World Development 122 (2019) 525-536

Contents lists available at ScienceDirect

World Development

journal homepage: www.elsevier.com/locate/worlddev

Spatial politics and local alliances shaping Nepal hydropower

Diana Suhardiman^{a,*}, Emma Karki^b

^a International Water Management Institute, Southeast Asia Regional Office, P. O. Box 4199, Vientiane, Lao Democratic People's Republic ^b International Water Management Institute, Kathmandu, Nepal

A R T I C L E I N F O

Keywords: Power relations Hydropower decision making Private sector actors Spatial alliances Nepal

ABSTRACT

This paper investigates the spatial dimension of power relations and the shaping of local alliances through a hydropower development project in Nepal. It provides a grass-roots illustration on the role of space in shaping and reshaping power relations, and how it manifests in the formation of local strategic alliances. Taking the Upper Karnali hydropower project as a case study, the paper highlights: 1) the role of private sector actor as an ad-hoc decision maker in hydropower development in the country; 2) how hydropower development is perceived by those who will be most affected; and 3) how the two shape the localized dynamics in hydropower decision making, while also sheds light on some of the key gaps in hydropower decision-making landscape and processes. Viewing space as a process and a product of socio-political interface, it shows how local communities living along the Karnali River view the planned hydropower in relationship is predetermined by local communities' bargaining power in relation to the proximity of their respective villages to the planned hydropower dam site, and vice versa. Unpacking the power relations shaping and reshaping spatial politics in hydropower decision making, it presents the concept of spatial alliances as a theoretical underpinning to unpack the question on why and how power relations emerge, are sustained and reproduced.

© 2019 Elsevier Ltd. All rights reserved.

1. Introduction

Over the past decades, Nepal has experienced a rapid period of political reform as it has transitioned from a democratic government with a constitutional monarchy towards a democratically elected federal government. Driven by the need to move towards federalism, to place greater decision-making authority to local governing bodies, this period has also been characterized by power struggles between major political parties, government agencies, civil society organizations, and local communities competing for decision-making power across scales. This paper looks at the shaping of these power struggles from the lens of spatial politics in hydropower decision making. Taking the Upper Karnali hydropower project as a case study, it looks at: 1) the spatial dimension in hydropower decision-making processes; 2) how spatial politics shapes and reshapes the different power relations between respective local community and the hydropower company; and 3) how these relationships reflect back and influence local community's views on the planned project. It illustrates how local community along the Karnali River in Far Western Nepal negotiated their

respective development needs and concerns with the hydropower company. It brings to light their different views and perceptions on the planned project, how the latter is derived from their spatialbased power relations with the company, and how these relations emerge partly as the company's response to the existing policy and institutional gaps in hydropower decision making.

Building on Lefebvre's theory of the production of space (Lefebvre, 1991; Chung, 2012) and Pierson's conceptualization of placing politics in time (Pierson, 2004), we argue that space plays an important role not only in shaping local community's view on the planned hydropower project, and how this view evolves over time, but also in determining their bargaining power, and how the latter (re)shapes the first. The importance of understanding the spatial dimension and how it shapes decision-making processes in natural resource management has been brought up by commons scholars looking at the role of local community in common pool resources management (Agrawal, 2014; Agrawal & Benson, 2011; Agrawal & Gibson, 1999; Ostrom, 2011; Varughese & Ostrom, 2001). Ostrom (2011) illustrates how unequal access to water and the power asymmetry between upstream and downstream water users in an irrigation system influence the process of rule shaping and proximity for collective action. Varughese and Ostrom (2001) show how locational differences to forest areas





WORLD

^{*} Corresponding author.

E-mail addresses: d.suhardiman@cgiar.org (D. Suhardiman), e.karki@cgiar.org (E. Karki).

shape power relations and the rules of the game in forest conservation. $^{1} \ \ \,$

Rather than portraying local communities as homogenous entity with a unified voice, we show how their views and perceptions on hydropower development are diverse and spatially fragmented, as they are shaped by their close or distant relationships with the company, the company's view on local community's importance in relation to the planned hydropower project, and how this view is partly derived from the respective village location, in proximity of the planned hydropower dam site. Building on earlier work that challenge the overall notion of community as homogenous social structure sharing common interests and norms (Agrawal et al., 2013; Agrawal & Gibson, 1999)², we illustrate how shared norms and common interests can change depending on how different members of local community perceive benefits and impacts from the planned hydropower project. Agrawal and Benson (2011) highlight the challenge of ensuring equity between upstream and downstream water users in an irrigation system, while referring to their differential benefits.

The paper contributes to current discourse on spatial analysis and hydropower decision-making processes in two ways. Firstly, it presents the concept of spatial alliance as a theoretical underpinning to unpack why and how power relations emerge, are sustained, and reproduced. Current literature on socio-political production of space has highlighted the importance of power analvsis surrounding the logic of inclusion and exclusion (Low, 2008). Scholars have also discussed how spatial imagination can be deployed as a method to negotiate the overall distributions of costs and benefits in urban planning (Visser, 2001; Massey, 1995; Merrifield & Swyngedouw, 1996). Building on these works, the paper illustrates how spatial imagination can be (re)produced to redefine the spatial connections between local communities living along the river. The creation of these new spatial connections takes place through the process of disconnecting, when the company 'divides' the river into different sections (e.g. villages upstream of the dam that will be inundated by the dam development; villages downstream of the dam) while presenting the planned dam site as the epicenter of the new spatial imagination. The process of reconnecting began, when the company spatially reconnected these upstream and downstream villages, but only in relation to the planned dam site. Unlike before, when the river directly connects upstream with downstream villages, the new spatial imagination does not recognize the inter-villages direct spatial relations.

We argue that the production of these new spatial connections redefines villages' power relations with each other and vis-à-vis the company. The paper brings to light the shaping of spatial alliances between the company and upstream villages. It shows how the new spatial connection reduces downstream villages' bargaining power and their room for maneuver to negotiate their concerns with the company. Here, negotiated development visions and imagined spatial disconnect between upstream and downstream villages serve as the company's device to proceed with the planned hydropower project while removing key foundations for local community to reconcile their differences and come up with a unified voice. The shaping of these alliances shows local community's fragmented bargaining power and the company's ability to strategically use it as its entry point to proceed with the planned dam project. It illustrates the messy realities where hydropower decision-making domains overlap and intersect, and how they are in fact shaped and reshaped by a continuous negotiation

process and alliance formation between various actors across the different domains (Lord, 2014; Dixit & Gyawali, 2010).

Secondly, it unpacks the local community's diverse views and perceptions on hydropower development and how these are shaped and reshaped by spatial-based alliance formation between respective local community and the company $(Harvey, 1996)^3$. Linking the concept of spatial imagination with the actual shaping of spatial politics, it argues that while local community's views and perceptions on hydropower development could serve as potential grass-roots forces for more inclusive development, there is a need to place these views within the broader context of social justice (Sen, 2009; Fraser, 1998; Young, 1990; Pirie, 1983). Building on Agrawal and Gibson (1999) earlier work that highlights the need to broaden our understanding of local community, from small spatial units towards an inter-connected spatio-political and institutional network shaped by actors' multiple interests and strategies, we illustrate how local community's diverse views are partly rooted in how they identify themselves as either affected people or project beneficiaries, and how these identities are sustained or evolved through their respective relationship with the company.

We conducted an in-depth case study research (Burawoy, 1991; Yin, 1994) from January to June 2018, looking at how power dynamics is shaping and reshaping hydropower decision-making processes in Nepal, while focusing on the Upper Karnali hydropower project in particular. We focus on two elements: 1) how spatial politics shape strategic alliances formation in hydropower decision making; and 2) how these alliances shape local community's views on the planned hydropower project, and vice versa.

To understand how local community perceives the planned hydropower project, we conducted a series of focus group discussions with various Upper Karnali Concerns Committee (UKCC) members and villagers from 8 villages along the Karnali River, followed by in-depth semi-structured interviews with 5 UKCC members and 15 farmers. UKCC was formed by the hydropower company as a means to establish better line of communication between the company and the villagers. We gathered information on how UKCC members and villagers perceive the planned hydropower project, how their different perceptions are linked to their relationship with the hydropower company, and how such relationship partly derives from the spatial location of their respective villages. As part of this field research, the second author interviewed the company representative in Kathmandu. Placing the information and insights into the wider context of water governance in Nepal, we link our field data collection with an institutional analysis of hydropower decision making at national level. As part of this institutional analysis, we conducted a series of indepth interviews with 8 government officials from various sector ministries, 7 political party representatives, as well as 9 representatives from donor agencies, international organizations and civil society groups. We complemented this institutional analysis with a policy review on the hydropower sector, looking at various policies and regulations (e.g. licensing system, cross-border power trade agreement, power purchase agreement).

In the following sections we highlight the central positioning of hydropower development in Nepal for the country's economic development. We then present some of the key concepts in socio-political production of space before moving to the case study presentation of the Upper Karnali hydropower project. We discuss and analyze the overall shaping of spatial politics in hydropower decision-making processes at the local level, centered on the company's strategic alliances with UKCC members from upstream villages, on the one hand, and their neglect for UKCC members

¹ See also Amirova et al. (2019) for determinants of cooperation in irrigation systems in Kazakhstan and Uzbekistan, and Cody (2018) for the role of water rights in shaping upstream-downstream relations in an irrigation system in Colorado basin.

² See McCord et al. (2019) on how farm households' heterogeneity shapes water delivery outcomes in irrigation systems in Kenya.

³ For understanding how people-place connections are shaped and differentially experienced see Dukpa et al. (2018).

from downstream villages, on the other hand. We conclude with discussion on the need to recognize how spatial politics shapes localized dynamics in hydropower decision making, and its implications for social justice.

2. Hydropower development in Nepal: linking dominant narrative with local community's views

Following the country's local and national elections held in respectively mid 2017 and early 2018, Nepal entered a new chapter in a process of state transformation. Since the country's decade long civil conflict ended in November 2006, Nepal has been struggling to make the move to the federal system (Shneiderman & Tillin, 2015). Consensus on federalism is hard to achieve as political actors hold not only different but also conflicting ideas about what federalism should entail (e.g. by ethnicity, and/or by means of political recognition) and what it should achieve (Lawoti, 2012; Lecours, 2013; Middleton & Shneiderman, 2008; Paudel, 2016). Nonetheless, in 2017 political parties agreed that the federal system would be comprised of three levels of administrative governments at respectively central, provincial, and local or municipality level.⁴ The elected local bodies would serve for 5 years.

Throughout the years of political turmoil, hydropower development remained a central piece in every government's economic development strategies. This is most apparent from the government's massive efforts to promote the sector development over time. As stated by Dixit and Gyawali (2010: 106-107): "Since the end of World War II, it has been a political truism in Nepal that the country's problem is poverty and its greatest asset is its enormous hydropower potential, estimated at 83,000 MW. This figure, known to almost any school child, is repeated endlessly in the media as Nepal's passport out of poverty". In 2014 the Nepal Electricity Authority (NEA) with support from the Japan International Cooperation Agency (JICA) developed the nationwide master plan study, highlighting Nepal's hydropower potential while outlining areas in the country's major rivers where hydropower development should be done. Currently, there are 56 hydropower projects in different phases of planning and construction in the country, representing over 20,279 MW potential power generating capacity, compared to the current installed capacity of 986 MW available to meet the electric demand (Alam et al., 2017; IHA, 2018). The central positioning of hydropower development as one of the key pillars to promote economic growth, and achieve national socio-economic development is not a new phenomenon in many developing countries in the Global South (Sneddon & Fox, 2012; Bakker, 1999; Molle, Foran, & Kakonen, 2009). Driven by rapid pace of industrialization, many developing countries worldwide have positioned hydropower development as the dominant pathway to respond to growing demand for electricity for both export-led economic growth and expanding domestic consumer markets.5

As Nepal embarked on hydropower development pathway, the government formulated a series of policies and legal frameworks to regulate and manage hydropower development projects. Hydropower development is featured prominently in both Water Resources Strategy (2002) and the National Water Plan (2005), formulated by Water Energy Commission Secretariat (WECS). The Hydropower Development Policy (2001) outlines hydropower decision-making steps (e.g. licensing⁶, feasibility study, Environmental Impact Assessment or EIA review⁷, Project Development Agreement) and covers the financial aspects in hydropower development, including royalty fee, income tax exemption rule, customs duty levy, and selling rate of electricity. In practice, however, it is unclear how the different government agencies in charge to approve each step of hydropower decision making will coordinate among themselves or monitor and evaluate the company's engagement with local communities. Similarly, while the policy mentioned the idea of benefit sharing, it does not specify the institutional set up, processes, and procedures that need to be followed to ensure its effective application. The Government of Nepal (GoN) has come up with various benefit-sharing modalities in hydropower development (Lord, 2016; Murton, Lord, & Beazley, 2016), including a royalty mechanism that provides a share of revenues to local government as well as the sale of publicly traded equity or shares to affected local community. Nonetheless, in most cases, the company would define benefit-sharing modalities, often without any prior consultation with local governing bodies and local communities. How benefitsharing mechanism can be hindered and/or supported by existing institutional set up and legal framework, and how local communities could have more say in designing benefit-sharing modalities, remain obscure.8

Despite its central positioning, many have also raised concerns on how hydropower decision-making processes have been done through top-down approaches, centered on the government and the relevant company, with local community coming into the picture only during project implementation or after all the paper works are done (Lord, 2016; Baruah, 2012). Widespread resistance to hydropower development was most apparent in the case of the Arun 3 hydropower project, which resulted in the World Bank's withdrawal from the project (Dixit & Gyawali, 2010).⁹ At the local level, rapid pace of hydropower development has resulted in an increase in the number of people and local community affected by dam projects (Lord, 2014; Subba, 2014), increase in socioeconomic inequity and further marginalization of the poorest and most marginalized groups (Baruah, 2012; Arora, 2009).

3. Spatial politics and strategic alliances shaping hydropower decision making

The concept of the production of space (Lefebvre, 1991) posits a theory that understands space as fundamentally bound up with socio-political reality. As stated by Schmid (2008: 28): "Space does not exist in itself, it is produced". As socio-political construct, space

⁴ Local governing bodies include 6 metropolises, 11 sub-metropolises, 276 municipalities and 460 rural municipalities. These local governing bodies are part of district and formed primarily based on population size and annual revenue. For example, each metropolis has minimum population of 280 thousand and annual revenue of at least 100 million NPR. Each sub-metropolis has minimum population of 150 thousand and annual revenue of at least 400 million NPR. Further, each municipality has minimum population of 20 thousand and annual revenue of at least 4 million NPR.

⁵ Nationally, hydropower development is often positioned as the government's primary means to achieve its economic development targets through industrialization and as a means for government revenue generation. Regionally, international financial institutions such as the Asian Development Bank and the World Bank present the need for hydropower development as an integral part of regional economic integration.

⁶ From a river basin planning perspective, little information is available with regard to how the licensing systems and process will be linked to various sectoral ministries development planning (e.g. master plans for hydropower and irrigation), and the overall basin planning.

⁷ While EIA is included in the Environment Protection Act (1997) and Environment Protection Rules (1997) both documents do not specify on what the EIA should entail in the context of hydropower development.

⁸ According to the policy, half of royalties coming from hydropower projects are shared with the district development committee (12%) and other districts in the area (38%) where the project was located (Sikor et al., 2018; Dixit & Gyawali, 2010). In practice, however, each company would apply different benefit sharing arrangements, as the policy is hardly being monitored or enforced.

⁹ The 900 MW project was revived recently and is being developed by Satluj Jal Vidyut Nigam (SJVN) as another large-scale export-oriented project. SJVN is subsidiary of Indian government-owned Satluj Jal Vidyut Nigam Ltd.

and time do not exist universally, but are produced and reproduced by social constellations, and power relations embedded in the wider socio-political landscapes. Lefebvre (1991) discussed the three dialectically interconnected dimensions or processes of space (re)production. These refer to: 1) spatial practice or networks of interaction and communication; 2) representations of space, which emerge at the level of discourse; and 3) spaces of representation, which concerns the symbolic dimension of space (e.g. divine power, organizational logos). Bringing to light the importance of temporality in shaping socio-political processes and their complex dynamics, Pierson (2004) highlights the need to place politics in time, which means looking at the circumstances under which certain processes emerge and understanding why they unfold in particular period of time. It highlights the importance of temporality and path dependence, and their role in the overall shaping of social and political outcomes. As stated by Sewell (1996: 262-63): "[Path dependence suggests] that what happened at an earlier point in time will affect the possible outcomes of a sequence of events occurring at a later point".

As a central theme in the reconceptualization of the naturesociety relation, the concept of the production of space has incorporated a relational conception of space and time, thus highlighting the need to understand space as an integral part of socio-political practice, or so-called spatial politics, in which power relations, competing interests and conflicts play an important role in shaping and reshaping the overall constellation of spatial interests and alliances (Soja, 2010; Pirie, 1983). Here, space becomes the key decisive factor shaping actors' and institutions' bargaining power and negotiation strategies, as these defined the overall process of alliances forming, and vice versa. Scholars have also discussed the logic of inclusion and exclusion through institutionalized orderings, while positioning space as a product of societal interaction and structures. They have shown how social inequity is produced and reproduced through spatial relations across scales (Berking, Frank, Frers, & Low, 2006; Mayerfeld-Bell, 1997). As stated by Low (2008:26): "While it cannot be often enough stressed that no space imposes specific action (pedestrian tunnels need not necessarily engender fear, however empirically frequently this occurs), highly elaborated know-how has been developed about how deliberately to generate atmospheres in spaces".

The paper unpacks the spatial politics (re)shaping the production of power relations in hydropower decision making at the grass-roots level. It illustrates the shaping of everyday politics in hydropower decision making (Huber & Joshi, 2015). It shows how the company's strategy to gain local community's support to proceed with the planned development has resulted in the fragmentation of local community's bargaining power and their ability to negotiate. Here, the basic spatial logic in hydropower decision making is constituted not by the company-local community dichotomy and/or opposition, but by how the company strategically formed alliances with upstream villages, while ignoring downstream villagers' concerns and needs. Or, as stated by Low (2008: 26): "Heterogeneity and homogeneity are tied to competing space logics". By ignoring downstream villagers' concerns on how the dam would impact the downstream fishing community and farmers, the company applied a spatial exclusion logic, knowing that they could proceed with the dam construction without downstream villagers' support. Similarly, by acknowledging and accepting upstream villagers' demand on land compensation payment for the land that will be inundated by the dam construction, the company employed a spatial inclusion logic, knowing that they could not proceed with the dam construction without upstream villagers' support. While the company's strategy to form strategic alliances with upstream villagers is key, the timing and sequence of how these spatial alliances are constructed also matter. Once alliances are made, there is a path-dependent quality that would sustain

such alliances and make it difficult to change. For example, following both the company and upstream villages agreement on the land compensation value, it would be very difficult for upstream villagers to change their view on the planned hydropower project, regardless of how downstream villagers' strategies to convince them to do otherwise. Similarly, the company lacks any incentive to improve its relationship with downstream villages, as the latter's objection would have very little significance for the company's interest to continue with the planned hydropower project following the company's alliance with upstream villages.

Linking this spatial logic in hydropower decision making with the central positioning of local community as grass-roots forces for inclusive development, the paper unveils local community's different and sometimes conflicting views on the planned hydropower projects. Scholars have discussed how hydropower development in Nepal would affect local community and/or how they would benefit from the dam development (Lord, 2016; Rest, 2012; Dixit & Gyawali, 2010; Armbrecht, 1999). According to Lord (2016), not only that the majority of local community agree on the importance of hydropower development, they are also very much inclined to getting recognition as affected people, in order to be heard, consulted and represented. As stated by Lord (2016: 151): "For many people, being classified as a project affected person is also a means of gaining entitlements to services that the government of Nepal has failed to provide, a more promising and immediate avenue for recognition". This shows how local community views the company as an agent for development to whom they could convey their development needs and concerns. Nonetheless, we argue that local community's desire for development (Rest, 2012; de Vries, 2007) should not be viewed as something static, or unchanging over time. Most importantly, we highlight the need to understand the rationales behind local community's different views, how these views are (re)produced through the shaping of spatial alliances, how such alliances change the existing power relations, and thus others' ability to negotiate, and vice versa. What are key decisive factors shaping and reshaping local community's views on hydropower development? How do these views relate to local institutional arrangements, both formal and informal, pertaining to resettlement and compensation? How do these arrangements come to stand in relation to local community's bargaining power and ability to negotiate their development needs and concerns through their relationship with the company? These are questions explored here.

4. Putting local communities' views central in Nepal hydropower

This section starts with some background information of the Upper Karnali hydropower project. It continues with the company's strategy to form the Upper Karnali Concerns Committee (UKCC) in each of the 4 municipalities and 3 rural municipalities¹⁰ that would be affected by the project. Further, we discuss local community's different views on the planned hydropower project, while putting their diverse views central in the overall shaping of hydropower decision-making processes at the local level.

4.1. The Upper Karnali hydropower project

The Upper Karnali hydropower project is set to be the largest hydroelectric power station in Nepal with power generation capacity of 900 MW. Nepal will receive 12% of generated electricity, with the remaining 88% going to India and Bangladesh. Commissioned

¹⁰ According to the previous administrative divisions, these represented 12 Village Development Committees (VDCs) in three districts.

by the Investment Board of Nepal (IBN)¹¹, the Nepal Electricity Authority (NEA) will have 27% free equity stake in the project, while the private Indian company covers 100% of the total investment. Located in Far Western Nepal, the Upper Karnali hydropower project is located in Karnali river, flowing through three districts of Achham, Dailekh and Surkhet. The dam will be 150 m high, 207 m long. Technically, the project will use water from the Karnali River to generate electricity, while taking significant amount of water from one side of the river and channel it through a tunnel to another side of the river.

While the company presented the dam as run-of-the river dam, because water is returned to the same river lower down, the dam design still have a socio-environmental impact, though the latter is relatively smaller compare to a traditional impoundment dam (Burrier, 2016). While the technical characteristic might indeed result in fewer number of households being resettled, this does not mean that the dam would have less impact on local communities living along the river. In contrast, it would impact a significant number of villagers who rely on fisheries and farming activities for their livelihoods. Following its construction, the dam would reduce water flow in a stretch of around 50 km downstream, thus disrupting the river ecology, sediment flow and fish migration, leading to potential loss of fisheries and farming activities.¹² In total, the planned dam will affect 426 farm households and local community out of which 56 households need to be resettled across the three districts. Moreover, the dam will also impact thousands of farming households and fishing community living downstream of the dam. Despite the dam's limited storage capacity, key socio-economic and environmental impacts associated with a reservoir scheme are likely to be present. Fig. 1 gives an overview of the planned dam location on the Karnali river, administrative boundaries of the three districts and affected villages across the districts.

In 2008 the project was started with the signing of cross-border power trade agreement signed by the Government of Nepal (GoN) and the Government of India (GoI) and power purchase agreement between the two countries. In line with the cross-border power trade agreement, Nepal government placed a call for foreign company to bid for the project. In the same year, an Indian company, GMR Upper Karnali Hydropower Limited (a subsidiary of GMR Energy) won the bid to develop the project. GMR group is one of the largest conglomerates in India and is viewed as a key player in the infrastructure and energy sector with experience in generation and sale of power. Currently it is developing plants both in India and Nepal with a generation capacity of over 2300 MW.¹³ For the import of electricity generated from the project, the company has ensured a long-term license from the Directorate General of Foreign Trade of GoI, valid for 30 years. The Project Development Agreement (PDA) states that GMR needs to comply with the relevant policies and legal frameworks of GoN when preparing and implementing its various plans (IBN, 2014). These included local benefit sharing, employment and skills training, industrial benefits, and disaster management plans, which will be jointly developed within the

12 months of the agreement date.¹⁴ The company will also develop the rehabilitation and resettlement plans within 6 months of the agreement date.¹⁵

While the formulation of these plans urges the company to comply with existing rules and regulations, the latter do not provide a clear guideline on how the company has to formulate and implement the plans in relation to local community's development needs and aspirations. For example, with regard to the benefitsharing plan, GMR will share 1% of the total project budget and spend it for community-based development including supporting infrastructure. As outlined in the PDA (IBN, 2014), this budget will primarily be spent on construction of a suspended bridge, child care centers, health post, mobile network tower, vocational training for youth, as well as, investment in education, health, empowerment, community development in the to be affected villages. Moreover, GMR would provide 2 MW rural electrification, 12% royalty to the project affected areas, shares for local community and 3000 direct employment during the construction phase. Nonetheless, it is unclear as to how and when the company has to do this in terms of institutional set up and consultation and negotiation with local governing bodies and local community (Jones, 2012).

All projects are also required to conduct an EIA following the guidelines (MoEST, 2006; MoFE, 2018) and seek approval from the Ministry of Forests and Environment (MoFE).¹⁶ This is to be done during the feasibility study phase and submitted along with the license application.¹⁷ According to the Hydropower EIA Manual (2018) the company should consult the affected communities during the pre-construction phase. It requires developers to engage with stakeholders during the EIA process. This is to provide information to the community regarding the project activities and ensure the community is in a position to take informed decisions. During this phase, discussions on land compensation also take place to plan and prepare a land acquisition, resettlement and livelihood restoration plan based on the feedback provided by the community and local authorities. The stakeholder consultation is expected to be a continuous and extensive process to ensure valuable inputs. Public hearings are required to be published 15 days prior inviting participants to partake in the EIA process.

In line with this general guideline, in 2012, the company formed Upper Karnali Concerns Committee (UKCC) in each of the villages that would be affected by the planned hydropower project to liaise with the larger community and channel information about the hydropower project. In practice, however, the company would focus the overall discussions on compensation mainly with upstream UKCC leaders and villages. As shared by UKCC leader from Saurat village during an interview: "Initially the company would arrange a big meeting involving all UKCC members. Later, however, the company would focus the consultation and engagement

¹¹ The IBN was established in 2011 to attract, accelerate and facilitate foreign direct investments in Nepal, while providing one window service to projects of national priority. It is in charge for hydropower project with power generation capacity above 500MW. The Prime Minster heads the board while the Chief Executive Officer heads the office.

¹² With minimum resettlement impacts and other socio-economic and environmental impacts spread throughout the basin, this makes it more difficult for local communities living along the river to organize and mobilize large-scale protests (Burrier, 2016; Klein, 2015).

¹³ The Indian government's own experience with the Sardar Sarovar Project and the subsequent criticism and rejection by the government to the guidelines proposed in the 2000 report by the World Commission on Dams provides significant background on the socio-economic impact of large dams and how this has resulted in widespread social movements (Thakkar, 2008).

¹⁴ GMR is expected to provide half yearly reports for the first 3 years of construction followed by yearly reports to inform the GoN on the implementation of the trainings and programs.

 $^{^{15}}$ In addition, GMR is required to consider the impact of the irrigation projects in the downstream impact study, which includes the Bardia and Karnali corridor lift irrigation projects with a total command area of 15,000 ha and water requirement of 42 m³/s.

¹⁶ Previously known as Ministry of Environment, Science and Technology.

¹⁷ Generally, a developer must obtain a license from the Department of Electricity Development (DoED) prior to conducting a survey. The survey license can be used either for electricity generation, transmission or distribution. A development license is also required after the survey is conducted and can be categorized for generation, transmission and distribution of electricity. The application is to be submitted to the Secretary of the Ministry of Energy, Water Resources and Irrigation (MoEWRI) through DoED following the Electricity Rules (1993) for both types of licenses. The licensee is required to start the physical work within three months for the survey and within one year for the generation, transmission or distribution, though these can be extended if the licensee submits an application explaining reasons behind the delay (MoEST, 2006). For Upper Karnali project in particular, the IBN is in charge for issuing the license, due to its power generation capacity (above 500 MW).



Fig. 1. Overview of Upper Karnali hydropower dam and administrative boundaries of affected villages across the three districts.

process with upstream UKCC members, due to their villages' location, close to the planned dam site, and their role in mobilizing protest against the company" (interview with UKCC leader from Saurat, May 2018). While consultation meetings with affected local communities were conducted in public spheres, the company could shape these meetings to include and exclude different UKCC members and local community.

Consequently, the subsequent EIA report would delve into the timeline for the construction of the project and expected land to be acquired for the purposes of the project, without much clarification as to whether affected community share common view with regard to the compensation, or how agreement on land compensation value was reached. Similarly, while the Resettlement Action Plan (RAP) provides key socio-environmental impacts and how the company would address these, the plan does not elaborate on the dam's downstream impacts and how the company would address these. Besides, while the company could only proceed with the dam construction after the government's approval of the RAP, the latter does not necessarily include a concrete timeline on when the company would provide affected households with compensation and any other entitlements. Obviously, while the company is required to consult and engage with affected community prior to the dam construction, the outcome of the process is very much defined by how the company convened the EIA process and implemented the RAP.¹⁸ This highlights the problem of poor compliance in hydropower development, due to the government's lack of monitoring and evaluation mechanisms (Dixit & Gyawali, 2010) and the company's interest to shape the process to their advantage. This reflects key challenges in the country's hydropower governance, and how they are linked with the government's dependency on foreign direct investment and private sector actors for hydropower development (Sikor, Satyal, Dhungana, & Maskey, 2018).¹⁵

In 2018, the company is supposed to finalize the financial closure to get the final license and start with the dam construction. The financial closure report would have to outline the company's financial capacity to build the dam, which will be then reviewed and verified by the government. In order to acquire funding from the lenders, the hydropower company must secure the market to sell the generated electricity.²⁰ The Bangladeshi government has already signed and approved the MoU with NTPC Vidyut Vyapar Nigam (NVVN) to import 500 MW electricity from the Upper Karnali.²¹ The plan is to complete the dam construction in 5–6 years from now (2024/2025). Once constructed, the company would have a 25-year concession time to operate the dam, after which they have to return to the GoN.

4.2. Upper Karnali concerns committee

Following the signing of the Memorandum of Understanding (MoU) between the GoN and the hydropower company in 2008 and the completion of the detailed project report in 2011, local community remained unaware about the plan to build the Upper Karnali hydropower dam. During that time, villagers would see the company staff coming to the area to conduct some topographical survey and measurement, but they hardly knew anything about the planned dam project. Local community heard about the planned hydropower project and how the project would impact their farming practices for the first time from their respective Village Development Committees (VDC) in 2012.

In the same year, the company proposed to form the Upper Karnali Concerns Committee (UKCC) in each of the 12 VDCs that would

¹⁸ Jones (2012: 9) discusses how consultation processes at VDC level are 'either not happening or being run as a formality'. For the Upper Karnali hydropower project, the company never publicly disclosed the RAP.

¹⁹ Policy mechanisms to ensure inclusive and sustainable hydropower development in Nepal have come under pressure as they are not always in favor of the government's goal to attract foreign direct investment. This is most apparent from the challenges to implement the International Labour Organization Convention 169 on indigenous rights in a series of hydropower projects (Jones, 2012).

²⁰ For GMR to lend money from the bank, it has to guarantee that a market exists to purchase the generated power. Since the company is responsible for this task, it is up to them to work with the Indian government to ensure the power purchasing agreement goes through. The Nepali and the Bangladeshi government are not influential in the settlement process. Once the bank releases the funds GMR can start acquiring land and pay the villages the promised amount.

²¹ The MoU is between Bangladesh and NTPC Vidyut Vyapar Nigam (NVVN) since private developers are not allowed to sell electricity generated in a third country using transmission lines in India. This is part of the larger plan to purchase 9000 MW electricity from Nepal until 2040 from Upper Arun and Dudhkoshi hydropower projects.

be affected by the planned hydropower dam project (see Fig. 1). The idea to form the UKCC is that the company would then be able to communicate the planned hydropower project to local community, discuss key challenges and find ways as to how address these challenges together, while also ensuring that the proposed solution captures local community's development needs and concerns. Ideally, the UKCC would serve as both the company's first point of contact to reach out to local community, while communicating their development plans, especially pertaining to resettlement, compensation and other support it can provide for the affected community, as well as local community's means to negotiate their conditions and needs in relation to how the planned hydropower project would impact and/or benefit their livelihoods. The absence of government in the negotiation process can be attributed to the lack of elected representatives and a sense of mistrust amongst the community members to allow the government officials to negotiate on their behalf (Lord, 2016).

Starting from 2012, the company formed UKCC at each village that will be affected by the dam development. UKCC members were selected from households that would be affected by the planned hydropower project. In 2012, UKCCs were formed in respectively the upstream VDCs, as three upstream villages where farmers' farmland will be inundated following the hydropower dam construction. There are respectively 48.85 ha of private farmland and 207.75 ha of communal forest²² that will be inundated in Thalpatta village alone. In Accham and Dailekh, there are respectively 35.61 ha and 15.26 ha of private farmland that will be inundated.

Unlike upstream villages UKCC that were formed first in 2012, UKCCs from downstream villages were formed only later in 2013. At that time, they were informed by their VDCs that their villages will be ones among those impacted by the planned hydropower project. Unlike upstream villages where the planned hydropower dam would result in villagers' agricultural farmland being inundated, the dam would not inundate any land in downstream villages. Rather, the planned dam would negatively impact local community's livelihoods in terms of reduced amount of water for their farming activities, while severely impacting the wider fishing community. Following the formation of the UKCC, the UKCC members raised their concerns on the dam's negative impacts to the company. However, at the time of writing, UKCC members remain uncertain as to whether the company would provide compensation for their loss of livelihoods following the construction of the dam.

Unlike in upstream villages where UKCC was formed in each of the villages that would be affected by the planned hydropower project, in downstream villages only one UKCC was formed out of the three villages that would be impacted by the dam. The UKCC formation in Pokharikanda and Chappre rural municipalities was halted by internal conflict between villagers, with each group wanting the UKCC chairperson representing the fishing community to be chosen from their respective group. As both villages comprise of local community living in the hilly and lowland area, each group wanted to have their respective leaders to be the UKCC chair person. As the group who lives at the hilly area would also represent the fishing community, as the one would be most affected by the hydropower dam, the idea is to assign their leader as the UKCC chairperson. However, the other group did not find this proposition acceptable as they wanted to also propose their own leader as the UKCC chair person, despite the fact that many of them are not fishermen. In the end, no UKCC was formed in these villages.

Thus, while the fishing community along the Karnali river would be the most affected by the planned hydropower project, they are not part of any of the UKCCs formed. While the fishing community could convey their concerns through general meeting organized by the company prior to the UKCC formation in 2012, following the formation of UKCC in each of the affected villages, their ability to raise the concerns is significantly reduced by each UKCC's focus to represent local community's needs and concerns in their respective villages. Moreover, the fishing community, comprised mainly of Dalit households, one of the poorest and most marginalized group, are without land registration papers. Perceived as untouchable, the group's ability to convey their concerns with regard to the planned hydropower project is very much limited by the existing power structure that does not always allow them to socialize and converse with others. As shared by one of Dalit fishermen we interviewed: "I was in the big meeting arranged by the company. However, during the meeting I could only listen as I do not feel right to enter the discussion without anyone asking me to do so in the first place" (interview with Dalit fisherman, May 2018). Hence, not having land registration papers to seek compensation and an UKCC that could represent their voice is a major blow.

While the company has formed and set up the UKCC as its point of contact, negotiation processes between the company and UKCC members are driven mainly by the company's and UKCC's interests, as most apparent from the negotiation on land compensation value, and thus not necessarily guided by the existing policies and legal frameworks in hydropower decision making. In instances wherein a parcel of land has to be acquired, the company is obliged to follow the government's policies and legal frameworks. Nonetheless, it is unclear as to whether the company should refer to the Land Acquisition Act (LAA) (NLC, 1977), the Land Acquisition, Resettlement and Rehabilitation Policy for Infrastructure Development Projects (LARRPIDP) (2014), or both. While the Act outlines the process to be followed to acquire and compensate land as defined by the government²³, its land classification system (e.g. agricultural, commercial and residential land) does not take into account people's livelihood options and strategies, and the overlapping boundaries between these different types of land use (Sharma & Khanal, 2010). Recently, the government has aimed to address these gaps through the introduction of new criteria to evaluate the existing land use and the application of 5 years of revenue in cash as a compensation measure, as stated in the LARRPIDP.²⁴ Yet, it is unclear how this policy will relate with the LAA and whether it can actually be implemented, when it concerns alternative measures to address the current gaps in the Act. This highlights the problem of overlapping policies and legal frameworks and its implications for the hydropower sector development in particular. As government agencies formulate laws and policies as a means to create spaces of power, overlapping policies and legal frameworks reveal not only bureaucratic fragmentation within the government, but also crosssectoral competition and power struggles (Suhardiman, Bastakoti, Karki, & Bharati, 2018).

²² While the forest land acquisition requires clearance from the Ministry of Forest and Environment, local community and UKCC members are not part of this discussion.

²³ Landowners are expected to seek compensation along with proof of land ownership within 15 days of issuing public notice indicating land acquisition by the government. An evaluation committee, comprised mainly of relevant government officials and rural municipality representatives, is responsible for determining the value of the land parcel as well as any house constructed in the premises. The Act also allows unsatisfied landowners to complain to the Chief District Officer for a final say. Section 27, however, states that the government may negotiate directly with the landowner, in which case, the above mentioned procedures are not applicable.

²⁴ The policy also envisions the compensation determination committee to work closely with the affected families and ensure mechanisms are in place to address complaints. It is unclear as to how the Act and the policy would include market price as part of the land valuation. Being largely unregulated, the market price for land can potentially inflate in situation wherein an infrastructure project is planned.

4.3. UKCC members' and local community's different views

4.3.1. Upstream view: the centrality of land compensation payment

UKCC members and local community from upstream villages (Thalpatta, Sisne and Daba) view that the planned hydropower project should continue as this would bring development to the area and improve local community's standard of living. They are aware about the negative impact the dam might give in terms of reducing their ability to produce sufficient food from their agricultural land, as they have to rely on their only farmland in the hilly area, which is much less fertile than the lowland, inundated one. Nonetheless, they think the immediate and long term benefits they could get from the dam development would exceed the costs.

Central in shaping the UKCC members and local community's view is the negotiated land compensation value, in which the company had agreed to pay for farmers' farmland that would be inundated following the hydropower dam construction. The incentive to support the project despite the significant loss to the farmland stems from the expected monetary benefit during the land acquisition process. The company has agreed to a land compensation value of 0.8–0.9 million NPR/ropani²⁵ for any loss of farmers' land. This value is very high, not only compared to the expected government compensation of 10,000 NPR/ropani derived from the land classification registration fee, but also with regard to the current land market value, usually set by the transaction rates in the last 6 months.²⁶ Villagers view the land compensation payment as additional benefit they could use to improve their livelihoods (e.g. for opening new shop and businesses, buy residential land elsewhere). As said by one of farmer from Sisne village: "At present, we can rely on agricultural production to suffice our food consumption for 5-6 months in a year. Once part of our lowland farmland is inundated, we could only suffice for 2–3 months with regard to home consumption. But if you are poor, it does not really matter as to whether the dam will affect your livelihoods, you will still be poor. The most important thing is that I can now use the money from the land compensation payment to invest in my son's education to be land surveyor and works and earns money from the company later. Hence, I am willing to take the risk. Without the project, nothing will happen in the area and people will remain poor" (interview with villager from Sisne, May 2018).

Throughout the years, upstream villages UKCC members negotiated with the company on terms and conditions for resettlement and compensation for agricultural land that will be inundated by the hydropower dam construction. In 2016, the company and upstream villages UKCCs agreed on the defined land compensation value of 0.9 million NPR/ropani payable for each household for land inundated to construct the dam. Initially, the company informed the villagers that they would complete land compensation payment in June 2017. In practice, however, the company only started with the actual distribution of the payment to affected villagers in September 2017. According to the new plan, the company would complete the payment process to all affected villagers in March 2018. As in May 2018, however, the company had only acquired approximately 12 percent of the total land and made the payment to the villagers.²⁷ This illustrates not only the company's inability to acquire the land needed for project development according to the defined plan, it also shows the government's lack of

power to enforce the plan implementation. According to Section 8.2 of the PDA, upon approval by the government, land needed for project development will be acquired within the 12 months thereafter. The company's agreement on the land compensation value, on the other hand, shows how upstream UKCC members have been able to negotiate their interests simply by focusing on their role in mobilizing protests at the planned dam site and the company's field office in Surkhet (McAdam, McCarthy, & Zald, 1996), and without any reference to existing policies and legal frameworks.

When the company halted their land compensation payment due to recent attack on the company field office in March 2018, affected villagers and local community from the three upstream villages insisted that the company continue with the planned project, as only the latter would ensure the completion of villagers' land compensation payment. Anticipating the land compensation payment, some villagers had already closed the deals to buy land elsewhere while using the money from the compensation payment to purchase the land. As said by one of the villagers from Daba: "I have purchased a residential land in Surkhet, where I will build our family home later. As part of the deal, I have given a down payment for the land and six months after that I would have to complete the final payment. For the latter, I would use the money from the land compensation payment. Hence, if the company delays the payment, this will affect my land deals" (interview with villager from Daba, May 2018).

The local community has routinely voiced their concerns regarding the politicization of the Upper Karnali despite the significance of the project on the entire nation (IBN, 2015). During our interactions and discussions with several members of the upstream UKCC there was a strong unified voice to ensure that our field work and subsequent report does not hamper the project. Given the larger national level debate surrounding the politics and environmental concerns of the Upper Karnali voiced by civil societies residing in urban areas, upstream UKCC members wanted to ensure we would present our findings supporting the construction of the dam. It was clear that UKCC members from Dailekh and Accham have a very different view and stake in the completion of the project compared to the civil society members and conservationists critical of the project. As said by one UKCC member from Thalpatta: "Many have come from Kathmandu to conduct research only to go back to write a report that talks about the negative effects of the project. They stay in their air-conditioned offices and nice homes and criticize the dam. Do they not see how we are living here? Our villages have never seen development; the government has not developed our area. Finally, we have some jobs coming and now the socalled experts want to stop that as well." (phone interview with UKCC member from Thalpatta, June 2018).

UKCC members from Thalpatta and Sisne view that the company has also provided them the opportunity to gain experience in hydropower decision-making processes, improve their negotiation skills, through for instance providing them the opportunity to visit hydropower projects in the country, to learn from past experiences. As said by UKCC member from Thalpatta village: "Throughout the negotiation process with the company we tried to get all the needed information, for example on how past projects had been done, issues that need to be brought up as to better represent local community's needs and concerns to the company. We would collect this information from the Investment Board of Nepal (IBN), the media, through interaction with other members, and also through study tour to other affected villages" (interview with UKCC member from Thalpatta village, May 2018). This brings to light as to how in the context of upstream villages, the UKCC has gained its power through its relationship with the company, as the company put UKCC central with regard to their role to communicate and negotiate local community's needs and concerns to the company, and vice versa.

²⁵ 1 Hectare = 19.965 Ropani.

²⁶ An official land valuation system does not exist in Nepal and valuation of compensation is conducted on project basis with the developers and government agencies determining compensation package (Ghimire et al., 2017).

²⁷ According to upstream villages UKCC members, the delay is rooted in the ongoing discussion to adjust the Power Purchase Agreement. Initially, the company would channel the generated power from the hydropower project to India, to ensure the country meets its electricity demand. At present, however, the discussion is to also sell this electricity from India to Bangladesh, as the first faces the issue of electricity over supply.

The case illustrates how power relations are shaped and reshaped following the company's spatial inclusion logic, to ensure it can proceed with the planned hydropower dam while also ensuring local community's concerns are addressed. The applied spatial logic not only result in the formation of strategic alliance between the company and upstream villages, it also ensures that the latter supported the newly produced spatial imagination, centered on the newly defined spatial connection between the planned hydropower dam site and its vicinity with upstream villages. Similarly, the timing when and the sequence of how the strategic alliance is formed ensure that the company could proceed with the planned hydropower project, while relying on upstream villages' support, with or without addressing the consent from downstream villages, which will be discussed next.

4.3.2. Downstream view: is the planned hydropower project worthwhile in the absence of any compensation mechanism?

UKCC members and local community from downstream villages (Ramaghat, Saura, and Dungeshwor) view that the planned hydropower project should be halted. While villagers would not directly lose their land due to inundation from hydropower development, the dam would negatively affect their livelihoods due to reduced water quantity leading to a loss of fisheries, loss of agricultural practices, loss of biodiversity as well as loss of communal land for livestock grazing near the river.

Back in 2016, the company informed UKCC members and local community that they would get access to electricity from the planned hydropower project. They have also provided school facilities and furniture to VDC offices to the respective villages. In practice, however, UKCC members and local community do not view this as a good enough benefit to outweigh their potential loss of farmland and fisheries resources. As said by one of the villagers from Saura village: "I do not think that the planned hydropower project would benefit villagers. Even when we would get free access to electricity, this would not benefit us if it means we have to lose everything else related to our farming activities. At present we have sufficient water supply for our farming activities. When the dam is built, it would take all the water and impact 10,000 households in three villages in Surkhet district" (interview with villager from Saura, May 2018). Similarly, as expressed by one of the Dalit fishing community from Ramaghat village: "We have always been fishermen all our lives. When the planned dam would force us to stop fishing, we do not know as to whether we would be able to make the needed transition in our livelihood options, as we lack the skills needed for that" (interview with Dalit fisherman, May 2018).

Central in shaping UKCC members' and local community's view is the fact that the company is not able to offer any clarity on compensation for the villagers' losses of livelihoods (e.g. farming and fisheries). As said by UKCC member from Saura village: "We are not against the planned hydropower project, as we all know the country needs to develop. However, it is unclear as to how the company would compensate our losses of livelihoods following the dam construction. Before this is clarified, we could not support the dam construction" (interview with UKCC member from Saura village, May 2018). Similarly, as expressed by one of the villagers from the same village: "At present we are food secured. We do not have cash but we are fine. When the dam project comes, perhaps we would get cash for compensation of our loss of livelihoods. But we do not know how much and whether it will be enough to secure our food needs for the long term" (interview with a farmer from Saura village, May 2018).

Unlike in the case of upstream UKCCs who have successfully negotiated with the company about the land compensation value, downstream UKCCs were able to voice local community's concerns on the negative impacts from the dam, though they lack any bargaining power to negotiate with the company on the compensation mechanism and arrangement. As the company did not depend on downstream UKCC members' and local community's support and acceptance for the construction of the planned hydropower dam, they could easily ignore their concerns. The company's unequal treatment towards respectively upstream and downstream UKCCs is captured in the following statement: "I know farmers in Daba village would receive 0.9 million NPR/ropani for the inundated farmland. As for farmers in Saura village, the company did not even inform as to whether we would get any compensation for the loss of our livelihood options" (interview with UKCC member from Saura village, May 2018).

As the company seems to be the one defining the space for negotiation in terms of compensation packages and other support, downstream UKCCs are left with very little chance to successfully negotiate local community's development needs and concerns in relation to the planned hydropower project. While downstream UKCCs could technically build alliance with upstream UKCCs to negotiate with the company, this potential alliance is undermined by the company's strategy to form alliances with upstream UKCC. While inter-UKCCs alliance is possible prior to the company's and upstream UKCC' agreement on the land compensation value, we argue that the agreement has put upstream UKCC and the company on a different negotiation path. Consequently, the establishment of this new negotiation path made it very difficult for upstream and downstream UKCC to join forces. Unlike before, they could no longer reconcile their concerns, as doing so would require upstream UKCC to break the agreement on the land compensation value they have just reached with the company.

4.4. Everyday politics and the shaping of local strategic alliances

UKCC members' and local community's different views on the planned hydropower dam show not only how the dam would impact local communities along the river differently, it also brings to light the spatial fragmentation and spatial politics shaping hydropower decision making at the grass roots level. This is most apparent from the formation of strategic spatial alliance between the company and upstream UKCCs on the one hand, and distance relationship between the company and downstream UKCCs' on the other hand. As the company depends on upstream UKCCs' support before it can proceed with the dam construction, it is keen to make the negotiation works. Similarly, as the company does not depend on downstream UKCCs' support for the dam construction, they can ignore their concerns and/or decide to not enter into any negotiation with the UKCCs.

The (re)production of a new spatial imagination, centered on the planned dam site in the vicinity of upstream villages, has divided local community's standpoints with regard to the planned dam project. This fragmentation and division are most apparent from the way the company positioned upstream villages as strategic allies as compared to its view of downstream villages as affected people whose concerns can be ignored. Similarly, upstream villagers view themselves as direct beneficiaries from the hydropower project, instead of affected people. Here, the company did not only disconnect upstream and downstream villages spatial connection, it also undermined local community's ability to act collectively, while reconciling their differences. By forming UKCC at village level, the company has limited the UKCC's role and operational boundary to village level negotiation with the company, rather than through nested inter-village decisionmaking platform. The UKCC organizational design ensures that the company remains the key actors shaping and reshaping the new spatial imagination, while ensuring that inter-UKCCs platform never materialized. As expressed by UKCC member from Saura village: "Initially, I and other UKCC members from Dungeshwor village proposed to the company to have an inter-UKCC committee, to ensure local community would have unified view on the planned hydropower project. When the company did not respond, this idea never materialized" (interview with UKCC member from Saura village, May 2018).

Despite the lack of formal inter-UKCC organizational structure, the upstream and downstream UKCC members used to meet and came together initially, to discuss their concerns and reconcile them into a larger dam-affected people approach, while emphasizing on their unified position with regard to the planned dam project. However, this informal communication network became highly dysfunctional following the upstream UKCC members agreement with the company on the land compensation value. As shared by UKCC member from Dungeshwor village: "In the past, upstream UKCC member (from Thalpatta) would inform us about their planned protests and encourage downstream villagers to join the protests to push for local community's demands for higher land compensation than initially proposed by the company. Yet, once the company agreed on the proposed land compensation value, upstream UKCC member did not communicate anything to downstream UKCC members. I heard about the agreement on land compensation value from my relatives living in upstream villages, and not from the UKCC member. This means that they have agreed on the company's plan to construct the dam, while overlooking how the latter would impact downstream villages" (interview with UKCC member from Dungeshwor village, May 2018). The absence of inter-UKCCs platform and the company's strategic alliance with upstream UKCCs made it impossible for downstream UKCCs to rely on inter-UKCCs networks both formally and informally.

It also creates inter-UKCCs competition as evident in upstream UKCC members' lack of interest to support downstream UKCC members' role in negotiating compensation for the dam's downstream impact with the company. As expressed by UKCC member from Sisne: "Everyone wants something different from the company. Upstream UKCC members and local community want to get land compensation payment, the fishing community downstream want to have training and employment opportunities, while farmers in downstream villages want to have irrigation systems. Nonetheless, the company has to do first thing first, that is ensuring land compensation payment for farmers in upstream villages" (interview with UKCC member from Sisne, May 2018). Obviously, upstream UKCC members have little interest to support downstream UKCC's requests, fearing this would affect their own negotiation with the company on land compensation value. Some members of upstream UKCC deliberately kept relevant information on the negotiation processes concerning the land compensation payment to themselves, fearing that downstream UKCC's request might disrupt the negotiation process and affect the outcome. Here, relevant information on the planned hydropower project (e.g. compensation payment value and agreement) trickles down mainly through the strategic alliances formed by the company and the upstream UKCCs, while excluding downstream UKCCs access to information.

The strategic alliance between the company and upstream UKCC and villages results in further marginalization of the poor. In the absence of inter-UKCCs decision-making platform, the company could direct the entire discussions on compensation to local community living near the dam site, with very little attention, if any, to local community downstream who would be the hardest hit by the hydropower project. The significant stratification within Nepali society enables the company to divide and rule the affected communities, while ignoring the Dalit as the one who will be most affected by the dam development, but whose status in society renders them almost voiceless (Jones, 2012; Sikor et al., 2018).

5. Conclusion

The paper brings to light the spatial dimension in hydropower decision making, and the centrality of strategic alliances formation in the shaping of socio-political production of space, centering on the company's strategy to proceed with the planned hydropower project through the production of new spatial imagination (Low, 2008). It shows how local communities living along the river have different, oftentimes conflicting views with regard to hydropower development project. These views are derived from their relationship with the company, based on their village's spatial importance vis-à-vis the planned dam site, and how the latter predetermined their bargaining power, and thus their ability to negotiate their development needs and concerns.

Referring to the shaping of everyday politics as well as the formation of spatial alliances in hydropower decision making at the local level, the paper illustrates the shaping and reshaping of spatial logic driving hydropower decision-making processes, centering on the company's strategy to include and exclude local community's development needs and concerns, and how these coincide with its objective to proceed with the planned hydropower project. It argues that understanding this spatial logic is key to unpacking power relations (re)shaping hydropower governance landscapes, processes and outcomes.

The Nepal case study clearly shows how the company did not only form strategic alliances with the upstream UKCCs, it also undermined local community's potential ability to come with a unified voice demanding their collective needs and concerns. Lacking any spatial power to gain access to hydropower decision-making processes, downstream UKCCs' lack any bargaining power to push the company to agree on the negotiated terms or even start with the negotiation processes, as the latter is sidelined by upstream UKCCs' support to the planned dam project. While the central government has formulated and implemented various policies and legal frameworks to regulate and manage hydropower development in the country, our case study highlights key policy and institutional gaps in hydropower decision making. As various government agencies are competing for decision-making space, and bearing in mind the country's dependency on foreign direct investments and private sector actor for the sector development, there is a tendency to give the company some leeway to create their own decision-making space, resulting in the latter taking the center stage in hydropower project implementation at the grass-roots level.

The paper argues that the current discourse on anti-dam movement cannot be framed without including local community's diverse views on hydropower development, their dynamic standpoints, how this evolves over time, and its implications for social justice (Sen, 2009; Visser, 2001; Young, 1990), while asserting that 'notions of justice are more likely to be plural than converge on a single meaning' (Sikor et al., 2018: 14). Moving beyond distributional and procedural justice (Schlosberg, 2007), it highlights the need to 'recognize that justice has different meanings for different people in different places' (Tschakert, 2009: 731), while unpacking the processes that (re)produce misrecognitions, exclusions, through which injustices are created and sustained. For the Upper Karnali case in particular, this means connecting upstream UKCCs' negotiated demand for land compensation payment with downstream UKCCs' concerns on how the planned hydropower project would negatively impact their agricultural and fisheries resources. Upstream UKCC and villagers view justice as getting the agreed land compensation value. Downstream UKCC and villagers view justice as getting their concerns heard and addressed by the company. Putting these different perceptions of justice within the context of hydropower decision making, the paper highlights how views of justice can be contradictory, as this manifested in upstream and downstream UKCC and villagers' negotiation strategies with the company, and how the latter defines their respective position to support and oppose the planned hydropower project. ²⁸Or, as stated by Walker (2009: 40): "as different groups will resort to different

²⁸ On challenges for cross-scale collective action and stakeholder representation in river basin management see Swallow et al. (2006) and Wester et al. (2003).

conceptions of justice to bolster their position, so will different groups work with different understandings of the spatiality of the issues at hand".

Placing this within the context of state transformation and the current move towards federalism, it highlights the need to understand the overall shaping of spatial politics and broaden the overall notion of accountability of elected local governing bodies, beyond their respective administrative and political units (e.g. village, municipality), as it is pertinent that the planned development captures development needs and concerns of the poorest and most marginalized groups of the society. From a policy perspective, this highlights the role that can be played by local governing bodies in shaping the country's development in general and with regard to hydropower development in particular. Following federalism, local governing bodies could ensure that local community's negotiation with hydropower company is not based only on the relations between certain UKCC with the company, but most importantly driven by the need to distribute benefits and impacts of hydropower development more equally. This highlights the need to develop policy framework and mechanisms to govern and direct hydropower development practices at local level, to ensure that hydropower project captures local community's diverse development needs and aspirations.

Declaration of Competing Interest

None.

Acknowledgements

We would like to thank Prof. Arun Agrawal, World Development Editor in Chief and two unanimous reviewers for their valuable comments and feedbacks. The study is made possible by the generous support of the American people through the United States Agency for International Development (USAID). The contents are the responsibility of the authors and do not necessarily reflect the views of USAID or the United States Government.

References

- Agrawal, A. (2014). Studying the commons, governing common pool resource outcomes: Some concluding thoughts. *Environmental Science and Policy*, 36, 86–91.
- Agrawal, A., & Benson, C. (2011). Common property theory and resource governance institutions: Strengthening explanations of multiple outcomes. *Environmental Conservation*, 38, 199–210.
- Agrawal, A., Brown, D. G., Rao, G., Riolo, R., Robinson, D. T., & Bommarito, M. II, (2013). Interactions between organizations and networks in common pool resource governance. *Environmental Science and Policy*, 25, 138–146.
- Agrawal, A., & Gibson, C. (1999). Enchantment and disenchantment: The role of community in natural resource conservation. World Development, 27(4), 629–649.
- Alam, F., Alam, Q., Reza, S., Khurshid-ul-Alam, S. M., Saleque, K., & Chowdhury, H. (2017). A review of hydropower projects in Nepal. *Energy Procedia*, 110, 581–585.
- Amirova, I., Petrick, M., & Djanibekov, N. (2019). Long and short-term determinants of water user cooperation: Experimental evidence from Central Asia. World Development, 113, 10–25.
- Armbrecht, A. (1999). The importance of being local: Villagers, NGOs and the World Bank in the Arun Valley, Nepal. *Identities*, 6(2–3), 319–344.
- Arora, V. (2009). They are all set to dam(n) our future: Contested development through hydel power in democratic Sikkim. *Sociological Bulletin*, 58(1), 94–114.
 Bakker, K. (1999). The politics of hydropower: Developing the Mekong. *Political*
- *Geography*, *18*(2), 209–232. Baruah, S. (2012). Whose river is it anyway? Political economy of hydropower in the
- Eastern Himalayas. Economic and Political Weekly, 47(29), 41–52. Berking, H., Frank, S., Frers, L., & Low, M. (2006). Negotiating urban conflicts.
- Interaction, space and control. Bielefeld: Transcript.
- Burawoy, M. (1991). The extended case method. In M. Burawoy (Ed.), Ethnography unbound: Power and resistance in the modern metropolis (pp. 271–287). Los Angeles: University of California Press.
- Burrier, G. (2016). The developmental state, civil society and hydroelectric politics in Brazil. Journal of Environment and Development, 25(3), 332–358.

- Chung, H. (2012). The spatial dimension of negotiated power relations and social justice in the redevelopment of villages-in-the-city in China. *Environment and Planning A*, 10(45), 2459–2476.
- Cody, K. C. (2018). Upstream with a shovel or downstream with a water right? Irrigation in a changing climate. *Environmental Science and Policy*, 80, 62–73.
- de Vries, P. (2007). Don't compromise your desire for development! A Lacanian/ Deleuzian rethinking of the anti-politics machine. *Third World Quarterly*, 28(1), 25–43.
- Dixit, A., & Gyawali, D. (2010). Nepal's constructive dialogue on dams and development. *Water Alternatives*, 3(2), 106–123.
- Dukpa, R. D., Joshi, D., & Boelens, R. (2018). Hydropower development and the meaning of place: Multi-ethnic hydropower struggles in Sikkim, India. *Geoforum*, 89, 60–72.
- Fraser, N. (1998). Social justice in the age of identity politics: Redistribution, recognition, participation. Discussion Paper. Berlin: WZB Berlin Social Science Center.
- Ghimire, S., Tuladhar, A., & Sharma, S. R. (2017). Governance in land acquisition and compensation for infrastructure development. *American Journal of Civil Engineering*, 7(3), 169–178.
- Harvey, D. (1996). Justice, nature and the geography of difference. Cambridge: Blackwell Publishers.
- Huber, A., & Joshi, D. (2015). Hydropower, anti-politics and the opening of new political spaces in the Eastern Himalaya. World Development, 76, 13–25.
- IBN (2014). Project development agreement Upper Karnali hydropower project. Kathmandu: Investment Board of Nepal.
- IBN (2015). Upper Karnali field visit report. Kathmandu: Investment Board of Nepal. IHA (2018). Hydropower Status Report: Sector trends and insights 2018. London: International Hydropower Association Limited.
- Jones, P. S. (2012). Powering up the people? The politics of indigenous rights implementation: International Labour Organisation Convention 169 and hydroelectric power in Nepal. *International Journal of Human Rights*, 16(4), 624–647.
- Klein, P. (2015). Engaging the Brazilian state: The Belo Monte dam and the struggle for political voice. *Journal of Peasant Studies*, 42, 1137–1156.
- Lawoti, M. (2012). Ethnic politics and the building of an inclusive state. In S. von Einsiedel, D. Malone, & S. Pradhan (Eds.), *Nepal in transition: From people's war to fragile peace* (pp. 129–152). Cambridge: Cambridge University Press.
- Lecours, A. (2013). The question of federalism in Nepal. The Journal of Federalism, 44, 609–632.
- Lefebvre, H. (1991). The production of space. Cambridge: Blackwell.
- Lord, A. (2014). Making a hydropower nation: Subjectivity, mobility and work in the hydroscapes of Nepal. *Himalaya*, 34(2), 111–121.
- Lord, A. (2016). Citizens of a hydropower nation: Territory and agency at the frontiers of hydropower development in Nepal. *Economic Anthropology*, 3, 145–160.
- Low, M. (2008). The constitution of space: The structuration of spaces through the simultaneity of effect and perception. *European Journal of Social theory*, 11(1), 25–49.
- Massey, D. (1995). Space/power, identity/difference: Tensions in the city. In A. Merrifield & E. Swyngedouw (Eds.), *The urbanization of injustice* (pp. 1–17). London: Lawrence and Wishart.
- Mayerfeld-Bell, M. (1997). The ghosts of place. Theory and Society, 26(6), 813-836.
- McAdam, D., McCarthy, J. D., & Zald, M. N. (1996). Comparative perspectives on social movements: Political opportunities, mobilizing structures, and cultural framings. Cambridge: Cambridge University Press.
- McCord, P., Angelo, J. D., Gower, D., Caylor, K. K., & Evans, T. (2019). Household-level heterogeneity of water resources within common pool resource systems. *Ecology and Society*, 22(1), 48.
- Merrifield, A., & Swyngedouw, E. (1996). The urbanization of injustice. London: Lawrence and Wishart.
- Middleton, T., & Shneiderman, S. (2008). Reservations, federalism and the politics of recognition in Nepal. *Economic and Political Weekly*, 43(19), 39–45.
- MoEST (2006). A handbook on licensing and environment assessment processes for hydropower development in Nepal. Kathmandu: Ministry of Environment Science and Technology.
- MoFE. (2018). Hydropower environmental impact assessment manual. Kathmandu: Ministry of Forest and Environment.
- Molle, F., Foran, T., & Kakonen, M. (2009). Contested waterscapes in the Mekong region: Hydropower, livelihoods and governance. London: Earthscan.
- Murton, G., Lord, A., & Beazley, R. (2016). Handshake across the Himalayas: Chinese investment, hydropower development, and state formation in Nepal. *Eurasian Geography and Economics*, *57*(3), 403–432.
- Ostrom, E. (2011). Reflections on some unsettled problems of irrigation. *American Economic Review*, 101, 49–63.
- Paudel, D. (2016). Ethnic identity politics in Nepal: Liberation from, or restoration of, elite interest? *Asian Ethnicity*, *17*, 1–18.
- Pierson, P. (2004). Politics in time: History, institutions, and social Analysis. Princeton: Princeton University Press.
- Pirie, G. H. (1983). On spatial justice. Environment and Planning A, 15, 465-473.
- Rest, M. (2012). Generating power: Debates on development around the Nepalese Arun 3 hydropower project. *Contemporary South Asia*, 20(1), 105–117.
- Schlosberg, D. (2007). Defining environmental justice: Theories, movements, and nature. Oxford: Oxford University Press.
- Schmid, C. (2008). Henri Lefebvre's theory of the production of space: Towards a three-dimensional dialectic. In K. Goonewardena, S. Kipfer, R. Milgrom, & C. Schmid (Eds.), Space, difference, everyday Life: Reading Henri Lefebvre (pp. 27–45). New York and London: Routledge.

Sen, A. (2009). The idea of justice. Harvard: Harvard University Press.

- Sewell, W. H. (1996). Three temporalities: Toward an eventful sociology. In T. McDonald (Ed.), *The historical turn in the human sciences* (pp. 245–280). Ann Arbor: University of Michigan Press.
- Sharma, K., & Khanal, S. N. (2010). A review and analysis of existing legal and policy issues related to land tenure and agriculture in Nepal. Kathmandu University Journal of Science, Engineering and Technology., 6(2), 133–141.
- Shneiderman, S., & Tillin, L. (2015). Restructuring states, restructuring ethnicity: Looking across disciplinary boundaries at federal futures in India and Nepal. *Modern Asian Studies*, 49, 1–39.
- Sikor, T., Satyal, P., Dhungana, H., & Maskey, G. (2018). Brokering justice: Global indigenous rights and struggles over hydropower in Nepal. *Canadian Journal of Development Studies*, 1–19.
- Sneddon, C., & Fox, C. (2012). Water, geopolitics and economic development in the conceptualization of a region. *Eurasian Geography and Economics*, 53(1), 143–160.

Soja, E. (2010). Seeking spatial justice. Minneapolis: University of Minnesota Press.

- Subba, T. (2014). Power projects, protests and problematics of belonging in Dzongu, Sikkim. In G. Toffin & J. Pfaff-Czarnecka (Eds.), Facing globalization in the Himalayas: Belong and the politics of the self (pp. 326–343). New Delhi: Sage Publications.
- Suhardiman, D., Bastakoti, R. C., Karki, E., & Bharati, L. (2018). The politics of river basin planning and state transformation processes in Nepal. *Geoforum*, 96, 70–76.

- Swallow, B., Johnson, N., Meinzen-Dick, R., & Knox, A. (2006). The challenges of inclusive cross-scale collective action in watersheds. *Water International*, 31(3), 361–375.
- Thakkar, H. (2008). India's dam building abroad: Lessons from the experience at home? New financers and the environment. Berkeley: International Rivers.
- Tschakert, P. (2009). Digging deep for justice: A radical re-imagination of the artisanal gold mining sector in Ghana. Antipode, 41(4), 706–740.
- Varughese, G., & Ostrom, E. (2001). The contested role of heterogeneity in collective action: Some evidence from community forestry in Nepal. World Development, 29(5), 747–765.
- Visser, G. (2001). Social justice, integrated development planning and postapartheid urban reconstruction. Urban Studies, 38, 1673–1699.
- Walker, G. (2009). Beyond distribution and proximity: Exploring the multiple spatialities of environmental justice. In R. Holifield, M. Porter, & G. Walker (Eds.), *Spaces of environmental justice* (pp. 24–46). New Jersey: Wiley-Blackwell.
- Wester, P., Merrey, D. J., & de Lange, M. (2003). Boundaries of consent: Stakeholder representation in river basin management in Mexico and South Africa. World Development, 31(5), 797–812.
- Yin, R. K. (1994). Case study research: Designs and methods Applied social research methods series no. 5. London and New Delhi: Thousand Oaks: Sage Publications.
- Young, I. M. (1990). Justice and the politics of difference. Princeton: Princeton University Press.