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The political ecology of small freshwater bodies in Kerala, India

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Abstract

This article situates the empirical context of small freshwater bodies in the theoretical debates of commons and political ecology to understand the processes of institutionalization. We argue that a “politics of empty space” operating in the policy narratives and the practices have resulted in a partial de commodification of rural waters in Kerala. The communities, especially the oppressed and the marginalized, have managed to co-produce ecological assets like rural ponds. Such efforts towards re-embedding the economy in the society could be a starting point to address the water and the larger environmental crisis that we are in today.

KEYWORDS

commons, countermovement, institutionalization, political ecology, water

1 | INTRODUCTION

Water crisis has reached alarming proportions in several parts of the world and particularly in the Global South. Failure to adequately recharge the groundwater aquifers and effectively manage surface water resources have significantly contributed to this crisis. Small freshwater bodies have a huge role to play in this regard. The disappearance and mismanagement of these ecosystems have exacerbated the crisis. Privatization and statization of water commons have failed to protect and/or equitably manage them. It is significant that we learn about the various models of local-level, community-led water governance in terms of an institutional perspective to craft better institutions that manage this resource equitably and sustainably. The process of institutionalization of community response to address water crisis is important to understand and solve the crisis. It could then possibly be replicated across various regions with context-specific rules factored in. In this article, our endeavor is to situate the institutions of small freshwater bodies

in the theoretical debates of commons and political ecology to understand the process of institutionalization. Here, we analyze recent empirical literature from a commons perspective.

The empirical literature on small-scale water commons has captured the process of change in the (de)commonization efforts in critical resources like water bodies. Nayak and Berkes (2011), Unnikrishnan et al. (2016), Nayak et al. (2014), and Bharucha (2019) have all tried to trace the trajectory of institutional change in commons by observing different types of ecosystems from large reservoirs like lakes to small-scale coastal fisheries. Deploying varied methods like geospatial analysis, archival research, assimilating oral narratives, surveys, and participant observation, they found that the lack of recognition for traditional community rights has led to degradation and even disappearance of ecosystems, along with marginalization and poverty among dependent communities. These studies were emphatic about situating a case in its historical context to understand the contemporary picture of the commons ecosystem.

Another theme in similar studies had been the examination of the role of power and how ecosystem governance is quite political. Analyzing how the neo-liberal regime—the state and the markets—has impounded land, water, and forests, these studies discuss the methods of political reallocation of resources (Birkenholtz, 2016; Cornea et al., 2016; Dell'angelo et al., 2017; Mehta, 2017; Mehta et al., 2019; Mollinga, 2008; O'Reilly & Dhanju, 2012; Punjabi & Johnson, 2019; Robbins, 2000; Shah & Narain, 2019; Truelove, 2011).

Power operates at multiple scales and forms. Whereas Robbins (2000) attempted to provide a theory of corruption in natural resource management, Mehta (2017), Shah and Narain (2019), and Bharucha (2019) dissected the fallacious discourses of “scarcity” of resources—its social construction and its pervasive hold in policy discussions. These studies have underscored the fact that “scarcity” has more to do with access and distribution patterns and less to do with biophysical reasons. Rather than focussing on redistribution, dispossession, and social justice, the discourse generally begins and ends with the “scarcity” argument.

Also, commons are often conflated with “open access” or a “free for all.” Dell'angelo et al. (2017) focused on the vulnerable nature of collective arrangements and how expansionist investments often led to “commons grabbing.” However, some studies do find that parastatal organizations like clubs and political parties could positively influence overwhelming and rickety governance regimes over urban water bodies and stem social marginalization (Cornea et al., 2016).

Moreover, the role of the state in this political formation needs further investigation. Whereas Birkenholtz (2016), Snorek et al. (2017), and O'Reilly and Dhanju (2012) argued that the state often abdicates its solemn responsibility to uphold traditional rights and sometimes intervenes to the detriment of collective rights, Mansbridge (2014) and Ramachandraiah (2001) posited that state has a role to play in governing the commons. Mansbridge (2014) urged that a need to build an institutional structure incorporating the role of the state along with grounded local knowledge is vital. Ramachandraiah (2001) contended that judicial interventions at the highest level safeguarding fundamental rights related to safe drinking water would improve the general confidence in institutions. Nagabhatla and Sellamuttu (2008), in their case study of Lake Kolleru in India, found “uncertainties” in wetland management due to policy intervention leading to its change from the freshwater reservoir to an aquaculture haven. Meinzen-Dick (2007) argued that effective water management by the autonomous state agencies would require more than just financial support, using an example from Karnataka, India.

The discussions over institutions of governance and institutional change bring us to our focus, which is commons. Ostrom (1990) defined commons or common-pool resources (CPRs) somewhat narrowly, as a “natural or man-made resource system that is sufficiently large to make it costly to exclude potential beneficiaries from obtaining benefits from its use”

(Ostrom, 1990, p. 30). However, Jodha (1986) defined CPRs broadly as resources accessible to the whole community and over which no individual has exclusive property rights. While these definitions capture the physical attributes of commons, Jodha et al. (2012) defined common property resources as “historically evolved institutional arrangement by communities to minimize environmental risks and vulnerabilities.”

In many parts of southern India, commons are known as “poramboke.” Poramboke is a Dravidian term for lands that are reserved for public purpose or communal use of villagers, as per the section 4, Kerala Land Conservancy Act, 1957 (Government of Kerala, 1957). In the official land revenue records, such common lands are classified as “wastelands” (Jodha, 2000). An elementary examination of revenue classification of “common land” in Kerala reveals that ecosystems such as thodu (irrigation channels), kulam (pond), river, bund, kayal (backwaters), sea, road, kavu (sacred natural site), or accreted land/unsurveyed land are considered “poramboke” (Foundation for Ecological Security, 2014, p. 16). Through this paper, we argue that these ecosystems have tended to be considered by the state and the markets as “terra nullius” or “empty space,” waiting to be intervened and turned “productive” (Sekhsaria, 2018).

Sen (2017) found that the logic of terra nullius or “empty space” was invoked to “enable occupation and justify settlements.” Sen (2017) saw it useful to understand state-led appropriation of lands by implicitly refusing to accept indigenous entitlements. Whitehead (2010) concluded that “idleness of land” was the criterion for state appropriation and expansion. Whitehead noted that the rights, customs, and privileges of dependent communities made way for commercial and revenue considerations. The “rationale” was that the traditional governance was either “unscientific” or even “evil.” Any land not under cultivation and therefore not generating revenue was “mapped” as “wasteland” and categorized as revenue wasteland (Shiva, 1986).

While commons theory does attempt to address the issues stated above, there are “gaps” in the “promise of common pool resource theory and the reality of commons projects,” as Saunders (2014) puts it. Such “failures” have provided scope for arguments such as water should be treated as an economic good to be priced and not as a common good (Rogers et al., 2002). To address this issue, we need both a micro-level theorization and an empirical understanding of the process of collective action. This study is an attempt to provide an understanding of the critical theory of change, applied to the field of environment in general and small freshwater bodies in particular.

2 | OBJECTIVE OF THE STUDY

In this article, our endeavor is to situate the empirical context of small freshwater bodies in the theoretical debates of commons and political ecology to understand the process of institutionalization. While this article is broadly about the political ecology of small freshwater bodies, it also looks at why and how political ecology questions matter in socio-environmental change. The contribution of this study to the existing literature is two-fold: theoretical and empirical. Theoretically, the paper outlines the “complex, multi-directional processes and mechanisms” (Goodwin, 2018) that underlie our understanding of governance of environmental resources, which were left undeveloped by Polanyi in his celebrated works such as *The Great Transformation* (1944/2001).¹ Goodwin (2018) asserted that the Polanyian conceptualization of the

¹How a micro-level countermovement shall shape up was left undeveloped by Polanyi. He assumed it would materialize with universal adult franchise (Goodwin, 2018).

countermovement explores “resistance, activism and contention in capitalist societies,” incorporating multiple actors and employing fictitious commodification as the main concern (p. 1272). Following Kentikelenis (2018) and Goodwin (2018), this study strives to fill the gap by capturing the “continuous and contested engagement between the state and the society” (p. 1273). Empirically, the contestation is explored in an understudied yet critical ecosystem of small freshwater bodies, specifically rural community ponds in India. The relationship between user communities and pond systems is situated in the conceptual framework of double movement, wherein the interactions between various actors, ecosystems, institutions, and socio-ecological outcomes at various levels are mediated by the state and market forces.

This introduction proceeds with a section on methods, followed by the theoretical premise. We then present an empirical contention through a policy analysis of water, land, and local democracy in Kerala and an illustration using a case study. Finally, we provide a discussion and concluding remarks.

3 | METHODS

To conduct this study, we first reviewed relevant literature on commons and political ecology. Later, the first author conducted three separate studies to understand how the policies and practices play out in the realm of small freshwater bodies in Kerala (Sankar, 2022a, 2022b). While the policy review was based on a content analysis of land, water, and local democracy reforms in Kerala and India, the other two studies mapped the statistical and qualitative relationships between rural community ponds and the dependent communities. Thirty ponds were selected using a multi-level sampling method for the statistical survey. The households for the survey were selected randomly within the panchayat ward of the pond. Field observation schedules were deployed to gather situational and behavioral features. Qualitative data were collected through participant observation and by employing a stakeholder in-depth interview method. Community leaders-people's representatives belonging to the ruling and opposition parties, representatives from Dalits, women, religious minorities, daily wage laborers, big farmers, and an influential civil society organization in the area were interviewed. Prior, informed, and written consent was obtained from each participant for the study.

4 | THEORETICAL PREMISE

We now sketch a theoretical premise for the political ecology of small freshwater bodies in India. We attempt this through a set of themes as follows.

4.1 | Institutions and institutional change

In this study, we are interested in understanding the role of institutions in shaping socio-environmental change. The institutional approach to economic analysis has its origins in Karl Polanyi's seminal work, *The Great Transformation* (1944) (Knudsen, 1995). Later on, the likes of Douglas North have taken this strand of enquiry to explain economic phenomena (Knudsen, 1995). North has given, arguably, the most epigrammatic of definitions to institutions. He defined them as the “rules of the game in a society, the humanly devised constraints shaping

human interaction” (North, 1990, p. 1). They could be as formal as constitutional provisions and associated laws, rules and regulations, or informal conventions and norms practiced in everyday life. To North, they were the defining characteristics separating rich and poor economies. The “Great Divergence” has occurred primarily due to the “opportunities and constraints” caused by the nature of institutions. However, North’s notion of institutions as incentive structures begs to be interrogated in terms of whose incentives, which is at the core of debates in political economy.

According to Mahoney and Thelen (2010), institutions are “distributional mechanisms that are power laden” (p. 8). In other words, they are essentially redistributive mechanisms. Following Thelen (2004) and others, institutions are arrangements for solving problems faced by actors in a given situation. As per a structural-functional perspective, institutions could be held as mechanisms to gain advantage through cooperation (p. 25). Building on the work of Thelen and others, and employing a historical-contextual approach, Greif (2006) pointed out that societies have certain “givens” such as geography, knowledge, and capital, apart from “gained” advantages in the form of laws, rules, and regulations. The latter is called institutions and, like the “givens,” impacts economic outcomes.

The Bloomington School of thought led by Ostrom has focused on the role of institutions in governance or management of natural resources. Ostrom chose a universal approach in order to generate a uniform framework of institutional design (Ostrom, 1990, 2005). A theory of institutions would mean that, given a set of exogenous variables, an institution could be predicted. The discussion on historical-contextual approaches versus universal, predictive approaches is reconciled in this study through the following position: While generic patterns of institutionalization could be found with a broad sweep, a deeper, granular, contextual approach is necessary to develop a theory of institutions. Therefore, we argue that institutional theory needs a generic and a particularistic approach.

Apart from being incentive mechanisms, institutions could also be instruments of coercion and power. Hayek (1944/1994), Olson (1971), and Katzenstein (1985) pointed towards this aspect of dominance. Hayek (1944/1994) feared that, as a state like institution takes direct control over action spheres, individual liberty could be undermined. His contention was that direct control of state over a finite sphere could lead to indirect control over an infinite sphere of action. Olson (1971) and Katzenstein (1985) echoed a similar argument when they underscored the feature of force/coercion influencing economic decision-making, such as in the case of production, consumption, and distribution. Olson (1971) was particularly skeptical when it came to the institutions intending to promote collective action and asserts that it would function only under external coercion or having some special incentive to do so, or if the size of the group is small.

The received wisdom of inevitable collective action failure was busted by the seminal works of Ostrom, who was categorical that self-organization is indeed possible in resource governance (Ostrom, 1990, 2005). She systematically demolished the argument that there is no alternative beyond statization and privatization by rigorously marshaling evidence for community institutions succeeding in equitably and sustainably governing natural resources for generations. Thereby she critiqued the “tragedy of commons” model of Hardin (1968). Ostrom could dismiss the “prisoner’s dilemma” model through experiments in social dilemma situations. Unlike the game theoretic model, actual action situation enabled communication and avenues for trust-building, and only if it is non-existent, it could lead to over-use and the eventual tragedy (Ostrom, 2005).

Our work focuses on an understanding of institutions from a political economy perspective with a focus on those authors whose work has been used to analyze the role of institutions in environmental governance and use. While this is in no way an exhaustive review, it brings us to

the point where we can say that the evidence—in terms of successful cases of community action at local and regional levels—marshaled tirelessly by Ostrom and others provides a counter for institutional skeptics bogged down by mounting cases of the “tragedy of commons” all around the world.

However, the establishment of the institution is not a sufficient condition to ensure equity. Agrawal (2005), using the concept of environmentality, addressed issues of power in environmental governance. Later work on environmental governance has also looked at legal pluralism that focuses on the coexistence of institutional arrangements, which drive legitimacy and authority from different sources (Benjamin, 2008), both formal and informal. These works pushed our understanding of the institutions beyond the mainstream political economy. Post-institutionalism has for a long time engaged in looking at discourse and knowledge to understand political institutions. Segal (1986) drew from a post-structuralist perspective that examined contested representations affected by unequal power hierarchies. These different perspectives have diverse epistemic and ontological roots. Guala (2016) tried to unify these understandings and presented institutions as a philosophical problem. However, in the context of natural resources, it ultimately boiled down to access and rules. As Gibbs and Bromley (1989) stated, commons that allow everyone access means no one owns it. This then leads to problems of equity. The question then is how do communities negotiate and effect changes in institutions, considering the twin goals of equity and sustainability?

4.2 | Structural inequities

Karl Polanyi had outlined in depth how markets based on self-interest have destroyed the lives and livelihoods of people all over the world (Polanyi, 1944/2001). Karl Marx too delineated the process of alienation and exploitation; how the rise in global trade and manufacturing led to accumulation of fungible capital, ultimately giving rise to two classes in conflict—the bourgeoisie and the proletariat (Tucker, 1972).

Polanyi (1944/2001) asserted that markets destroyed humans and nature. The “haute finance” or the international financial institutions have encouraged greater financialization of land and labor. The change from “land as nature” to “land as real estate” resulted in the degradation of land and marginalization of the vulnerable, dependent communities, especially lands that are historically been held as commons—forests, pastures, and lakes. Polanyi reminds us that economy is “embedded” in the social and therefore, not dichotomous. Principles of reciprocity and redistribution underlie every society, and a pure market society is a chimera and “artificial.” He noted that land is nature, labor is human activity, and money is only a token for purchasing power, and therefore, they are not commodities. He called them “fictitious commodities” (Polanyi, 1944/2001).

Changes in agriculture policies, such as enclosures on commons, aggravated the deprivation of the rural poor. The traditional risk mitigating mechanism of mixed farming came under immense stress as well (Polanyi, 1944/2001, p. 96). Ultimately, it led to “social dislocation,” which, to Polanyi, was the real problem, and not poverty *per se*. He stated, contrary to the neoclassical economists, that there is nothing “natural” about creation of markets (Krul, 2016), and marketization of labor and land is a politically violent project with consequences for equitable society and sustainable ecosystem. Hence, any public policy in the socio-environmental arena needs to be evaluated on the basis of bringing social justice and environmental sustainability.

4.3 | Power hierarchies within structures

In order to understand how policy and empirical narratives fare against the goals of equity and sustainability, we use the Polanyian analytic of “double movement” (Goodwin, 2018; Polanyi, 1944/2001). The double movement is essentially built and operates on the notion of commodification and decommodification.

Polanyi used the framework of “double movement” to capture the simultaneous and contending forces of ever-expanding liberal market economy with social protection, acting as a counter balance. He argued that “free market cannot be really ‘free’, as during clashes between freedom of buyer and the freedom of the capitalist, it is the latter that prevails” (Polanyi, 1944/2001, p. 155). Marx too stated the same when he argued that in the era of capital concentration fuelled by trade wars (often ended up as naval wars), “free trade” was never possible. Customs and tariffs were the order of the day. Consequently, this conception led to the rise of the big industry, the industrial capital, the centralized capital, and made science subservient to industry, apart from the inauguration of money relationships (Tucker, 1972, p. 149).

Polanyi focused on the effort of liberals exhorting the state to deploy its resources and employ its defenses to protect the self-regulating market from “distorting interventions,” and this often meant justification for civil wars and continuation of abominable practices like slavery in the US (Polanyi, 1944/2001, p. 156).

At the same time, Polanyi differed with Marx in the notion of class formation. He attacked the “crude class theory” of Marx stating that class interests need not always be economic and are often social. As he puts it succinctly: “it is not ‘want satisfaction’, but the need for ‘rank and standing’ that is important, and that the ‘fate of classes is more frequently determined by the needs of the society than the fate of society determined by the needs of classes’” (Polanyi, 1944/2001, p. 159). The distinction between the positions of Polanyi and Marx is central to our argument that the effect of commodification of commons has a complex relationship with class, caste, and gender in a context like India.

Consequently, Polanyi was emphatic in his assertion that the separation of socio-political from the economy has made society subservient to the market economy and the consequences of treating man as a mere cog in the economic wheel has resulted in acute social dislocation leading to “vice, perversion, crime and starvation.” He had warned:

Nature would be reduced to its elements, neighborhoods and landscapes defiled, rivers polluted, military safety jeopardized, the power to produce food and raw materials destroyed. Finally, the market administration of purchasing power would periodically liquidate business enterprise, for shortages and surfeits of money would prove as disastrous to business as floods and droughts in primitive society
(Polanyi, 1944/2001, p. 76).

And yet, “defiling of landscapes,” “river pollution,” and overall “destruction” of the planet, a continuing “project,” are neither straightforward nor linear matters. The adverse effects of global warming and climate change are incommensurately felt by communities that have imperceptible role in creating emissions in the first place.

To illustrate this point, Bryant and Bailey (1997) put forward the notion of “politicized environment” to deal with aspects of environmental change. They framed environmental change using the framework of political economy, which is how political ecology as a field emerges. Political ecology views how political, social, and economic factors impact nature/environment

at different scales like local, regional, and global through an understanding of environmental problems, concepts, and actors. It attempts to capture the struggle between actors for control over the environment. When mainstream ecologists talk of a “perennial crisis in the Third World,” political ecologists ask “whose crisis, and created by whom and how?” (Bryant & Bailey, 1997).

Political ecology, unlike environmental politics, rejects a techno-centric approach and takes an eco-centric one. It assumes that such problems are a creation of the political and economic structures and that it aggravates the problem of degradation and deprivation. As mentioned by Polanyi (1944/2001) and Marx (Tucker, 1972), Bryant and Bailey (1997) viewed the problem not as a mere market or policy failure, but as structural in general and that of capitalistic structures, in particular. The whole capitalistic production systems related to logging, fishing, mining, and farming have changed the “rules of the game,” benefitting a minority of capitalists at the expense of the majority subsistence communities. This politicization is also evident in the export of polluting industries from the First World to the Third World economies. Bryant and Bailey (1997) favor putting politics first, as the power structures are highly unequal, and poverty is persistent in large parts of the Third World. The colonial administrative structures based on extraction and exploitation are still, largely in place, driving the discourse of development.

As Robbins (2011) concurred, such a discourse has led to widespread degradation in the form of soil erosion, desertification, and marginalization of communities living in a subsistence economy. The level of resource depletion is so high that radical solutions, mostly using a Marxian framework, have been sought. They are also aware that the power/politics is not just about control over material, but over ideas as well (Bryant & Bailey, 1997).

Bryant and Bailey (1997) and Robbins (2011) underlined the argument that political and ecological questions are closely intertwined. This argument is evident from the following assumptions of political ecology: One, the effectiveness of an ecological project, be it mining, fishing, or logging, in terms of costs and benefits is unequally distributed; two, such distribution promotes or demotes the relative position of various actors—politically, economically, and socially; and three, conflict over resources is ubiquitous in the Third World (Bryant & Bailey, 1997).

Recent work (Mukherjee, 2020) in political ecology drew from environmental humanities to highlight the relationship between history, micropolitical process, and indigeneity in the Third World settings that determine political, social, and cultural aspects of environmental resources. Similarly, Vij and Narain (2016), in their study on peri-urban areas of Gurgaon, India, found that population pressure and rising demand for land had resulted in the encroachment of *johads* or village ponds. Exploring the nature-society relations in a historic context with a political ecological focus on power has enabled scholars to critically understand power relations structured on lines of gender (Hawkins et al., 2011; Massé et al., 2021), race (Egge & Ajibade, 2021; Norgaard, 2019), and class (Wolf, 1972).

From the preceding discussion, the role of state in natural resource governance comes under critical focus, apart from that of the markets. Scott (1998) opined that in order to control subjects, the state resorted to taxation and law enforcement and that the initial attempts failed due to information asymmetry when it came to local systems. Therefore, for any intervention, a need for “legibility” and “simplicity” was recognized. To this end, state introduced institutions like land tenure laws, legal metrology, maps, and registers (Scott, 1998). It is simply that “political expediency and administrative convenience trumped ecological considerations” (Scott, 1998, p. 235). As a way forward, Scott advocated decentralization of governance having “flexible regimes capable of adaptation.”

We conclude this discussion with the following arguments. Commons theory pioneered by Ostrom and others through design principles is necessary for researching institutional ecosystem

governance and in capturing the changes over time. At the same time, the commons framework based on the “design principles” is being challenged by counterevidence. Baggio et al. (2016), Leach et al. (1999), Saunders (2014), Cox et al. (2010), and even Nagendra and Ostrom (2014) conceded that there are unaccounted factors influencing the success and failure of the commons. Recent studies by Whaley and Weatherhead (2014) provided a politicized version of the Institutional Analysis and Development (IAD) framework to address this lacuna, whereas Kashwan (2016) and Mudliar and Koontz (2021) examine local level power asymmetries within the Ostromian framework. Through this study, we attempt to account for the unaccounted factors, which we argue, lie in the socio-political sphere.

The Ostromian paradigm, though useful in laying out the importance of institutions in breaking enclosures and securing commons, is still largely, situated in the formalist, neoclassical economic assumptions of scarcity and rational choice and utility maximization models. Contrastingly, the substantivist framework of Polanyi is based on the argument that the anthropological or non-economic arena of social institutions is imperative to analyze economic history and that market-centric assumptions need to be discarded (Krul, 2016). Polanyi denounced the “relevance and universality” of scarcity and, therefore, the rational choice theory. To him, scarcity is the result of markets. Pre-modern societies outside of markets did not look for individual utility maximization but rather at social integration and reproduction in the form of reciprocity and redistribution (Polanyi, 1944/2001, as quoted in Krul, 2016). And though Ostrom is positioned within the new institutional economics paradigm, she, through her field-based enquiries of commons and its institutional functioning, comes close to the substantivist economic anthropology studies spearheaded by Polanyi (Krul, 2016). Therefore, we brought together the Ostromian and the Polanyian questions to develop a theoretical basis for small freshwater ecosystems.

4.4 | Combining commons and political ecology

Commons research has evolved and shifted from, primarily, an institutional approach to community-based natural resource management to critically approaching commons from the perspective of commoning or commons-making practices, post-capitalist alternatives, and mobilization against enclosures (Villamayor-Tomas et al., 2022, p. 1). Frameworks in political ecology have been found particularly useful in this regard, as political ecologists have critically looked at the institutional theory of commons and for the “relative inattention to how historically-shaped patterns of power, conflict, state institutions and organizations and capital forces shape the access to and use of common resources” (Villamayor-Tomas et al., 2022, p. 2). The Ostromian tradition in resource economics mostly equates commons as CPRs, a type of good having high degrees of subtractability and rivalry, making it difficult to exclude potential beneficiaries (Euler, 2017). At the same time, recent studies have highlighted the social relations and practices that produce these commons through a process of commoning (Meretz, 2014; Vivero-Pol, 2017). Hence, following the adage of “putting politics first” (Bryant & Bailey, 1997), we have combined the idea of commons with that of frameworks in political ecology to analyze the institutions around small freshwater bodies in India. We now dive into the empirical realities around small freshwater bodies and their governance in India.

5 | EMPIRICAL CONTENTION

When applied empirically, the discussion on commons and commoning is incomplete without the social groups who make and maintain the commons—communities. In India, a new wave

of Dalit environmentalism has started to impact scholarship on commons significantly. They contend that the caste system, which denies a dignified existence for Dalit Bahujan communities, is at the core of the denial of access to commons like water. Foregrounding the relevance of Ambedkarite thought on access and utilization of critical resources like water, Dalit environmentalist scholars highlight that inaccessibility signified exclusion, indignity, and injustice (Kumar, 2016). It is argued that in the environmental history by Gadgil and Guha (1992) or in the anthropological accounts by Sivaramakrishnan and Agarwal (2001)—two seminal works on the history of the Indian environmental movement—the blame is on the British colonial rule for rural land alienation and ecological destruction (Kumar, 2016). These previous works tend to assume that the pre-colonial environmental record in India was “ecologically more prudent” (Kumar, 2016, p. 3). However, he noticed that a few studies like Sharma (2012) brought together the Dalit perspectives and environmental histories to initiate a new strand of environmentalism.

Kumar (2016) found that the imperial state's control over the commons, through statutes like the Indian Forest Act of 1878, the Madras Forest Act of 1882, and the Indian Easement Act of 1882, led to a loosening of the traditional control of dominant caste Hindus over common pool resources. It also provided room for the erstwhile untouchables to assert their rights over their resources. Ambedkar, the chief architect of the Indian Constitution, was categorical that ending the exploitation and systematic oppression within a democratic framework needs a public policy, pushing for the redistribution of resources based on the principle of equity (Kumar, 2016, p. 5). The Ambedkarite position was that the relationship between humans and nature was not a “romantic alienation of human beings from nature, but focused on alienation of humans by humans from nature” (Kumar, 2016, p. 5).

Apart from caste, the gendered nature of the relationship between commons and communities is highlighted by several feminist scholars. Bina Agarwal, through her works on the nuanced relationship between gender and forest governance, broke new ground in feminist environmentalism (Agarwal, 1992). More specifically, in the context of water commons in Rajasthan, O'Reilly (2006) reiterated that far from having a “natural” relationship with the environment, women's connections to nature are socially constructed and negotiated by development agencies (p. 961). Providing access to water through pipelines, the aid agencies sold the idea of water as an economic good and co-opted women as responsible consumers (O'Reilly, 2006). Feminist scholars asserted that the commodification of water is engineered not just by putting a price on (piped) water but by linking it to a modern notion of women. O'Reilly (2006) finds that by providing new and improved drinking water, traditional women could transform into modern women. Through such projects, market forces and many times, the state attempts to smuggle the notion that the transition from free water to commodified water is inevitable in the transition from traditional societies to modern ones. We briefly discuss the operation of such insidious narratives in the subsequent case analysis. In our field setting, we found that the Dalit Bahujans and women continue to be heavily dependent on commons, not because of some “special dependence and knowledge of nature,” but due to their material reality and everyday lived experience.

5.1 | Water paradox in Kerala

Our case study is based in Kerala, a coastal province in Southern India, which has been facing a paradoxical situation of inequity in water access even as it receives an average of 3000 mm annual rainfall and has plenty of water bodies in the form of rivers, lakes, backwaters, irrigation tanks, and ponds. Before the megafloods of 2018 and 2019, Kerala experienced unprecedented drought in 2016 and 2017.

Land use changes—through the systematic destruction of the Western Ghats in the uplands and the conversion of wetlands into commercial cropping lands in the plains, among others—are exacerbating the impact of drastic changes in the precipitation patterns in Kerala. These biophysical changes clash with the water and environmental governance in the province, as various stakeholders such as users, experts, and managers bring competing interests and worldviews into the policy-making process.

Kerala is also well-known for undertaking reforms in water, land, and local democracy. As Krishnan and George (2009) noted in their study on irrigation tanks in Kerala's Palakkad district, small freshwater bodies like ponds and larger structures like irrigation tanks were impacted by land reforms and reforms in local self-governments (panchayats). The rural public ponds in Kerala are a creation of a set of reforms, starting from the land reforms of the 1950s and 1960s and the reforms in decentralized democracy, beginning in the 1990s. Many private ponds became public ponds through the land reforms, as land ceiling restrictions forced the landed gentry to let go of these water bodies and place them under state control. Various water policies at the national and provincial levels have had implications on how communities perceive water. Similarly, devolution of powers to the local self-government is understood to have a substantial impact on local water commons. The political and historical context of Kerala, which has shaped the governance of rural ponds, makes it a relevant and important field site.

In this background, in order to understand the nature of the relationship between waters and user communities, we considered the role of rural community ponds in Kerala. Though urban ponds have been recently conceptualized as a “composite resource” (Zimmer et al., 2020), the village ponds are a largely understudied ecosystem. Small freshwater bodies such as ponds and tanks play a vital role in improving water access, especially for the poor (Cornea et al., 2016).

Despite their vital importance, ponds and lakes continue to be vulnerable to destruction and degradation. Zimmer et al. (2020) state that the destruction, degradation, and restoration of ponds are not merely biophysical processes but signify socio-political and institutional changes. Small freshwater bodies, having the characteristics of commons, and their governance have been under tremendous stress, often failing to cope with the pressures from the market forces and centralized state interventions (Bharucha, 2019; Nayak et al., 2014; Nayak & Berkes, 2011; Unnikrishnan et al., 2016).

We started off the study by undertaking a content analysis of relevant policy documents impinging on the governance of small freshwater bodies in Kerala. We used the conceptual lens of commodification/decommodification and found that while earlier country-level policies (National Water Policy [NWP], 1987, 2002) largely showed a tendency to treat water as a commodity, decommodification tendencies were perceptible in the water policy of Kerala (State Water Policy [SWP], 2008). The 1987 NWP, in the opening paragraph itself, is alive to the issues of “complex problems of equity and social justice with regard to water distribution” (Government of India, 1987; p. 2). However, the very next paragraph normalizes increasing demands for water due to “growth process and expansion of economic activities,” sidelining the equity principle. The policy envisions only a “progressive” involvement of farmers in managing irrigation systems, water distribution, and collection of water rates. The assumption is that farmers might be uneducated to understand the intricacies of complex irrigation systems right from the beginning. The irony is that, ultimately, the irrigation projects are for the benefit of the farmers, and yet, they are not consulted from planning to execution and maintenance of systems.

The water allocation priorities of NWP 2002 present a curious inclusion of “ecology” as a priority just below hydro-power and above agro-industries and other nonagricultural industries. This inclusion could be viewed as recognition that unhindered diversion of water to industrial

usages has devastated ecologies and has had social implications. It is further emphasized that preserving the environment and maintaining ecological balance should be a prime consideration in project planning and execution (Government of India, 2002; p. 3).

A significant shift in thinking about water projects is the prescription to involve “beneficiaries and other stakeholders” right from the planning stage. This way, the 2002 policy is a departure from the earlier one.

Even though the 2002 policy recognizes that irrigation takes away the major share of freshwater, it is justified as long as it is aimed at “optimal productivity per unit of water.” It is envisaged that water provisioning charges would cover the maintenance costs and a part of the capital costs. Plans to commoditize water appear to be in full swing through such policies, and even when mentioning the need for subsidies to the poorer sections of the population to be “well-targeted and transparent,” it is perpetuating the re-imagination of water as a scarce commodity and that the poor needs to pay (Government of India, 2002; p. 5). It is apparent that by prioritizing the notion of “efficiency” over and above the principles of equity and sustainability, the policy smuggles in the “need” for pricing and markets.

Compared with the 1987 and 2002 policies, which treat water as essentially private property needing technocratic, top-down management rooted in the principles of high modernism, the 2012 policy signals a paradigm shift by conceptualizing water as a commons. The policy is categorical that “the Centre, states and local self-governments must ensure access to a minimum quantity of potable water to all citizens available within easy reach of households” (Government of India, 2012; p. 4). Further, the document considers the importance of ensuring the ecological flow of water in rivers and streams. “Community-based water management should be institutionalised and strengthened,” and local water needs should be prioritized over and above long-distance transfer, says the 2012 policy. These are massive changes in the thinking about water—from being a scarce commodity to be governed in a centralized fashion to a critical ecosystem that needs to be locally governed in an equitable and sustainable manner.

The 2008 State Water Policy (hereafter SWP) of Kerala states that “water is vital for the survival of life.” Furthermore, the SWP explicitly considers “water as part of the ecosystem for the benefit of all and not as a commodity for the profit of a few” (Government of Kerala, 2008; p. 3). In terms of water use priorities, the policy keeps equity and sustainability over and above “productive management” and emphasizes public health over growth requirements.

The policy identifies that local self-governments have a critical role in perspective planning and sustainable water resource management. Crucially, it finds that a “total replacement of traditional systems by piped water supply need not be a goal as long as it is possible to ensure the safety of those water sources” (Government of Kerala, 2008; p. 7). This particular policy stance is of immense significance amidst the clamor for increasing piped connections. Consequently, small freshwater bodies like panchayat ponds and tanks come into sharp focus.

However, when it came to the much-acclaimed land reforms in Kerala, the review found that the reforms systematically excluded Dalit Bahujans from accessing land. This exclusion raises questions on the popular and sometimes academic narrative that the land and caste questions are settled in Kerala. Pramod (2020) quoted a land ownership study done by the Kerala Sasthra Sahithya Parishad (People's Science Movement), where it was found that the dominant Hindu General castes have a per capita landholding of 105 cents, whereas that of the Dalit community is 2.7 cents! The middle castes Hindus (known as other backward class or OBC) have an average landholding of 63 cents, Christians 126 and Muslims 77.

Devika (2010) asserted that historically marginalized communities like Dalits were denied their stake in land ownership, even though they were the actual tillers. The peasant subtenants,

the actual cultivators, were left with a tiny homestead land at the most and were relegated to “colonies.” Their right to land has been subverted to a mere right to housing today, as various governments try to pacify them by offering high-rise apartments, disregarding their rightful claim to agricultural land.

On a positive note, the land reforms did put an end to a feudal, agrestic slave labor system, which operated on the extreme commodification of labor. Exemptions were given to plantations and private forests, once again highlighting how commodification operates. At the same time, enforcement of land ceilings broke the enclosures around many privately-held ponds, bringing them under community control through the Panchayati-raj system.

The local self-governments were strengthened through the devolution of powers. They were endowed with funds, functions, and functionaries to undertake development and welfare measures. Even as it resulted in accessible policy-making, recent evidence shows that the communities need to guard against ceding their hard-earned political space back to a centralized state (Sankar, 2022a).

5.2 | Decommodification through co-production—a case study

To verify the above policy implications on the ground, we conducted field studies in the district of Palakkad in Central Kerala (Sankar, 2022b). It is the biggest district in the state and has the highest number of rural community ponds (Government of Kerala, 2019). Thirty community ponds were selected randomly using a multi-stage sampling method. One hundred twenty-one households were surveyed living in the proximity of these ponds.

Composite scores were constructed to capture the ecological health of 30 ponds (presence of aquatic weeds, side-wall erosion, open defecation, chemical impurities, etc.) and the aspects of collective action (rules on water access, monitoring, sanctioning, and conflict resolution) around them. The mean score for 30 ponds was 65.19 with only three ponds scoring less than 30. The institutional score representing collective action aspects had questions covering both Ostromian and Polanyian frameworks of IAD and countermovement, respectively. Once again, the average institutional score was 93 with 13 panchayats scoring 90 or above. To identify the level of relative scarcity in the area, we calculated a diversification score as well. It indicated the extent to which households are diversified in terms of household access to various sources of water, other than panchayat pond. A low mean score of 37.52 showed that there exists relative scarcity in the surveyed area. A regression analysis showed that domestic water use was determined by the institutional arrangement, ecological integrity, and heterogeneity of water sources available. Even as the number of water sources available to the community increased, the dependency on the rural ponds continued to rise. Most importantly, there was universal access for domestic usages of bathing, washing, and cleaning. The statistical results showed that there is a distinct class, caste, and gender dimension to the utilization pattern. Daily wage earners and women were more likely to use the pond compared with other occupational and social groups. Relative scarcity was also a significant factor for the pond usage.

Nonetheless, the overall picture that emerged from the quantitative study was problematized in a follow-up qualitative study conducted in two panchayats. Using in-depth interviews with community representatives and an analysis of local plan documents, we explored the nature of the relationship between rural ponds and dependent communities in terms of how various stakeholders perceive water in a commons-commodity framework.

Eighteen open-ended interviews (six female and 12 male participants) were conducted in the local language of Malayalam with purposively selected users and direct stakeholders

such as people's representatives belonging to the ruling and opposition parties, representatives from Dalits, women, religious minorities, daily wage laborers, big farmers, and an influential civil society organization in the area to understand the various thoughts, priorities, perceptions, and meanings of these participants. The interview data, collected on-site, such as homes and offices, were triangulated using field notes, and content analysis of local plan and budget documents.

The study found that the narrative of the commodification of commons was evident in the extreme inequality in land and water access in Kerala. To overcome this structural issue, the Dalit Bahujan communities, and women led a “countermovement” to decommodify rural pond waters. They have used panchayat funds and programs like Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS) to make and maintain these assets. They had resisted, and many times reversed, unsustainable and unjust interventions such as commercial fish rearing, waste dumping, and diverting pond waters for irrigating commercial and water-guzzling crops like banana. At the panchayats, uses of pond waters were prioritized, rules enforced, issues deliberated, funds for maintenance allocated, and actions monitored, effectively creating a “new commons” (Hess, 2008). Even when the fishing lease is operational, it is seldom on a commercial scale, hampering everyday domestic usage. Nonetheless, when leasing of ponds for pisciculture clashed with domestic utilization of bathing and washing, the users could mount a resistance in the panchayat meetings leading to the cancellation of such leases in several instances (“Puthukulam” in Vadakkencherry Gram Panchayat [GP], for example). In the said case, the lease was owned by the then panchayat president himself. The respondents mentioned that whenever fishing leasers tried to reduce water levels during harvesting (“Ullanoor kulam” in Nagalasseri GP), local users had successfully resisted such attempts.

Similarly, directives are in place in many GPs, prohibiting the usage of the pond for irrigation, especially during lean seasons like summer (“Perumkulam” in Chalavara GP, for instance). In the case of “Angadikulam,” in Ongallur GP, attempts to extract water for road construction were resisted by the women users. Waste dumping in and around public ponds was countered in panchayats like Eruthempathy, Vadakkencherry, and Puthupariaram. In all these instances, the local panchayat meetings were utilized to register the protests and undertake negotiations. It was essentially a political mobilization at the grassroots, an institutionalized “countermovement” that has led to sustainable and just outcomes. As Boelens (2014) mentions, “water is the source of collaboration and conflict, a basic means of mobilising people and a driving force behind local common property institutions.”

Most of the rural ponds were privately held and primarily used for irrigation prior to the land reforms of the 1960s and 1970s. Post-reforms, these ponds were commonly owned, and the dispossessed communities were particularly dependent on them. Asked about the sources of water for their various needs, an elderly Dalit woman remarked:

For drinking, now we get water from the pipeline. For bathing, washing, and cleaning we go to the public pond

[Interview number 18].

The participants of the study were unequivocal when it came to the role of local self-governments in the restoration and upkeep of the rural ponds. For instance, an elderly Dalit woman had this to say when asked if the panchayat has any role to play in rural ponds in her area:

The panchayat constructed the flight of steps. They arrange for the removal of sludge and weed matter through the MGNREGS. Before 2-3 years, I used to be a part of the MGNREGS labour. I am not feeling well of late, so I stopped going for it

[Interview number 18].

The Dalit Bahun women, as major users of rural ponds, and as skilled laborers ensuring their maintenance and ecological health, had a huge impact on the governance of small freshwater bodies in Kerala. Women from the margins were at the forefront of creating and maintaining vital ecological assets through programs like MGNREGS. A field coordinator of the program had this to say when asked about her role in the upkeep of rural ponds:

I am a community steward. We are also considering digging new ponds in the area for pisciculture, using MGNREGS funds. This way, we get adequate employment

[Interview number 11].

The employment guarantee scheme has, thus, economic, ecological, and socio-political ramifications.

Apart from facilitating the process of maintenance and ensuring the ecological integrity of the pond, the panchayat has a clear perspective on the governance of rural ponds. This intent is evident from the following statements made by a panchayat vice-president:

We leverage the funds from MGNREGS to protect the ponds by cleaning up the sludge and weed, strengthening the embankments and making it accessible to people, especially during the summers, and this is done extensively. For the last ten years, we have been doing this with all seriousness and have never allowed any public well or pond to be unutilised or fall into disuse. We never allow anybody to reclaim the pond in any manner

[Interview number 2].

The existence of rules and regulations making the local self-governments responsible for the upkeep of rural ponds and a complete ban on reclamation of wetlands was confirmed by a senior functionary of an influential think-tank instrumental in facilitating panchayat-level resource mapping and planning in Kerala.

As per the Panchayati Raj Act, no pond could be reclaimed. The Municipal Act says the same. We cannot say that even when some reclamation happened, it is of significance. In a few places, ponds have been reclaimed into real estate for residential and commercial purposes. There are quite a few abandoned ponds as well. Public ponds are being renovated regularly

[Interview number 4].

The people's representatives were alive to the dangers of pricing water and treating it as a commodity. A panchayat member was categorical that this tendency should be resisted and reversed. He said:

... buying drinking water for a price is not something we can agree on. Such water markets and water industry is booming all around us. It is a low investment-high

profit venture. One litre of mineral water costing hardly two rupees to produce is being sold for Rs. 20! This is becoming a highly profitable business. The water that we get practically free from nature cannot be bottled and sold for a premium. This is a wrong thing to do. We have enough water here in Kerala with a good number of rivers and a high level of rainfall. At least, the people of Kerala should be protected from falling into this trap of marketisation by maintaining the traditional sources of water

[Interview number 2].

The local panchayats in Kerala had played a pivotal role in reinforcing the claims of the marginalized, often landless communities, over the rural ponds. A toddy-tapper in his 60s talked about this shift in usage as follows:

There was rice cultivation before. Even with irrigation usage, water was available in the pond for domestic usage. Now with reduced rains, there is not enough water. Also, after the panchayat took over, irrigation usage stopped

[Interview number 9].

Though there are exceptional cases, overall, these rural ponds cannot be used for direct irrigation, and attempts to subvert the regulations had been countered by the dispossessed communities through the panchayats. Importantly, the panchayats were resolute about protecting the rural ponds, and the outcomes of the policy resolve were visible in the equitable access and sustainable utilization of these ponds.

6 | DISCUSSION

Our objective was to situate the empirical context of small freshwater bodies in the theoretical debates of commons and political ecology to understand process of institutionalization. We found that the narrative of the commodification of commons was evident in the extreme inequality in land and water access in Kerala. To overcome this structural issue, the Dalit Bahujan communities, and women led a “countermovement” to decommodify rural pond waters.

Our study attempted to lay out the “politicized environment” (Bryant & Bailey, 1997) around small freshwater bodies in Kerala, India employing a broad theme of commodification of commons. Scholars, critiquing the role of commodification in socio-environmental change, have pointed out that “production of commodities by means of commodities” is the ultimate purpose of capitalism (Sraffa, quoted in Leys, 2001). It means that the factors of production—land, labor, and capital—need to be commodified to create commodities (Leys, 2001). Also, capitalist production and distribution systems have created an unprecedented socio-environmental crisis that we are in today. The idea of commons holds the key to solving several such inter-related global crises related to water, climate, biodiversity loss, deforestation, and pollution.

However, the relationship between capitalism and commons is “ambivalent” and “dialectical” (Fournier, 2013). Elinor Ostrom and others have tirelessly marshaled evidences to prove that common property regimes can be considered as a third alternative to statization and marketization (Peter, 2020). Commons and commonization could also address rising inequality and marginalization of communities. An explicitly political approach to the largely “rational choice” theory of commons (Ostrom, 1990, 2005), conceptualizing commonization as a “non-capitalist practice”,

is essential to make it critical and contextual (Agrawal, 2014; Fournier, 2013; Singleton, 2017). A political ecology approach to understanding commons and its function in a capitalist world suggests that while “commons is essential to capitalist reproduction, it also sets up a stage for developing anti-capitalist alternatives” (Fournier, 2013). In order to capture this dialectical dynamics of commons and commonization, we have employed the concept of “double movement” (Polanyi, 1944/2001).

The central theme of the study—the politics of empty space—was evident in the extreme inequality in land access in Kerala. We find that the dependency over rural ponds is, to a great extent, forced by the politics of dispossession, a consequence of the land reforms in Kerala, which systematically excluded the Dalits, Adivasis, fishers, and plantation workers from gaining access to land. As various Dalit scholars have noted, land reforms in Kerala resulted in perpetuating the structures of caste oppression and pushed Dalits and Adivasis to “colonies”—the term often used by non-Dalits and government agencies to refer to their settlements.

Bardhan (2002) stated that a focus on “checks and balances,” limiting the power of the central government, is a conventional position in the discussion on decentralization. However, he argued that in developing countries, grappling with issues of elite capture and historical oppression of the poor, the marginalized might be “looking up” to the “central state” for protection of their rights (Bardhan, 2002, p. 188). Applying Bardhan’s theory to the case of rural water governance in Kerala, we find that the vulnerable communities could “embrace the state” through the panchayat while gaining relative autonomy from the state and union governments.

By no means is this process of statization, which we refer to in the sense of state control or ownership, smooth or stable in Kerala. It has always been a highly contested process with various political actors having differing stakes and interests calling for attention. The central issue is that the political process is complicated by the economic operation of fictitious commodification. As Goodwin (2018) insisted, the Polanyian conception of countermovement is helpful as an alternative conceptual framework to explore “resistance, activism and contention in capitalist societies,” incorporating multiple actors and employing fictitious commodification as the main concern (p. 1272).

The subaltern politics succeeded in ensuring that, in general, the domestic needs of the dispossessed communities took precedence over the commercial logic of irrigation and/or pisciculture. However, as Goodwin (2018) maintained, decommodification is often partial and intrinsically contradictory, if, for example, the products of community lands and waters were to be exchanged in food or agriculture markets. Hence, he was unambiguous about decommodification not being the same as “re-embedding.” As evident in the attempts by the panchayats to promote commercial-scale fish farming in rural ponds in Kerala, framing it in the narratives of food insecurity, or thrusting the top-down, metered pipe water projects on the communities living on the margins and normalizing it in the narratives of water scarcity, or farmers resorting to expensive and unsustainable bore well irrigation along with occasional diversion of water from public ponds to irrigate commercial, water-guzzling crops, as they are locked into neoliberal, industrial agriculture, were all instances of disembeddedness, market integration, and therefore water being only partially decommodified.

Through this analysis, we have strived to delineate the theoretical exposition of the “double movement” as follows: First, the double movement is a dialectic process, with commodification and decommodification happening simultaneously, rather than sequentially. Second, securing rural ponds through panchayat recognition of the rights of marginalized communities prevents capital accumulation, while relentless attempts by markets to capture “cheap” land and labor persist elsewhere. Third, double movement is a plurality of movements within multiple

economic classes and caste groups. In this regard, Polanyi identified three broad patterns of development at work at the same time: redistribution, reciprocity, and market exchange (Goodwin, 2018, p. 1275). He contended that based on the “degree to which they can provide necessities of life, or the means by which communities access land, water, food, shelter and income,” one particular pattern may dominate. In a similar vein, we argue that based on the extent to which communities can embrace the state—through a political and institutional movement and mechanism—shall determine which of the processes—movement/commodification or countermovement/decommodification—dominate lives and livelihoods.

7 | CONCLUSION

We sum up the paper by stating that the relentless pursuit of the centralized state for the commodification of commons can only be countered by the bottom-up countermovement by the dependent communities. The operation of the notion of empty space was evident in the case of rural community ponds in Kerala, India. However, amidst pressures from experts to consider panchayat ponds as economic/club goods and use it for exclusive commercial ventures such as pisciculture, the dependent communities such as Dalit Bahujans and women in Palakkad, Central Kerala, have pushed back such high modernist narratives and co-produced these ponds.

The empirical material demonstrates that commodification and decommodification processes are intertwined with various practices and worldviews over water, making it at once a commodity and a commons in rural Kerala. Thus, we argue that despite a “politics of empty space” operating in the policy narratives and practices at the grassroots, a partial decommodification of rural waters in Kerala was evident. While policies and practices relevant to water governance endure the narratives of commodification, the communities, especially the oppressed and the marginalized, have managed to counter these tendencies through a co-production of ecological assets like rural ponds. Such co-production of assets with the communities leading the political and institutional countermovement towards re-embedding the economy in the society could be a starting point to address the water and the larger environmental crisis that we are in today.

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CONFLICT OF INTEREST

We declare that there is no conflict of interest in the conduct of this study.

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REFERENCES

- Agarwal, B. (1992). The gender and environment debate: Lessons from India. *Feminist Studies*, 18(1), 119–158. <https://doi.org/10.2307/3178217>
- Agrawal, A. (2005). *Environmentality: Technologies of government and the making of subjects*. Duke University Press.
- Agrawal, A. (2014). Studying the commons, governing common-pool resource outcomes: Some concluding thoughts. *Environmental Science & Policy*, 36, 86–91. <https://doi.org/10.1016/j.envsci.2013.08.012>

- Baggio, J., Barnett, A., Perez-Ibarra, I., Brady, U., Ratajczyk, E., Rollins, N., Rubiños, C., Shin, H. C., Yu, D. J., Aggarwal, R., Anderies, J. M., & Janssen, M. (2016). Explaining success and failure in the commons: The configural nature of Ostrom's institutional design principles. *International Journal of the Commons*, 10(2), 417. <https://doi.org/10.18352/ijc.634>
- Bardhan, P. (2002). Decentralization of governance and development. *The Journal of Economic Perspectives: A Journal of the American Economic Association*, 16(4), 185–205. <https://doi.org/10.1257/089533002320951037>
- Benjamin, C. E. (2008). Legal pluralism and decentralization: Natural resource management in Mali. *World Development*, 36(11), 2255–2276. <https://doi.org/10.1016/j.worlddev.2008.03.005>
- Bharucha, Z. P. (2019). This is what nature has become: Tracing climate and water narratives in India's rain-fed drylands. *Geoforum; Journal of Physical, Human, and Regional Geosciences*, 101, 285–293. <https://doi.org/10.1016/j.geoforum.2018.09.032>
- Birkenholtz, T. (2016). Dispossessioning irrigators: Water grabbing, supply-side growth and farmer resistance in India. *Geoforum*, 69, 94–105. <https://doi.org/10.1016/j.geoforum.2015.12.014>
- Boelens, R. (2014). Cultural politics and the hydrosocial cycle: Water, power and identity in the Andean highlands. *Geoforum*, 57, 234–247. <https://doi.org/10.1016/j.geoforum.2013.02.008>
- Bryant, R. L., & Bailey, S. (1997). *Third world political ecology*. Psychology Press.
- Cornea, N., Zimmer, A., & Véron, R. (2016). Ponds, power and institutions: The everyday governance of accessing urban water bodies in a small Bengali city. *International Journal of Urban and Regional Research*, 40(2), 395–409. <https://doi.org/10.1111/1468-2427.12377>
- Cox, M., Arnold, G., & Tomás, S. V. (2010). A review of design principles for community-based natural resource management. *Ecology and Society*, 15(4), art38. <https://doi.org/10.5751/ES-03704-150438>
- Dell'Angelo, J., D'odorico, P., Rulli, M. C., & Marchand, P. (2017). The tragedy of the grabbed commons: Coercion and dispossession in the global land rush. *World Development*, 92, 1–12. <https://doi.org/10.1016/j.worlddev.2016.11.005>
- Devika, J. (2010). Egalitarian developmentalism, communist mobilization, and the question of caste in Kerala State, India. *The Journal of Asian Studies*, 69(3), 799–820. <https://doi.org/10.1017/S0021911810001506>
- EGGE, M., & AJIBADE, I. (2021). A community of fear: Emotion and the hydro-social cycle in East Porterville, California. *Journal of Political Ecology*, 28(1), 266–285. <https://doi.org/10.2458/jpe.2366>
- Euler, J. (2017). Conceptualizing the commons: Moving beyond the goods-based definition by introducing the social practices of commoning as vital determinant. *Ecological Economics*, 143, 10–16. <https://doi.org/10.1016/j.ecolecon.2017.06.020>
- Foundation for Ecological Security. (2014). “The case for the commons”. 5. Anand, Gujarat, India. Retrieved September 29, 2018, from <http://fes.org.in/images/case-for-commons-issue-5.pdf>
- Fournier, V. (2013). Commoning: On the social organisation of the commons. *Management*, 16(4), 433–453.
- Gadgil, M., & Guha, R. (1992). *This fissured land: An ecological history of India*. Oxford.
- Gibbs, C. J., & Bromley, D. W. (1989). Institutional arrangements for management of rural resources: Common property regimes. In F. Berkes (Ed.), *Common property resource: Ecology and community-based sustainable development* (pp. 22–32). Belhaven Press.
- Goodwin, G. (2018). Rethinking the double movement: Expanding the frontiers of Polanyian analysis in the global south. *Development and Change*, 49(5), 1268–1290. <https://doi.org/10.1111/dech.12419>
- Government of India Ministry of Water Resources. (1987) National Water Policy. Government of India Ministry of Water Resources. <https://jalshakti-dowr.gov.in/sites/default/files/NationalWaterPolicy1987English.pdf>
- Government of India Ministry of Water Resources. (2002). New Delhi: National Water Policy. http://jalshakti-dowr.gov.in/sites/default/files/nwp20025617515534_1.pdf
- Government of India Ministry of Water Resources. (2012). *National Water Policy*. Government of India Ministry of Water Resources. http://jalshakti-dowr.gov.in/sites/default/files/NWP2012Eng6495132651_1.pdf
- Government of Kerala. (1957). “The Kerala Land Conservancy Act, 1957”. Trivandrum, Kerala, India. Retrieved September 29, 2018, from Kerala State LandBank: http://www.kslb.kerala.gov.in/act_rules/TheKeralaLand-ConservancyAct1957.pdf
- Government of Kerala. (2019). “General information—Kerala State Land Use Board”. Thiruvananthapuram, Kerala, India. Retrieved September 27, 2019, from http://kslub.kerala.gov.in/images/pdf/natural_resources/12Palakkad.compressed.pdf

- Government of Kerala Water Resources Department. (2008). Water policy 2008. Government of Kerala. <https://kerala.gov.in/documents/10180/46696/Waterpolicy>
- Greif, A. (2006). *Institutions and the path to the modern economy: Lessons from medieval trade*. Cambridge University Press.
- Guala, F. (2016). Understanding institutions. In *Understanding institutions*. Princeton University Press.
- Hardin, G. (1968). The tragedy of the commons: The population problem has no technical solution; it requires a fundamental extension in morality. *Science*, 162(3859), 1243–1248. <https://doi.org/10.1126/science.162.3859.1243>
- Hawkins, R., Ojeda, D., Asher, K., Baptiste, B., Harris, L., Mollett, S., Nightingale, A., Rocheleau, D., Seager, J., & Sultana, F. (2011). A discussion. *Environment and Planning D: Society and Space*, 29(2), 237–253. <https://doi.org/10.1068/d16810>
- Hayek, F. A. (1944/1994). *The road to serfdom*. University of Chicago Press.
- Hess, C. (2008). Mapping the new commons. Available at SSRN 1356835.
- Jodha, N. S. (1986). Common property resources and rural poor in dry regions of India. *Economic and Political Weekly*, 21(27), 1169–1181.
- Jodha, N. S. (2000). Waste lands management in India: Myths, motives and mechanisms. *Economic and Political Weekly*, 35(6), 466–473.
- Jodha, N. S., Singh, N. P., & Bantilan, C. S. (2012). The commons, communities and climate change. *Economic and Political Weekly*, 47(13), 49–56.
- Kashwan, P. (2016). Integrating power in institutional analysis: A micro-foundation perspective. *Journal of Theoretical Politics*, 28(1), 5–26. <https://doi.org/10.1177/0951629815586877>
- Katzenstein, P. J. (1985). *Small states in world markets*. Cornell University Press.
- Kentikelenis, A. E. (2018). The social aftermath of economic disaster: Karl Polanyi, countermovements in action, and the Greek crisis. *Socio-Economic Review*, 16(1), 39–59. <https://doi.org/10.1093/ser/mwx031>
- Knudsen, A. J. (1995). Living in the commons: Local institutions for natural resource management.
- Krishnan, J., & George, A. (2009). Ecology and equity in rights to land and water: A study in south-eastern Palakkad in Kerala. *Water Alternatives*, 2, 1–15.
- Krul, M. (2016). Institutions and the challenge of Karl Polanyi: Economic anthropology after the neoinstitutionalist turn.
- Kumar, V. M. R. (2016). History of Indian environmental movement: A study of Dr B.R. Ambedkar from the perspective of access to water. *Contemporary Voice of Dalit*, 8(2), 239–245. <https://doi.org/10.1177/2455328X16662371>
- Leach, M., Mearns, R., & Scoones, I. (1999). Environmental entitlements: Dynamics and institutions in community-based natural resource management. *World Development*, 27(2), 225–247. [https://doi.org/10.1016/S0305-750X\(98\)00141-7](https://doi.org/10.1016/S0305-750X(98)00141-7)
- Leys, C. (2001). *Market-driven politics: Neoliberal democracy and the public interest*. Verso.
- Mahoney, J., & Thelen, K. (2010). A theory of gradual institutional change. *Explaining Institutional Change: Ambiguity, Agency, and Power*, 1, 1–37.
- Mansbridge, J. (2014). The role of the state in governing the commons. *Environmental Science & Policy*, 36, 8–10. <https://doi.org/10.1016/j.envsci.2013.07.006>
- Massé, F., Givá, N., & Lunstrum, E. (2021). A feminist political ecology of wildlife crime: The gendered dimensions of a poaching economy and its impacts in Southern Africa. *Geoforum*, 126, 205–214. <https://doi.org/10.1016/j.geoforum.2021.07.031>
- Mehta, L. (2017). Taking the scare out of scarcity: The case of water 1. In *Global resource scarcity* (pp. 21–38). Routledge.
- Mehta, L., Huff, A., & Allouche, J. (2019). The new politics and geographies of scarcity. *Geoforum; Journal of Physical, Human, and Regional Geosciences*, 101, 222–230. <https://doi.org/10.1016/j.geoforum.2018.10.027>
- Meinzen-Dick, R. (2007). Beyond panaceas in water institutions. *Proceedings of the National Academy of Sciences of the United States of America*, 104(39), 15200–15205. <https://doi.org/10.1073/pnas.0702296104>
- Meretz, S. (2014). Socialist licenses? A rejoinder to Michel Bauwens and Vasilis Kostakis. *tripleC: Communication, Capitalism & Critique. Open Access Journal for a Global Sustainable Information Society*, 12(1), 362–365. <https://doi.org/10.31269/triplec.v12i1.564>
- Mollinga, P. P. (2008). Water, politics and development: Framing a political sociology of water resources management. *Water Alternatives*, 1(1), 7.

- Mudliar, P., & Koontz, T. M. (2021). Locating power in Ostrom's design principles: Watershed management in India and the United States. *Society & Natural Resources*, 34(5), 639–658. <https://doi.org/10.1080/08941920.2020.1864535>
- Mukherjee, J. (2020). *Blue infrastructures*. Springer Singapore.
- Nagabhatla, N., & Sellamuttu, S. S. (2008). Political ecology of wetland management: The post aquaculture demolition case of Lake Kolleru in India. *Revista Geográfica Acadêmica*, 2(1), 10–19.
- Nagendra, H., & Ostrom, E. (2014). Applying the social-ecological system framework to the diagnosis of urban lake commons in Bangalore, India. *Ecology and Society: A Journal of Integrative Science for Resilience and Sustainability*, 19(2), art67. <https://doi.org/10.5751/ES-06582-190267>
- Nayak, P., & Berkes, F. (2011). Commonisation and decommonisation: Understanding the processes of change in the Chilika Lagoon, India. *Conservation and Society*, 9(2), 132. <https://doi.org/10.4103/0972-4923.83723>
- Nayak, P. K., Oliveira, L. E., & Berkes, F. (2014). Resource degradation, marginalization, and poverty in small-scale fisheries: Threats to social-ecological resilience in India and Brazil. *Ecology and Society: A Journal of Integrative Science for Resilience and Sustainability*, 19(2), art73. <https://doi.org/10.5751/ES-06656-190273>
- Norgaard, K. M. (2019). *Salmon and acorns feed our people: Colonialism, nature, and social action*. Rutgers University Press.
- North, D. C. (1990). *Political economy of institutions and decisions: Institutions, institutional change and economic performance*. Cambridge University Press.
- Olson, M. (1971). *Logic of collective action: Public goods*. Harvard University Press.
- O'Reilly, K. (2006). "Traditional" women, "modern" water: Linking gender and commodification in Rajasthan, India. *Geoforum*, 37(6), 958–972.
- O'Reilly, K., & Dhanju, R. (2012). Hybrid drinking water governance: Community participation and ongoing neoliberal reforms in rural Rajasthan, India. *Geoforum*, 43(3), 623–633. <https://doi.org/10.1016/j.geoforum.2011.12.001>
- Ostrom, E. (1990). *Governing the commons*. Cambridge University Press.
- Ostrom, E. (2005). *Understanding institutional diversity*. Princeton University Press.
- Peter, L. (2020). *Democracy, markets and the commons: Towards a reconciliation of freedom and ecology*. transcript Verlag.
- Polanyi, K. (1944/2001). *The great transformation: The political and economic origins of our time*. Beacon Press.
- Pramod, M. (2020). As a Dalit woman. *CASTE: A Global Journal on Social Exclusion*, 1(1), 111–124. <https://doi.org/10.26812/caste.v1i1.69>
- Punjabi, B., & Johnson, C. A. (2019). The politics of rural–urban water conflict in India: Untapping the power of institutional reform. *World Development*, 120, 182–192. <https://doi.org/10.1016/j.worlddev.2018.03.021>
- Ramachandraiah, C. (2001). Drinking water as a fundamental right. *Economic and Political Weekly*, 36(8), 619–621.
- Robbins, P. (2000). The rotten institution: Corruption in natural resource management. *Political Geography*, 19(4), 423–443. [https://doi.org/10.1016/S0962-6298\(99\)00087-6](https://doi.org/10.1016/S0962-6298(99)00087-6)
- Robbins, P. (2011). *Political ecology: A critical introduction* (Vol. 20). John Wiley & Sons.
- Rogers, P., De Silva, R., & Bhatia, R. (2002). Water is an economic good: How to use prices to promote equity, efficiency, and sustainability. *Water Policy*, 4(1), 1–17. [https://doi.org/10.1016/S1366-7017\(02\)00004-1](https://doi.org/10.1016/S1366-7017(02)00004-1)
- Sankar, V. (2022a). Commons, communities and commodification: A review of reforms in land, water and local democracy in Kerala, India. *Environmental Sociology*. Advance online publication. <https://doi.org/10.1080/23251042.2022.2135062>
- Sankar, V. (2022b). The political ecology of rural community ponds in Kerala, India: A quantitative study. *Ecology, Economy and Society—The INSEE Journal*, 5(2), 67–102. <https://doi.org/10.37773/ees.v5i2.545>
- Saunders, F. (2014). The promise of common pool resource theory and the reality of commons projects. *International Journal of the Commons*, 8(2), 636. <https://doi.org/10.18352/ijc.477>
- Scott, J. C. (1998). *Seeing like a state*. Yale University Press.
- Segal, M. (1986). Post-institutionalism in labor economics: The forties and fifties revisited. *ILR Review*, 39(3), 388–403. <https://doi.org/10.1177/001979398603900306>
- Sekhsaria, P. (2018). The Andaman and Nicobar Islands are not an 'empty space'. *Ecology, Economy and Society—The INSEE Journal*, 1(1), 91–95. <https://doi.org/10.37773/ees.v1i1.22>
- Sen, U. (2017). Developing Terra nullius: Colonialism, nationalism, and indigeneity in the Andaman Islands. *Comparative Studies in Society and History*, 59(4), 944–973. <https://doi.org/10.1017/S0010417517000330>

- Shah, S. H., & Narain, V. (2019). Re-framing India's "water crisis": An institutions and entitlements perspective. *Geoforum; Journal of Physical, Human, and Regional Geosciences*, 101, 76–79. <https://doi.org/10.1016/j.geoforum.2019.02.030>
- Sharma, M. (2012). Dalits and Indian environmental politics. *Economic and Political Weekly*, 47(23), 46–52.
- Shiva, V. (1986). Ecology movements in India. *Alternatives*, 11(2), 255–273. <https://doi.org/10.1177/030437548601100204>
- Singleton, B. E. (2017). What's missing from Ostrom? Combining design principles with the theory of sociocultural viability. *Environmental Politics*, 26(6), 994–1014. <https://doi.org/10.1080/09644016.2017.1364150>
- Sivaramakrishnan, K., & Agarwal, A. (2001). *Social nature: Resources, representations, and rule in India*. Oxford University Press.
- Snorek, J., Moser, L., & Renaud, F. G. (2017). The production of contested landscapes: Enclosing the pastoral commons in Niger. *Journal of Rural Studies*, 51, 125–140. <https://doi.org/10.1016/j.jrurstud.2017.01.015>
- Thelen, K. (2004). *How institutions evolve*. Cambridge Books.
- Truelove, Y. (2011). (Re-)conceptualizing water inequality in Delhi, India through a feminist political ecology framework. *Geoforum*, 42(2), 143–152. <https://doi.org/10.1016/j.geoforum.2011.01.004>
- Tucker, R. C. (1972). *The Marx-Engels reader* (Vol. 4). Norton.
- Unnikrishnan, H., Manjunatha, B., & Nagendra, H. (2016). Contested urban commons: Mapping the transition of a lake to a sports stadium in Bangalore. *International Journal of the Commons*, 10(1), 265–293.
- Vij, S., & Narain, V. (2016). Land, water & power: The demise of common property resources in periurban Gurgaon, India. *Land Use Policy*, 50, 59–66. <https://doi.org/10.1016/j.landusepol.2015.08.030>
- Villamayor-Tomas, S., García-López, G., & D'Alisa, G. (2022). Social movements and commons: In theory and in practice. *Ecological Economics*, 194, 107328. <https://doi.org/10.1016/j.ecolecon.2021.107328>
- Vivero-Pol, J. L. (2017). The idea of food as commons or commodity in academia. A systematic review of English scholarly texts. *Journal of Rural Studies*, 53, 182–201. <https://doi.org/10.1016/j.jrurstud.2017.05.015>
- Whaley, L., & Weatherhead, E. K. (2014). An integrated approach to analyzing (adaptive) comanagement using the "politicized" IAD framework. *Ecology and Society*, 19(1), art10. <https://doi.org/10.5751/ES-06177-190110>
- Whitehead, J. (2010). John Locke and the governance of India's landscape: The category of wasteland in colonial revenue and forest legislation. *Economic and Political Weekly*, 45(50), 83–93.
- Wolf, E. (1972). Ownership and political ecology. *Anthropological Quarterly*, 45(3), 201–205. <https://doi.org/10.2307/3316532>
- Zimmer, A., Véron, R., & Cornea, N. L. (2020). Urban ponds, environmental imaginaries and (un)commoning: An urban political ecology of the pondscape in a small city in Gujarat, India. *Water Alternatives*, 13(2), 225–247.

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