the Río Grande coalition, in Málaga, Andalucía. Through collective action, an interlacing of customary and scientific epistemologies, and multi-scalar integration, the Río Grande coalition was able to shape political spaces of engagement and new state-citizens relations (Duarte-Abadía et al., 2019). At the national level, the Río Grande coalition supported the demonstrations against the water transfer from the Ebro River to the Mediterranean. Fundación Nueva Cultura del Agua connected them to important networks of scholars, activists, and key state employees. Together, they conducted counter-studies and showed how scientific knowledge and rural experiences can be mobilized to co-produce new alternatives to keep the rivers alive and free of dams. The Río Grande coalition also offered concrete hydrosocial alternative plans for Málaga while not affecting the river (Duarte-Abadía et al., 2019). The water administration momentarily approved the movement's alternatives, but river-damming threats linger on.

# 3.3. Contesting the Baba Dam and Broader River Commoning Initiatives in Ecuador

Since the 1960s, the Ecuadorian state has enthusiastically adopted the hydraulic mission to address pressing issues such as poverty, energy supply, flood control, and navigability, among others (Hidalgo-Bastidas, 2020; Warner et al., 2017). The initial designs for the Baba dam, as proposed by the Ecuadorian state, had a capacity of 2,000 hm<sup>3</sup> and a dam height of 55 m. It would flood nearly 4,000 ha. Although construction was about to start in 2005, none of the local communities that would be affected by the project were informed or consulted. As a local community leader recalls: "They came to do studies. We authorized them...but they wanted some-

thing else....They were not clear about the project. They fooled us!" (Interview, 13 October 2015).

In 2005, the state started with the first on-theground preparation for the construction of the dam, including the expropriation of land of nearly 240 peasant families. Given that the formal channels of communication with state institutions did not take into account local voices, dam-affected communities created the Committee for the NO Construction of the Baba dam through which they sought to develop political agency to defend their riverine livelihoods. This movement included 31 local communities and engaged local politicians, critical academics, national and international NGOs, and inter-American human rights bodies. Through these alliances and based on the leadership of popular intellectuals (Hidalgo-Bastidas & Boelens, 2019), the Committee upscaled and diversified its struggles and strategies, including several-day blockades of the country's main highway, protests in the country's capital, as well as dialogue rounds with state representatives and construction companies. After steadfast pressure from the Committee and in the context of a left-wing new government that proclaimed itself as the citizens' revolution (Hidalgo-Bastidas, 2020), the Ecuadorian state decided to re-design the Baba dam project to accommodate some of the concerns of local communities. As a national newspaper announced on its front page:

Baba dam changes its design. The number of hectares expropriated decreases from 4,420 ha to 1,012 hectares with the new project. The social and environmental impact on the area is reduced....Overall, the eviction of people from the affected area will be reduced by 90%. ("Presa Baba," 2005)

The dam re-design went hand in hand with a different communication strategy with local communities. This time, local communities were politically participating in the process through hybrid institutional spaces, where local communities' socio-environmental claims and state developmental goals were negotiated (Hidalgo-Bastidas & Boelens, 2019).

Another river commoning case is the Ecuadorian National Water Forum (NWF). It is a citizen-led initiative that was set up in 2000 by engaged academics and NGOs. It now gathers grassroots and indigenous organizations, local NGOs, critical scholars, and other social organizations nationwide. It aims to develop political agency at multiple scales through the creation of networks and coalitions that empower local communities to defend their waters and rivers. The coalition permanently carries out critical research and organizes provincial citizen forums and a biannual national event that gathers nearly 1,000 attendants. Politicians, state representatives, and officials are invited to actively participate. Depending on the socio-political context, the NWF leads important negotiations with the Ecuadorian state about river commoning initiatives. In 2008, during a



government with a left-wing and progressive discourse, NWF managed to include some grassroots demands in the newly drafted constitution such as water as a human right, state-community water management, the prohibition of water privatization, the recognition of rights of nature, and water redistribution (see Hoogesteger, 2017). However, after the initial opening for citizen participation, the state severely curtailed and repressed citizen initiatives since the 2010s (Boelens et al., 2015). This intensified environmental struggles which led to repeated confrontations between NWF, the Ecuadorian Indigenous Movement, and other organized civil society movements vis-à-vis the state (Hoogesteger, 2016; Mills-Novoa et al., 2022; Velásquez, 2022).

## 3.4. Integrated Water Resources Management Implementation and Local Everyday River Use Practices in Mozambique

In Mozambique large numbers of smallholder farmers divert river water for irrigated agriculture, creating socio-hydrological networks that de facto govern and shape (mostly the upper reaches of) river systems. This is done by building on customary water governance principles that conflict with the rules and regulations of the state (de jure). There are very large areas of river-based irrigation developed by smallholder farmers. These often interconnected irrigation networks have come to shape existing river socio-natures, which local communities understand as "their river," and have gone largely unnoticed by government and non-government agencies alike (Beekman et al., 2014; Veldwisch et al., 2019; Woodhouse et al., 2017). The practices through which these systems are created, sustained, and transformed in both their social as well as infrastructural, and natural dimensions are guided by local cultural norms of commoning which are by and large upheld by tribal authorities.

In Mozambique, the existing state's framework for water management is founded on the 1991 Water Act and the National Water Policy adopted in 1995 (Veldwisch et al., 2013). These are largely guided by the international policy ideas of IWRM that were reworked into laws, policies, and institutional structures (Alba & Bolding, 2016). Decentralization and participation, on the one hand, and formalization of water rights and its connection to fee collection, on the other hand, were two of the central guiding principles. However, the way that these get shaped on the ground reflects a previously existing culture of "centralized and authoritarian forms of governance" (Alba & Bolding, 2016, p. 562).

Though on paper the state has come to play a central role in water governance, the actual implementation is very poor, therefore, the policies that exist on paper hardly become reality. For instance, the water law stipulates that even small users require a water license as soon as they use technology to divert water, even if these are manually operated pumps or tempo-

rary diversion weirs (Veldwisch et al., 2013). However, the limited financial resources and institutional capacity of the established Regional Water Administrations make it near impossible to enforce these strict water rights requirements and diversion restrictions (Alba et al., 2016). In practice, in the operationalization of the water rules and regulations at the local level, smallholders are often considered under common use, which is a category that is exempted from licensing and officially protected by law. However, this kind of use does not formally qualify as common use and is likely also not to benefit from legal protection while they do suffer the risk of being overlooked by not being made visible (van der Zaag et al., 2010). The failed experiments by the Regional Water Administrations aiming to make group representatives responsible for registration and fee collection (Alba & Bolding, 2016) demonstrate that more than a deliberate choice to not license and charge smallholders, it is an acceptance of institutional and operational limitations. In practice, the policies of the government hardly are a threat to farmers.

By continuing to build and maintain river diversion infrastructure without seeking licenses or permission, farmers expand and strengthen their practices despite, and alongside, the state's water rights and institutional frameworks. The state, at least at its lowest scale, is very aware that it cannot uphold the formal norms, as it does not have the means to enforce and implicitly accepts the successful continuation of commoning practices. The state is weak in materializing at the local level the norms and values that are upheld in national-level rules, regulations, and institutional frameworks. Local water administrations and their "street-level bureaucrats...face the local physical, economic, and political difficulties," becoming key policy actors in operationalizing the national guidelines into realistic procedures (Alba & Bolding, 2016, p. 583). Rather than a strategy of resistance, this broad "movement" of "disobedient citizens" may be understood as a river commoning strategy that builds on practices of accommodation on basis of pragmatism, connectedness, and moral ecological rationality (Cleaver, 2018).

### 4. Navigating the State to Create Spaces of Engagement for River Commoning

Echoing Bourdieu's (1989, p. 16) "field of power," the previous case studies illustrate how processes of river commoning are shaped and reshaped by power geometries embedded in the state—citizens relations at multiple scales. The analyzed cases bring important findings concerning river commoning initiatives and how these deal with issues of self-governance, the commons, scale, and related state—citizen engagement as discussed below.

Firstly, it highlights the importance of networking and multiscale alliance building between and among grassroots initiatives and other state and non-state actors for the development of political agency in different



spaces of engagement. Except for the case of smallholders in Mozambique, all other analyzed cases show that the key to the advancement of river commoning initiatives vis-à-vis the state is networking and the creation of alliances at different scales. Through such networks and alliances information is exchanged, relations are established, and political and institutional openings (i.e., spaces of engagement with the state that are supportive of river commoning initiatives) are forged at and across different scales.

Secondly, it highlights that in many cases engagement in subversive public collective actions such as rallies, street protests, mobilizations, and road blockades forms a successful strategy to develop polity by amassing public and political attention. It allows forcing openings for dialogue with the state, albeit in contexts of a democratic state. This is especially so when it concerns specific rooted cases in which there is a clear common base such as the Baba dam in Ecuador, the Río Grande Coalition in Spain, and the Pak Beng hydropower dam in the Mekong River. Here local communities expanded and reconfigured their political spaces for engagement with the state by aligning with other actors and institutions outside the realm of the formal state. In so doing linking local with national and transnational environmental and social justice movements.

Thirdly, it shows the importance of grassroots scalar politics through which river commoning initiatives can both up-scale as well as down-scale their struggles. This up-and-down scaling is essential for the creation of networks and alliances as well as for linking causes, initiatives, and efforts. Through scalar politics, political space is sought and sometimes found at different levels of the state institutional framework. In this context, the creation of grassroots-based institutionalized spaces, such as the Mekong People Forum, the Fundación Nueva Cultura del Agua in Spain, and the Ecuadorian National Water Forum, has a pivotal role in the advancement of river commoning initiatives through the creation of spaces of engagement. Through these, multiscalar constituencies are brought together to share, discuss, co-create, and disseminate ideas, proposals, alliances, and networks for river commoning. At the same time, these spaces can develop considerable political agency vis-à-vis the different levels of state institutions. They play a key role in spreading alternative grassroots discourses, ideas, and proposals, influencing public opinion as well as key actors in and outside of the state apparatus.

Finally, the case of smallholders in Mozambique shows that in other cases and contexts river commoning takes place by consolidating community and the commons locally and by avoiding spaces of engagement with the state. By strategically keeping the state out, the necessary space for self-governance of "their river" is created, protected, and sustained. This strategy rests on a strong culturally defined level of self-governance and autonomy in contexts in which external threats such

as mining, damming, enclosure, river pollution, or river diverting initiatives do not threaten the existence of these river commoning practices (Boelens, 2015; see also Mills-Novoa et al., 2022).

This reminds us of the importance of not falling into the unintentionally perpetuated domination/injustice versus resistance/justice binary in the literature on river commoning and water injustice dynamics (Cleaver, 2018). The presented cases give evidence of the wide array of often eclectic, dynamic, and scale-specific statecitizen relations that can arise in and around river commoning initiatives. The recognition of this diversity in state-citizen relations around river commoning initiatives forms an important conceptual grounding to advance our understanding and scholarship on this field and its entanglements with different manifestations of the state. The latter can not be taken for granted but need to be carefully analyzed in their context and multi-scalar dimensions. As such, we close this contribution with an open invitation to further explore and deepen the analysis of the rich field of river-commoning initiatives that seek to advance socio-environmental justice and more inclusive forms of governance around the world. A process in which the relation with the state often plays an important role.

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The authors declare no conflict of interests.

### References

Alba, R., & Bolding, J. A. (2016). IWRM avant la lettre? Four key episodes in the policy articulation of IWRM in downstream Mozambique. Water Alternatives, 9(3), 549–568.

Alba, R., Bolding, J. A., & Ducrot, R. (2016). The politics of water payments and stakeholder participation in the Limpopo River Basin, Mozambique. *Water Alternatives*, *9*(3), 569–587.

Asara, V. (2020). Untangling the radical imaginaries of the Indignados' movement: Commons, autonomy, and ecologism. *Environmental Politics*. Advance online publication. https://doi.org/10.1080/096440 16.2020.1773176

Beekman, W., Veldwisch, G. J., & Bolding, A. (2014). Identifying the potential for irrigation development in Mozambique: Capitalizing on the drivers behind farmer-led irrigation expansion. *Physics and Chemistry of the Earth, Parts A/B/C, 76/78,* 54–63.

Belletti, B., de Leaniz, C. G., Jones, J., Bizzi, S., Börger, L.,



- Segura, G., Castelletti, A., van de Bund, W., Aarestrup, K., Barry, J., Belka, K., Berkhuysen, A., Birnie-Gauvin, K., Bussettini, M., Carolli, M., Consuegra, S., Dopico, E., Feierfeil, T., Fernández, S., . . . Zalewski, M. (2020). More than one million barriers fragment Europe's rivers. *Nature*, *588*, 436–441. https://doi.org/10.1038/s41586-020-3005-2
- Boelens, R. (2015). Water, power, and identity: The cultural politics of water in the Andes. Routledge.
- Boelens, R., Escobar, A., Bakker, K., Hommes, L., Swyngedouw, E., Hogenboom, B., Huijbens, E. H., Jackson, S., Vos, J., Harris, L. M., Joy, K. J., de Castro, F., Duarte-Abadía, B., de Souza, D. T., Lotz-Sisitka, H., Hernández-Mora, N., Martínez-Alier, J., Roca-Servat, D., Perreault, T., . . . Wantzen, K. M. (2022). Riverhood: Political ecologies of socionature commoning and translocal struggles for water justice. *The Journal of Peasant Studies*. Advance online publication. https://doi.org/10.1080/03066150.2022. 2120810
- Boelens, R., Hoogesteger, J., & Baud, M. (2015). Water reform governmentality in Ecuador: Neoliberalism, centralization, and the restraining of polycentric authority and community rule-making. *Geoforum*, 64, 281–291.
- Boelens, R., Hoogesteger, J., Swyngedouw, E., Vos, J., & Wester, P. (2016). Hydrosocial territories: A political ecology perspective. Water International, 41(1), 1–14.
- Bourdieu, P. (1989). Social space and symbolic power. *Sociological Theory*, *7*(1), 14–25.
- Brenner, N. (1998). Between fixity and motion: Accumulation, territorial organization, and the historical geography of spatial scales. *Environment and Planning D: Society and Space*, *16*, 459–481.
- Brenner, N., Jessop, B., Jones, M., & McLeod, G. (2003). *State/space: A reader*. Blackwell Publishing.
- Bridge, G., & Perreault, T. (2009). Environmental governance. In N. Castree, D. Demeritt, D. Liverman, & B. Rhoads (Eds.), *Companion to environmental geography* (pp. 475–497). Blackwell Publishing.
- Bukowski, J. (2007). Spanish water policy and the national hydrologic plan: An advocacy coalition approach to policy change. *South European Society and Politics*, *12*(1), 39–57.
- Cambaza, C., Hoogesteger, J., & Veldwisch, G. J. (2020). Irrigation management transfer in sub-Saharan Africa: An analysis of policy implementation across scales. *Water International*, 45(1), 3–19.
- Cleaver, F. (2000). Moral ecological rationality, institutions and the management of common property resources. *Development and Change*, *31*(2), 361–383.
- Cleaver, F. (2018). Everyday water injustice and the politics of accommodation. In R. Boelens, T. Perreault, & J. Vos (Eds.), *Water justice* (pp. 246–258). Cambridge University Press.
- Cleaver, F., & de Koning, J. (2015). Furthering critical insti-

- tutionalism. *International Journal of the Commons,* 9(1), 1–18.
- Cumbers, A., Routledge, P., & Nativel, C. (2008). The entangled geographies of global justice networks. *Progress in Human Geography*, *32*(2), 183–201.
- Del Moral, L., Laconi, C., & Pedregal, B. (2020). Mapping environmental justice at a regional scale: The collaborative digital map of water conflicts in Andalusia. *Boletín de la Asociación de Geógrafos Españoles*, 85, Article 2867.
- Duarte-Abadía, B., & Boelens, R. (2019). Colonizing rural waters: The politics of hydro-territorial transformation in the Guadalhorce Valley, Málaga, Spain. *Water International*, 44(2), 148–168.
- Duarte-Abadía, B., Boelens, R., & Du Pre, L. (2019). Mobilizing water actors and bodies of knowledge. The multi-scalar movement against the Río Grande dam in Málaga, Spain. *Water*, *11*(3), 200–220.
- Dupuits, E. (2019). Water community networks and the appropriation of neoliberal practices: Social technology, depoliticization, and resistance. *Ecology and Society*, 24(2), Article 20.
- Dupuits, E., Baud, M., Boelens, R., de Castro, F., & Hogenboom, B. (2020). Scaling up but losing out? Water commons' dilemmas between transnational movements and grassroots struggles in Latin America. *Ecological Economics*, 172, Article 106625.
- Flaminio, S. (2021). Modern and nonmodern waters: Sociotechnical controversies, successful anti-dam movements and water ontologies. *Water Alternatives*, *14*(1), 204–227.
- Flaminio, S., Piégay, H., & Le Lay, Y. F. (2021). To dam or not to dam in an age of anthropocene: Insights from a genealogy of media discourses. *Anthropocene*, *36*, Article 100312.
- García, A. L., & Del Moral, L. (2020). El derecho humano al agua en España en el contexto europeo (2010–2020). Implicaciones para las políticas y los modelos de gestión del ciclo urbano [The human right to water in Spain in a European context (2010-2020). Implications for policies and modes of management of the urban cycle]. *Relaciones Internacionales*, 45, 305–326.
- Harvey, D. (1996). *Justice, nature and the geography of difference*. Blackwell Publishing.
- Hernández-Mora, N., Cabello, V., De Stefano, L., & Del Moral, L. (2015). Networked water citizen organisations in Spain: Potential for transforming power structures in water management. *Water Alternatives*, 8(2), 99–124.
- Hidalgo-Bastidas, J. P. (2020). Agua, poder y tecnología. Megaproyectos hídricos y movimientos sociales en Ecuador [Water, power and technology. Hydraulic megaprojects and social movements in Ecuador]. Editorial Abya Yala.
- Hidalgo-Bastidas, J. P., & Boelens, R. (2019). Hydraulic order and the politics of the governed: The Baba dam in coastal Ecuador. Water, 11(3), 180–199.



- Hirsch, P. (2020). Scaling the environmental commons: Broadening our frame of reference for transboundary governance in Southeast Asia. *Asia Pacific Viewpoint*, *61*(2), 190–202.
- Hommes, L. (2022). The ageing of infrastructure and ideologies: Contestations around dam removal in Spain. *Water Alternatives*, *15*(3), 592–613.
- Hommes, L., Hoogesteger, J., & Boelens, R. (2022). (Re)making hydrosocial territories: Materializing and contesting imaginaries and subjectivities through hydraulic infrastructure. *Political Geography*, 97, 102698.
- Hoogesteger, J. (2016). NGOs and the democratization of Ecuadorian water governance: Insights from the multi-stakeholder platform el Foro de los Recursos Hídricos. VOLUNTAS: International Journal of Voluntary and Nonprofit Organizations, 27, 166–186.
- Hoogesteger, J. (2017). The politics of water democracy: Insights from grassroot struggles in the Ecuadorian Highlands. *Asia Pacific Viewpoint*, *58*(1), 74–85.
- Hoogesteger, J., Boelens, R., & Baud, M. (2016). Territorial pluralism: Water users' multi-scalar struggles against state ordering in Ecuador's highlands. *Water International*, *41*(1), 91–106.
- Hoogesteger, J., Bolding, A., Sanchis-Ibor, C., Veldwisch,
  G. J., Venot, J.-P., Vos, J., & Boelens, R. (2023).
  Communality in farmer managed irrigation systems:
  Insights from Spain, Ecuador, Cambodia, and Mozambique. Agricultural Systems, 204, Article 103552.
- Hoogesteger, J., Konijnenberg, V., Brackel, L., Kemink, S., Kusters, M., Meester, B., Mehta, A., 't Hart, T., van der Poel, M., van Ommen, P., Boelens, R., & Sanchis-Ibor, C. (2023). Imaginaries and the commons: Insights from irrigation modernization in Valencia, Spain. *International Journal of the Commons*, *17*(1), 109–124. https://doi.org/10.5334/ijc.1216
- Hoogesteger, J., Tiaguaro-Rea, Y., Rap, E., & Hidalgo, J. P. (2017). Scalar politics in sectoral reforms: Negotiating the implementation of water policies in Ecuador (1990–2008). World Development, 98, 300–309.
- Hoogesteger, J., & Verzijl, A. (2015). Grassroots scalar politics: Insights from peasant water struggles in the Ecuadorian and Peruvian Andes. *Geoforum*, 62, 13–23.
- Jackson, S. (2017). How much water does a culture need? Environmental water management's cultural challenge and indigenous responses. In A. Horne, A. Webb, M. Stewardson, M. Acreman, & B. Richter (Eds.), Water for the environment: From policy and science to implementation and management (pp. 173–188). Academic Press.
- Kenney-Lazar, M. (2020). Relations of sovereignty: The uneven production of transnational plantation territories in Laos. *Transactions of the Institute of British Geographers*, 45(2), 331–344.
- Krause, F. (2022). Rhythms of wet and dry: Temporalising the land-water nexus. *Geoforum*, 131, 252–259.
- Leitner, H., & Miller, B. (2007). Scale and the limitations

- of ontological debate: A commentary on Marston, Jones and Woodward. *Transactions of the Institute of British Geographers*, 32(1), 116–125.
- Martinez-Alier, J., Temper, L., Del Bene, D., & Scheidel, A. (2016). Is there a global environmental justice movement? *The Journal of Peasant Studies*, 43(3), 731–755.
- Martínez-Gil, F. J. (1997). La nueva cultura del agua en España [The new water culture in Spain]. Editorial Bakeaz.
- Massey, D. (1998). Power geometries and the politics of space-time. Hettner-lecture 1998. University of Heidelberg.
- McCarthy, J. (2005). Scale, sovereignty, and strategy in environmental governance. *Antipode*, *37*(4), 731–753.
- Mekong River Commission for Sustainable Development. (2017). Official prior consultation process of the pak beng hydropower project kicked off. http://www.mrcmekong.org/news-and-events/news/official-prior-consultation-process-of-the-pak-beng-hydropower-project-kicked-off
- Miller, M. A., Middleton, C., Rigg, J., & Taylor, D. (2019). Hybrid governance of transboundary commons: Insights from Southeast Asia. *Annals of the American Association of Geographers*, 110(1), 297–313.
- Mills-Novoa, M., Boelens, R., Hoogesteger, J., & Vos, J. (2022). Resisting, leveraging, and reworking climate change adaptation projects from below: Placing adaptation in Ecuador's agrarian struggle. *The Journal of Peasant Studies*. Advance online publication. https://doi.org/10.1080/03066150.2022.2144252
- Parés, M. (2010). River basin management planning with participation in Europe: From contested hydropolitics to governance-beyond-the State. *European Planning Studies*, 19(3), 457–478.
- Perreault, T. (2003). Changing places: Transnational networks, ethnic politics, and community development in the Ecuadorian Amazon. *Political Geography*, 22(1), 61–88.
- Perreault, T. (2014). What kind of governance for what kind of equity? Towards a theorization of justice in water governance. *Water International*, 39(2), 233–245.
- Presa Baba cambia su diseño [Baba Dam changes its design]. (2005, December 12). *Diario Hoy*, 2A.
- Reyes-Escate, L., Hoogesteger, J., & Boelens, R. (2022). Water assemblages in hydrosocial territories: Connecting place, space, and time through the cultural-material signification of water in coastal Peru. *Geoforum*, 135, 61–70.
- Shah, E., Vos, J., Veldwisch, G. J., Boelens, R., & Duarte-Abadía, B. (2021). Environmental justice movements in globalising networks: A critical discussion on social resistance against large dams. *The Journal of Peasant Studies*, 48(5), 1008–1032.
- Sneddon, C., & Fox, C. (2008). Struggles over dams



- as struggles for justice: The World Commission on Dams (WCD) and anti-dam campaigns in Thailand and Mozambique. *Society and Natural Resources*, 21(7), 625–640.
- Suhardiman, D., & Geheb, K. (2022). Participation and politics in transboundary hydropower development: The case of the Pak Beng dam in Laos. *Environmental Policy and Governance*, 32(4), 320–330.
- Suhardiman, D., Manorom, K., & Rigg, J. (2022). Institutional bricolage (re)shaping the different manifestations of state-citizens relations in Mekong hydropower. *Geoforum*, *134*, 118–130.
- Suhardiman, D., Nicol, A., & Mapedza, E. (2017). Water governance and collective action: Multi-scale challenges. Earthscan Publications.
- Swyngedouw, E. (2004). Globalisation or "glocalization"? Networks, territories and rescaling. *Cambridge Review of International Affairs*, 17(1), 25–48.
- Swyngedouw, E. (2007). Technonatural revolutions: The scalar politics of Franco's hydro-social dream for Spain, 1939–1975. *Transactions of the Institute of British Geographers*, 32, 9–28.
- Swyngedouw, E., & Heynen, N. C. (2003). Urban political ecology, justice and the politics of scale. *Antipode*, *35*(5), 898–918.
- Tanasescu, M. (2013). The rights of nature in Ecuador: The making of an idea. *International Journal of Environmental Studies*, 70(6), 846–861.
- Trouillot, M. R. (2001). The anthropology of the state in the age of globalization: Close encounters of the deceptive kind. *Current Anthropology*, *42*(1), 125–138.
- van der Zaag, P., Juizo, D., Vilanculos, A., Bolding, A., & Uiterweer, N. P. (2010). Does the Limpopo River basin have sufficient water for massive irrigation development in the plains of Mozambique? *Physics*

- and Chemistry of the Earth, Parts A/B/C, 35(13/14), 832–837.
- Velásquez, T. (2022). Pachamama politics: Campesino water defenders and the Anti-Mining Movement in Andean Ecuador. The University of Arizona Press.
- Veldwisch, G. J., Beekman, W., & Bolding, A. (2013). Smallholder irrigators, water rights and investments in agriculture: Three cases from rural Mozambique. *Water Alternatives*, *6*(1), 125–141.
- Veldwisch, G. J., Venot, J. P., Woodhouse, P., Komakech, H. C., & Brockington, D. (2019). Re-introducing politics in African farmer-led irrigation development: Introduction to a special issue. *Water Alternatives*, 12(1), 1–12.
- Vos, J., Boelens, R., Venot, J. P., & Kuper, M. (2020). Rooted water collectives: Towards an analytical framework. *Ecological Economics*, *173*, Article 106651.
- Wantzen, K. M., Ballouche, A., Longuet, I., Bao, I., Bocoum, H., Cissé, L., Chauhan, M., Girard, P., Gopal, B., Kane, A., Marchese, M. R., Nautiyal, N., Teixeira, P., & Zalewski, M. (2016). River culture: An eco-social approach to mitigate the biological and cultural diversity crisis in riverscapes. *Ecohydrology & Hydrobiology*, 16(1), 7–18.
- Warner, J., Hoogesteger, J., & Hidalgo, J. P. (2017). Old wine in new bottles: The adaptive capcity of the hydraulic mission in Ecuador. *Water Alternatives*, 10(2), 322–340.
- Whaley, L. (2022). Water governance research in a messy world. *Water Alternatives*, *15*(2), 218–250.
- Woodhouse, P., Veldwisch, G. J., Venot, J. P., Brockington, D., Komakech, H., & Manjichi, Â. (2017). African farmer-led irrigation development: Re-framing agricultural policy and investment? *Journal of Peasant Studies*, 44(1), 213–233.

### **About the Authors**



Jaime Hoogesteger is associate professor of water commons and collectives at the Water Resources Management Group of Wageningen University, the Netherlands. His research interests revolve around the themes of water commons, water collectives, social movements, and water co-governance arrangements, especially in contexts of rapid environmental and agrarian change and related rural transformations. His research approach is interdisciplinary and inspired by notions of political ecology.



**Diana Suhardiman** is director of the Royal Netherlands Institute of Southeast Asian and Caribbean Studies, an institute of the Royal Netherlands Academy of Arts and Sciences. She is a special professor of natural resource governance, climate, and equity at Leiden University, the Netherlands. Putting power and politics central in the contemporary struggles of natural resource governance, her research focuses on unpacking messy processes (re)shaping water, land, environmental, and climate governance in Southeast Asia. It places knowledge (re)production central in unpacking actors' and institutions' views, strategies, and responses to agrarian change, climatic change, and processes of globalization, including how capitalist intrusions affect livelihood (re)making.





**Rutgerd Boelens** is a professor of Political Ecology of Water with CEDLA, University of Amsterdam, and a Professor of Water Governance and Social Justice at Wageningen University. He is a visiting professor at the Catholic University of Peru and the Central University of Ecuador. He coordinates the Justicia Hídrica (Water Justice) alliance and the international research/action programs Riverhood and River Commons (www.movingrivers.org). His research focuses on political ecology, water rights, legal pluralism, water cultural politics, governmentality, hydrosocial territories, environmental justice, and social mobilization.



**Fabio de Castro** is a senior lecturer at the University of Amsterdam with a research focus on environmental governance in Latin America. He has coordinated several research projects on socioenvironmental transformation in the Brazilian Amazon addressing small-scale production systems. His publications include topics related to community-based governance, environmental justice, agroecological systems, land-use policies, environmental politics, and socioenvironmental movements in Brazil. His current project LINKAGES focuses on transdisciplinary research on sustainable grounded value chains of socio-biodiversity products in the Amazon.



**Bibiana Duarte-Abadía** is an engaged scholar in the political ecology of water with transdisciplinary social-environmental training in the fields of rural development, political-economic power analysis, landscape ecology, and environmental justice. Her latest scientific publications examine rural—urban water transfers, land dispossessions, enclosures of the commons, water grabbing, and social protest. These articles study the effects of dam constructions and the extractive industry, including new market-environmentalism solutions. She currently works as a postdoctoral researcher at Wageningen University on river co-governance and new water justice movements.



Juan Pablo Hidalgo-Bastidas is an agronomist, specialist in water and land management, and holds a PhD in social sciences. He is currently a postdoctoral researcher in the Water Resources Management group at Wageningen University, the Netherlands. His work especially covers the study of water and environmental justice, the political ecology of water, hydrocracies and social movements, and the role of water technologies in society-nature relations. Juan Pablo is a member-researcher of the Water Justice Alliance (http://justiciahidrica.org), the WaterLat-Gobacit Network (http://waterlat.org), and the National Water Forum of Ecuador (https://camaren.org).



Janwillem Liebrand is an assistant professor at the International Development Studies Group, Department of Human Geography and Spatial Planning, Faculty of Geosciences, Utrecht University, the Netherlands. His research and education focus on the practices and politics of land, water and climate management, food security, and the role of science and technology expertise in promoting development interventions. Central to his research is the implicit politics of race and gender as part of foreign aid and international development cooperation. He is the author of the book Whiteness in Engineering: Tracing Technology, Masculinity and Race in Nepal's Development (2022), coordinating board member of the IOS (Institutions for Open Society) platform Fair Transitions at Utrecht University, coordinator of the SAFI network (Supporting African Farmer-led Irrigation), and coordinating member researcher of the Diamonds in the Delta (DiD) network.



**Nuria Hernández-Mora** is a senior researcher and consultant. She has a PhD in geography from the University of Seville. Her work focuses on water policy development, evaluation and design, institutional analysis, water economics, urban water management, human right to water, public participation, and drought risk management. She works with non-profit organizations, social movements, universities and research institutions, and local, regional, and national administrations in Spain, the European Commission, and the World Bank. She is a member of the governing board of the Fundación Nueva Cultura del Agua.



**Kanokwan Manorom** is a director of the Mekong Sub-Region Social Research Center (MSSRC), based at the Faculty of Liberal Arts, Ubon Ratchathani University, Thailand. She is a PhD in rural sociology from the University of Missouri-Columbia, USA. She has a master's degree in rural and regional development and planning from the Asian Institute of Technology (AIT) and a bachelor's degree in community development from Khon Kean University, Thailand. Much of her work is involved with policy recommendations about dam, irrigation, and land resource management and development in the Northeast region of Thailand and the Mekong region.





**Gert Jan Veldwisch** is an associate professor in the field of water, society, and technology at Wageningen University. His research and education aim to bridge the gap between science and implementation practices concerning societal and technological transformations. Working on cases across the Global South his work spans themes such as drinking water supply, irrigation, practices and politics of modeling, rural-urban water transfers, and river (co)management.



Jeroen Vos is an associate professor of water governance with the Water Resources Management Group at Wageningen University, the Netherlands. As a water policy advisor, he worked for a decade in Peru and Bolivia. His current research interests are the dynamics and discourses of water use by agribusinesses in Latin America and Spain. He uses a political ecology approach to research water commons, virtual water trade, water governmentalities, and water stewardship certification. He was co-editor of the book *Water Justice* (Cambridge University Press) and is an associate editor of the *International Journal of Water Governance*.