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Water Security and Inclusive Water Governance in the Himalayas



- ✓ How does a social justice framing help understand local peoples' claims over natural resources?
- ✓ How do power relations shape water access and distribution between core and fringe areas in Nepali towns?
- ✓ What dynamics of conflict over water resources are emerging in the urbanising mid-hill towns of Nepal?
- ✓ How are civil-society groups responding to large dam projects in the Eastern Himalaya region of India?
- ✓ What issues and opportunities the newly formed local governments in Nepal are facing in implementing inclusive water governance?
- ✓ How can participatory community engagement transform gender relations in agriculture and water management?
- ✓ How do agrarian structures affect groundwater access for irrigation in Nepal's Tarai Madesh?
- ✓ How can local experts contribute to inclusive water governance?

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Contact:

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Southasia Institute of Advanced Studies (SIAS)
NK Singh Marga-304, Minbhawan-31
Kathmandu, Nepal
PO. Box 23499

Telephone: 977-1-4469801

E-mail: sias-info@sias-southasia.org

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EDITORIAL: WATER SECURITY AND INCLUSIVE WATER GOVERNANCE IN THE HIMALAYAS

Stephanie Leder¹, Dil Khatri² and Hemant Ojha³

The Himalayan region is known as the 'water tower' of South Asia (Bajracharya et al., 2015; Singh and Pandey, 2019), and yet, the problem of water insecurity is escalating in urban, peri-urban and rural areas of the lower Himalayan region (Ojha et al., forthcoming). Three drivers lead to water crisis in the region. First, climate change affects the water availability as the Himalayan region experiences faster rate of warming (Immerzeel et al., 2019). Second, there is an increasing demand for water due to population growth, rapid rate urbanisation, and industrial activities (Connor, 2015). Third, there is an increasing level of disparity over water access and use, attributed to existing or

even rising socio-economic inequalities in both rural and urbanising areas (Narain et al., 2013; Zimmer, 2011). These problems are especially set to escalate in contexts of political and climate uncertainty, while efforts to find solutions face a multiplicity of competing knowledges (Karpouzoglou & Zimmer, 2016; Mehta, 2007). Powerful actors such as industries, hydropower projects, and development agencies control water resources and drive decisionmaking processes in water governance, marginalising smallholders, women and tenant farmers, and migrants (Joshi et al., 2019; Sugden, 2019, Leder et al., 2019a; Leder et al., 2017).

¹ Department of Urban and Rural Development, Swedish University of Agricultural Sciences (SLU), Uppsala, Sweden; Research Fellow, Southasia Institute of Advanced Studies (SIAS), Kathmandu, Nepal. Corresponding email: stephanie.leder@slu.se

² Southasia Institute of Advanced Studies (SIAS), Kathmandu, Nepal.

³ University of Canberra & Institute for Study and Development Worldwide (IFSD), Sydney, Australia.

We consider water security as a vision which can be achieved through the means of inclusive water governance. perspective is strongly rooted in a social and environmental justice perspective which uncovers the multiple relational ties through which diverse and differently powerful actors interact among themselves and with the environment. The Himalayan region offers an urgent context to explore water security questions deeply embedded in contested political fields. A number of governance challenges prevent diverse Himalayan communities to have reliable and equitable access to water. While approaches such as integrated water resource management decentralising government arrangements give hope for more locally adaptive approaches, the sectorial approach of ministries to implement policies prevent the implementation of such ambitions (Suhardiman et al., 2015). Similarly, rapid urban development processes escalate resource conflicts, historically rooted in structural inequalities based on landownership, gender, ethnicity, class and other divides which shape water governance at its deepest core. State, market and civil society actors engage in contention with each other in policy and implementation processes, as they bring diverse intentions to improve "water security" and competing interests (Leder et al., 2017; Shrestha and Clement, 2019).

This Special Issue deals with disparities and inequalities in access to and the governance of water resources in the lower Himalayas, particularly in Nepal and India. The papers in this Issue examine conflicts and contestations over water as well as the impact of growing water insecurity on rural, peri-urban and urban communities.

Most importantly, contributors examine the way in which diverse struggles over water could be addressed by more inclusive and climate adaptive water governance reforms.

THE THORNY QUESTION OF JUSTICE IN LOCAL WATER GOVERNANCE

Researchers on water security and local water governance stress the need for the analysis of socio-cultural, political, and economic relations to understand how differentiated access to and control over water is linked to poverty, livelihood options and landlessness (Harris, 2008; Sultana, 2010; Ahlers et al., 2014; Zimmer, 2011). In the lower Himalayas, everyday relations around gender, age, ethnicity and caste differences shape water access (Resurrección et al., 2019; Leder et al., 2017; Leder & Sachs, 2019). It is these kinds of complex social relations which are often hidden in mainstream water security and governance research but are vital to understand diverse and allocation sometimes covert water strategies (Zwarteveen & Neupane, 1996). We envisioned this Issue to explore how these political and economic dynamics shape and reshape water management in contexts of urbanisation, out-migration, and anthropogenic climate change. This Special Issue includes six original research papers and two commentary papers which address emerging questions on water security, access, and distribution in the lower Himalayan region. All papers use the angle of social and environmental justice, and offer fresh and alternative approaches development pathways towards equitable and inclusive water governance.

Here we highlight key messages of the six papers and two commentaries. Dhungana and Maskey (2019) draw attention to three social justice concerns in contestations over water resources: first, recognition of local knowledge and customary tenure; second, competing participative claims by diverse local communities, state bodies and private actors; and third, distributive issues, such as financial burdens and benefits. Drawing on three case studies, the authors call for political articulation by citizens demanding compensation from a Hydropower project in Lamjung of Nepal. They also argue for communities' rights to fishing in National Parks, and for compensating their contributions from REDD+ programs.

Pokharel et al. (2019) examine inequalities in water distribution between core and fringe areas in the Nepali town of Dhulikhel. They unpack the power exercised by elites which, highlighting discriminatory water tariffs, uneven water availability throughout the day, and unequal water source access due to social and castebased discrimination. Further, there are also disparities with regard to participation in decision-making in municipal water governance as there is limited participation of women and marginalised groups in decision-making.

Similarly, Devkota et al. (2019) examine the unequal distribution of water within municipal areas, based on social and spatial differentiations at urban fringes. They analyse upstream-downstream conflicts over water resources in the Nepali periurban communities, Dhulikhel and Bidur. Their case studies show how people from fringe areas have been discriminated in water access, and resulting contestations over water. They identify increased

ability of weaker actors to articulate their voices, which led to open contestations of unequal water distribution practices. The paper draws attention to the importance of political agencies supporting the articulation of the marginalised groups in order to challenge inequitable water governance mechanisms (Devkota et al., 2019).

Sugden (2019) argues that the historically unequal agrarian structure and land distribution lie at the heart of the inequitable access to groundwater for irrigation in Nepal's Tarai Madhesh. He reports that smallholders and tenant farmers lack incentives and the ability to afford irrigation equipment. Their marginalisation from groundwater access can only be addressed through an integrated approach, combining radical redistributive land reforms and technical provision and access to low-cost and efficient pumping technology.

ENGAGING IN CONFLICTS OVER WATER AND STRUGGLING FOR JUSTICE

Engaging at the science-policy-practice interface can offer some promise towards more inclusive and climate adaptive water governance (Ojha et al., 2019). Ojha et al. (2019) see 'the potential of knowledge-led interventions in the Himalayan context, where interactive and iterative research can create space for new hybrid, pragmatic and at times critical and creative forms of knowledge and expertise around water management and policy'. Their evidence is based on more than five years of engaged research and engagement at Dhulikhel, a small town in the middle hills of Nepal.

Joshi et al. (2019) report how civic action both counteracts and aligns to dominant development pathways. Their case study examines the civic response to a large hydropower dam in North East India which has been presented as win-win project to counteract climate change and contribute to economic development. The Affected Citizen of Teesta movement in Sikkim has become successful to halt some of the proposed dam projects in the Dzonju region, demonstrating some resonance of the struggle for justice. However, NGOs in Darjeeling are depoliticised by being funded for pre-determined development activities. In this way, NGOs fail to hold the state accountable for social and environmental excesses as they struggle to exist and act in relation to the developmental bureaucracy.

White and Haapala (2019) examine opportunities for more inclusive water governance through policy and institutional reform in the recently reformed local government structures in Nepal. It is widely expected that the new local governance structure be more responsive to the issue of local water security, as they are closer to the citizen and have the authority to craft policies ensuring rights to access of drinking water for marginalised groups. However, despite ongoing decentralisation reforms, discriminatory practices in water governance continue to surface, especially when powerful actors exercise increasing control over water resources.

Leder et al. (2019b) argue for more participatory community engagements in order to promote the empowerment of women and other marginalised sections of communities. They examine opportunities to promote critical consciousness on gender norms, roles and relations in agriculture and local water resource management

through an innovative "Participatory Gender Training for Community Groups". The approach is based on critical pedagogy (Freire, 1990) and principles of democratic and visual learning theories to promote empathy and critical consciousness on gender relations in resource management groups.

TOWARDS INCLUSIVE AND CLIMATE ADAPTIVE WATER GOVERNANCE IN HIMALAYA

A range of institutional innovations as well as multi-sectoral and multi-actor approaches are needed in order to explore and promote transformative pathways for more inclusive and climate adaptive water governance in the Himalayan communities. We argue for a more discursive and localised understanding of justice, which addresses both social and material dimensions of inequality and marginalisation. This may help to open up spaces for change. Dhungana and Maskey (2019) contend that acquiring justice requires political mobilisation and political articulation, and the translation of policies into practice. Policy and institutional reforms in Nepal's ongoing decentralisation give some hope for more inclusive governance, particularly through inclusion of marginalised groups in decision-making and ensuring access of water (White and Haapala, 2019). Devkota et al. (2019) call for greater participation in decision-making and for innovative institutional mechanisms upstream-downstream cooperation way to address water conflicts. Similarly, Pokharel et al. (2019) argue for addressing the deeper structural divide between core and fringe areas and the need for the empowerment of fringe areas to improve water access for the most socially and geographically marginalised people. Sugden (2019) argues that innovative and radical mechanisms such as farmer collectives which pool land, capital and labour are required to improve access to groundwater irrigation. Joshi et al. (2019) suggest mobilising civic potential to challenge and counteract discriminatory practices and projects that affect people. We hope that the contributions in this Special Issue open up further scientific

and policy debates on the challenges around inclusive water governance, as well as opportunities for contextualised understandings of water security. Collectively, this Issue points to some important directions for water security in the lower Himalayan region, including transformative pathways of change driven by engaged actors concerned with greater social and environmental justice.

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