

International Journal of the Commons

Vol. 13, no 1 2019, pp. 130–152

Publisher: Uopen Journals

URL: <http://www.thecommonsjournal.org>

DOI: 10.18352/ijc.920

Copyright: content is licensed under a Creative Commons Attribution 3.0 License

ISSN: 1875-0281

Masculinities and hydropower in India: a feminist political ecology perspective

Gitta Shrestha

International Water Management Institute (IWMI), Nepal Office, Nepal

gitta.shrestha@cgiar.org

Deepa Joshi

Coventry University, UK

CGIAR Research Program on Water, Land and Ecosystems (WLE) and International Water Management Institute (IWMI), Sri Lanka

deepa.joshi@cgiar.org

Floriane Clement

DYNAFOR, Université de Toulouse, INPT, INRA, France and International Water Management Institute (IWMI), Nepal

floriane.clement@inra.fr

Abstract: Mainstreaming gender in water governance through “how to do gender” toolkits has long been a development focus. It has been widely argued that such toolkits simplify the complex, nuanced realities of inequalities by gender in relation to water and fail to pay attention to the fact that the proposed users of such gender-water toolkits, i.e. mostly male water sector professionals, lack the skills, motivation and/or incentives to apply these toolkits in their everyday work. We adopt a feminist political ecology lens to analyse some of the barriers to reduce social inequalities in the management of global commons such as international rivers. Our findings highlight the leap of faith made in the belief that gender toolkits, as they exist, will filter through layers of a predominantly masculine institutional culture to enable change in ground realities of complex inequalities by gender. Analysing the everyday workings of two hydropower development organisations in India, we show how organisational structures demonstrate a blatant culture of masculinity. These two organisations, like many others, are sites where hierarchies and inequalities based on gender are produced, performed and reproduced. This performance of masculinity promotes and rewards a culture of technical pride in re-shaping nature, abiding by and maintaining hierarchy and demonstrating physical strength and emotional hardiness. In such a setting, paying attention to vulnerabilities, inequalities and disparities are incompatible objectives.

Keywords: Feminist political ecology, gender, global commons, hydropower, India, masculinities

Acknowledgement: This study was conducted as part of a five-year research project ‘Hydropower in the Context of Climate Change: Exploring conflicts and fostering cooperation across scales and boundaries in the Eastern Himalayas’ (Grant W.07.68.413) funded by the programme ‘Conflict and Cooperation over Natural Resources (CoCooN)’ a joint initiative of NWO, the Netherlands Organisation for Scientific Research, and the UK Department for International Development. We would like to acknowledge the field assistance provided by Mr. Sangam Katel, Mr. Tseten Lepcha, and Mr. Vijay Thapa for facilitating contacts and supportive documents to get an entry into the hydropower organisations. We would like to thank the insightful comments of three anonymous reviewers.

1. Introduction

In the late 1990s, following pressure by diverse civil society institutions and actors, the World Bank commissioned an independent, multi-actor global evaluation of large dams. The outcome of this review, entitled The World Commission on Dams report (Dams and Development) published in 2000 raised concerns on the social and environmental impacts of large dams. The report acknowledged the various developmental values of large dams but noting the high risks of social and environmental externalities, asked, “are they [large dams] our *only* tool, or [even] our *best* option” (WCD 2000; ii). Large dams were on the decline since then, until a decade later, large dams¹ producing hydropower reemerged in global development policy as clean, green and climate-mitigating: a major source of renewable energy, expected to contribute to economic growth, particularly in emerging markets in the Global South (WEC 2015). This dramatic comeback of large dams as development marks a significant reversal in global environmental policy. Rachel Kyte, the World Bank’s vice president for sustainable development clarified that the earlier move out of hydro “as the wrong message... That was then. This is now. We are back” (Schneider 2013). Exempt of any fossil fuel burning, hydroelectricity production is said to contribute to preserve the global commons. However, there are substantial emissions of greenhouse gas by large reservoirs (Deemer et al. 2016). More importantly, as McCully (1996) noted, water is renewable, yet dams are not.

¹ The IFC Guide to Dams for Malovic et al. (2015, 18) specifies the following typology by scale of production : *Micro* P<0.1 MW; *Small* 0.1 MW<P<10 MW (some countries go up to 30–35 MW); *Medium* 10 MW<P<100 MW; *Large* P>100 MW.

Policy narratives promoting the green development agenda, i.e. hydropower are relatively silent on the earlier noted (WCD 2000) environmental and social risks of large dams. Narratives that reposition large dams as clean and green conceal complex controversies relating to dam development across the Global South and essentially justify the commodifying of global commons such as international rivers and forests, which pose huge social, environmental and economic risks to local populations whose identity, sense of place and livelihoods are deeply rooted in these aquatic and forest ecosystems (Goldman 2001). Several researchers have explained how a neo-liberal vision of environmental governance has allowed powerful players in the state, market and science community to come together and construct rhetorical claims of climate problems and solutions (Goldman 2001; Gough and Shackley 2001; Yates 2012; Joshi et al. 2018). Swyngedouw (2011, 1) articulates that the climate-change discourse has encouraged dramatic reversals in environmental policy—through a “cozy neoliberal consensus... forming a new bourgeois [of the] commons mobilizing all political energies to keep the spluttering accumulation engine going on, ignoring social and environmental cost[s]”. Disregarding past studies in India (and elsewhere) on the efficiency and distributional implications of large dams, which have pointed out that, ‘Overall... large dam construction in India is a marginally cost-effective investment with significant distributional implications, and has, in aggregate, increased poverty’ (Dufflo and Pande 2007, 1), donors, development actors and researchers tend to believe that there are ways and means to develop and implement a new era of dams (“Dams 2.0”), so that “the next generation of global dams do more to improve people’s lives” (Hulme in Manchester University 2017).

It is not surprising that the new focus on socially engineering sustainable dam development also includes new interventions to engender the process of planning and implementing large dams. In the 1990s, there were a few studies on the gendered impacts of large dams and unsurprisingly, there was little policy follow up to these analyses (Mehta and Srinivasan 2000). One significant recent intervention in this regard is Oxfam Australia’s “Balancing the Scale” project in the Mekong basin in South East Asia, which led to the development and launch of a Gender Impact Assessment (GIA) manual (Simon 2013). The manual as outlined on the Oxfam website² would provide,

a step-by-step gender impact assessment process [...] aimed for use by hydropower and consulting companies [giving] guidance to business [stakeholders] for considering gender across the project cycle [...] It provides checklists for developers to help ensure they have assessed gender impacts at different stages of project development... which help guide companies to consider how a [hydropower] project can contribute to positive outcomes for women, as well as men.

² Retrieved from: <https://www.oxfam.org.au/what-we-do/infrastructure-people-and-environment/save-the-mekong/gia-manual/>; last accessed on 11th June 2018.

We recognise that this initiative to enhance gender equality in hydropower development is well-intentioned. However, we question the viability of gender toolkits as standalone tools in transforming the social and environmental impacts of large dams. In particular, the relevance of such toolkits developed initially for a Southeast Asian context is intriguing—as democratic rights and privileges of citizens to question authority and/or government decisions is severely limited in the region. For example, Goldman (2001, 499) writes of the coercive ‘new efforts (by prominent international developmental actors) to classify, colonize, and transnationalise territory in the name of “eco-governance”’ in Laos. One of the co-authors, an invitee to the launch of the GIA manual in Bangkok in 2013, noted how in an informal group exercise during this event, the official contingency from the Lao People’s Democratic Republic (Laos) disagreed to own the term “conflict” as relevant to their country context – there could be no further group discussion until the word “conflict” was scratched out on the sheet of paper which was used to collate the discussion outcomes. We wonder what nature of gendered equalities will possibly be achieved through technocratic fixes such as gender toolkits in such a context.

As we discuss below, toolkits to “do gender” have been historically popular among development actors and practitioners and it would not be exaggerated to say that there are tall mountains of gender toolkits developed for all nature of development interventions and sectors. While many feminist authors have written about the resilience of masculine institutions and sectors to adopt and implement gender toolkits, Standing (2007, 103) interestingly writes about how this failure to mainstream gender is also in part because of the bureaucracy inherent in “the gender and development industry”. According to her, the classic failings of gender mainstreaming are “an agenda driven by outside agencies, often as part of the conditionality for aid and a capture of language and resources by the particular kinds of (gender) elites which the aid industry ‘throws up’ quite uniformly across different development contexts” (ibid). In this paper, our intent is not to discuss the efficacy of gender toolkits—i.e. whether or not they help reduce gendered inequalities in targeted local populations. We focus here on the fact that the investment and initiative mostly by international aid organisations to mainstream gender takes place with little attention to the fact that these take place in diverse settings, contexts and sectors where there is mostly no institutional appetite for critically rethinking development as inclusive. Interestingly, gender toolkits are increasingly being developed for diverse actors and sectors—including private companies engaged in mining and oil industries. From a feminist political ecology point of view, the logic of gender toolkits to minimise gendered inequalities in extractive industries that by design undermine nature and happen in contentious situations of conflict—speaks of a classic depoliticisation of gender, of nature, and of development per se.

A recent study in Laos and Vietnam led by Hill et al. (2017) indicates that while Oxfam’s GIA manual might be useful in minimising the unequal spread of risks and losses to local communities, the biggest need is for key stakeholders (hydropower developers, government and gender experts) to understand how

gender inequalities crosscut class, ethnicity and other divides at scale, including in planning and decision-making processes (Rai 2008). Several researchers have analysed how the structure and culture of development organisations are gendered (Cornwall 2000; Rao and Kelleher 2005; Mukhopadhyay 2014; Milward et al. 2015). In this study, we focus on the contextual and structural factors that shape gender attitudes and everyday practices in hydropower development organisations in Sikkim in Northeast India. By unpacking the performance of gender identities, attitudes, perceptions and practices in these two organisation, we draw attention to how gender is performed, which, allows us to reflect on whether and how gender might be addressed while implementing hydropower projects.

The water sector has been identified as deeply masculine—institutions *manned* (pun intended) to address the governance and management of water through essentially economic and managerial goals and objectives (Mosse 2008). The material and symbolic interrelationships between (water) science, knowledge, technology, infrastructure and masculinity has made these spaces of managing water exclusionary not just to women, but essentially to the marginalised (Harding 1986). The masculinity of the sector, the presence of men and the relative absence of women from water science, knowledge, decision-making, planning and implementation implies that there is an inherent performance and reproduction of a culture of masculinity in these spaces. As we discuss below, in such cultures of masculinity, both men and women aspire to, are assessed by, and need to align to the reproduction of masculine traits of performance—maintaining hierarchies, taking risks, achieving predetermined goals regardless of their impact. What we draw attention to here, is the fact that—critically rethinking the means and ends of pre-determined goals and objectives—is not a common practice in water institutions.

Most research on gender and hydropower projects has focused on the experiences of women (*vis-a-vis* men) in local communities impacted by such projects. However, a core area of research enquiry for feminist political ecology scholars is to understand how micro-politics at scale shape access to the commons and how access to resources and knowledge is gendered (Carney 1996; Rocheleau et al. 1996; Sultana 2009). Understanding that gender inequalities are never absent, we analyse in this paper the micro-politics, knowledge and everyday practices in the organisations implementing hydropower projects: organisations which are re-shaping local environments, and therefore local lives and livelihoods. Our analysis is based on two case studies of hydropower implementing organisations operating in North-eastern India. The region has been the target of ambitious hydropower development plans and because of its complex social, ecological, cultural and political dynamics, there are risks of an unequal distribution of the costs and benefits of hydropower development, particularly to local communities dependent on the river-based ecosystems in the region (Ahlers et al. 2015). Looking inside the organisations that implement hydropower projects, our findings draw on the theorisation of ‘hegemonic masculinities’ (Connell 1995; Collinson and Hearn 1996; Connell and Messerschmidt 2005) and performativity (Butler 1990), which we discuss below, alongside empirical data which gives shape to the theories and concepts used.

2. A feminist political ecology lens

Ecofeminist literature argues that traditional, old-world feminist principles of nature-culture symbolisms and practices were systematically eroded by mechanistic world views of a new socio-economic world order where economic growth and development became synonymous with natural resources exploitation, facilitated by masculine knowledge, science and technology (Merchant 1980; Shiva 1988; Mies and Shiva 1993). This subordination of nature, the characterisation of nature as passive and submissive, traits deemed as feminine—is argued to be synonymous with subjective subordination of the feminine—of women’s bodies, spaces and sexuality (ibid). This philosophy, ecofeminists argue, led to the mutual backgrounding of nature—the domination of nature for the benefit of humans—and the domination of women—who as mothers, caregivers and nurturers would provide “the background to a dominant, foreground sphere of recognised achievement or causation” (Plumwood 1993; 21). There is much written about western, masculine and dominant models of natural resource management and the masculinity, whiteness and elite nature of scientific knowledge, reasoning and power that led to these processes. We refer to these arguments to draw attention to the fact that feminist analysis (Harding 1986) has both challenged the androcentric foundations and principles of what is known and practiced as “science” as well as questioned the limitations of popular (eco)feminist rationale of science as bad, women as good. A feminist political ecology perspective moves beyond simplistic binaries of nature-women relationships and argues for a critical analysis of complex nature-society relations, taking into account that both nature and society are synergistically intertwined as well as corrupted by contextual moralities and politics. It is feminist critique of science (ibid) that calls for questioning the climate mitigation logic associated with hydropower projects, as well as the belief that development through such masculine, bourgeois endeavours can be engendered.

This paper focuses on the everyday practices, experiences, (in)visible norms and values that shape attitudes and behaviours in two hydropower implementing organisations in order to provide an insight into the vast complexities that influence developmental objectives, in this case of proposed climate gains and the possibility of enhancing gender equalities. The point we want to make here is that, the intention to reduce gendered inequalities through toolkits is grossly inadequate in challenging and transforming complex inequalities by gender. Feminist scholars have questioned the effectiveness of gender toolkits to enable transformative change processes (Harcourt 1993; Resurreccion and Elmhirst 2008; Eyben 2010) and argued, that at best, toolkits serve to mask and ignore the profoundly political and patriarchal context of development *per se*; i.e. these approaches ‘depoliticise’ the deep-rootedness of inequalities by gender that exist across scale and context (Panda 2007; Eyben 2010; Brouwers 2013; Verma 2014; Milward et al. 2015). Nonetheless, contrary to feminist critique and analysis, the overwhelming argument of the gender and development industry is that, if ‘gender inequalities’ can

be ‘simply’ explained and to-do tools provided, gender can be mainstreamed anywhere and everywhere—and (in)equalities will be minimised.

Udas and Zwarteveen (2010, 87) noted that gender tools and approaches are mostly not possible to implement because of the deep-rootedness of masculinities, in this case, in the irrigation sector in Nepal:

the contradictions between gender goals and policies and the aspirations of irrigation professionals, which are embedded in the incentive structure of a [masculine] bureaucracy...[how] the prevailing incentives and culture of the irrigation bureaucracy stand in the way of achieving any real progress in terms of gender goals.

Indeed, scholars have long observed that most gender mainstreaming initiatives tend to evaporate, even as they are being implemented (Longwe 1997; Mukhopadhyay 2004; Ahmed 2005; Moser and Moser 2005; Theobald et al. 2005; Parpart 2014; Verma 2014; Milward et al. 2015). Some proximate causes include the lack of investment of adequate time and resources (Rao and Kelleher 2005; Verma 2014) or the lack of authority and power, gender experts hold within organisations—resulting often in a backlash on the very gender experts who are then labelled as ‘not very effective’ (Joshi 2011). However, beyond these proximate causes, structural factors are at play: Eyben (2013) argues that organisations favour ‘development artefacts’, e.g. showing expected outcomes and results, thereby limiting gender mainstreaming to procedural details and not creating space to engage in policy changes transforming power relations.

It is important to note here, that our analyses draws on Butler’s theory of performativity, i.e. gender is not a binary, fixed category that is rooted in biological sex, rather gender is performative: performed unconsciously through repeated habits, responding to context-specific social norms that prescribe how men and women should be and act (Butler 1990). In organisations, everyday practices can be understood as a set of gender performances that construct feminine and masculine identities (McDowell and Court 1994). It is also important to note that masculinity as well as femininity is not a single identity or performance associated with biological sex. There are various kinds of masculinities that compete with each other—those that are subordinating and dominating are called ‘hegemonic’ (Connell 1995). Finally, masculinity is not only performed and differently by different men, it is performed—both in private and public domains by both men and women. Here, factors other than gender—for example, age, class, hierarchy, position, disability etc. all come into play in defining who dominates how, where, when and why. When working within a space that inherently promotes and values dominant, hegemonic attitudes and practices, i.e. a masculine organisation, some women may identify themselves and act as ‘one of the boys’ to fit into the hegemonic masculine culture. In doing so, women often reinforce existing gender inequalities by accepting gender discrimination and devaluing feminine

traits, in order to gain the acceptance of other men in the organisation (Powell et al. 2009). A feminist political ecology perspective adds the dimensions of space and the materiality of nature to such analyses, interrogating how everyday practices in organisations relate to the physical characteristics of the environment where different types of staff work and how in turn such characteristics reinforce hegemonic masculinities.

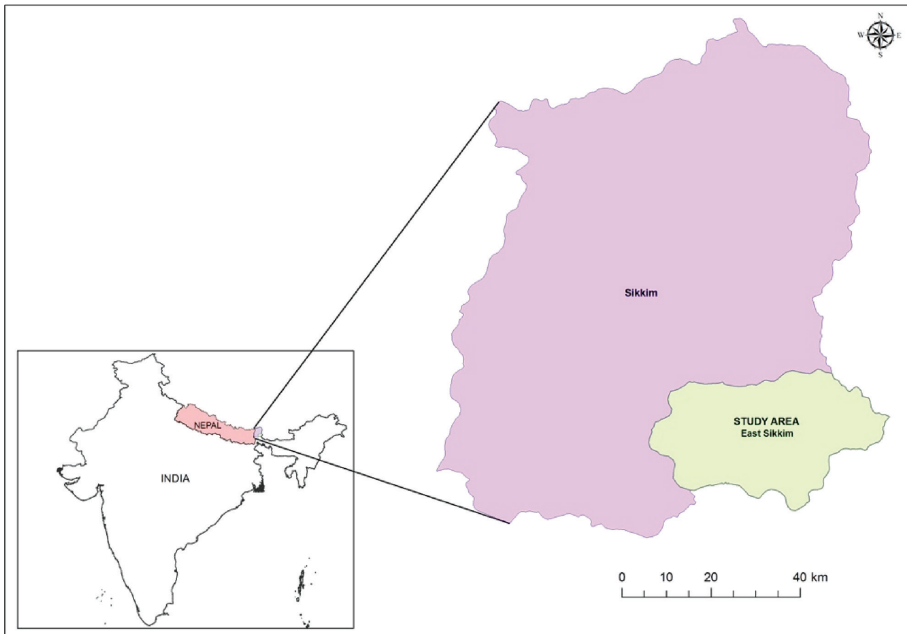
3. Methods

In the sections below, we discuss two case study examples of hydropower organisations, a public sector enterprise (X) and a private company (Y), operating in Sikkim, a state located in North-eastern India (Map 1).

The two case study organisations were selected in order to include a semi-autonomous public sector undertaking (organisation X) and a private hydropower company (organisation Y). At the time of the study, organisation X had 277 staff members, of which 20 were female, including three females in executive positions (two female engineers and one HR executive). In organisation Y, out of 40 staff members, there were four females all of whom held low tier administrative (three) and technical assistant (one) positions. Whereas all staff positions in organisation X were permanent, staffing in organisation Y was project-based and competitive. Nonetheless, in both organisations and more so in organisation X, social networks influenced recruitment, transfer and performance evaluations. However, the project-based employment in organisation Y seemed to result in more stress and pressure among the employees in adhering to project deadlines. In both organisations, the female staff members were not stationed in the field sites (powerhouse and dam office).

One of the co-authors conducted semi-structured, in-depth interviews with staff in both organisations from December 2015 to January 2016. The informants were purposively selected in each organisation to ensure a representation across hierarchies and disciplines. All female staff members were interviewed in both organisations along with a total of 31 male staff members from both organisations. The interviews were conducted in the main and field offices of the two organisations as well as at the site of the powerhouse where these dams are operated. Interviews were conducted in the language that the respondents were most familiar with: English, Nepali or Hindi. With consent of the respondents, notes were taken during interviews. Data collected were translated, transcribed and analysed through MAXQDA qualitative analysis software. Emerging concepts and ideas were coded at the initial phase based on patterns that could be observed, later the data was grouped at an interpretative level (Saldana 2009).

It was not easy to research hydropower organisations. The co-author spent a significant time building rapport with various individuals in both organisations. It took time and effort to get various permission and to convince the management and staff in both organisations to be interviewed. Through help and



Map 1: Location map of the study area in North-eastern India.
Source: IWMI, Nepal.

support of personal contacts and locally-based researchers, the field researcher accessed different political and bureaucratic channels including written permission from the Sikkim State Authority and Regulatory Commission in order to request organisation X to allow her entry into their offices and field sites. The same document was useful to get entry into organisation Y, however, in this case, the organisational headquarter came to know of the research and strongly objected to the researcher entering and/or conducting interviews at the dam site. While the senior-most officials (chief engineer and senior human resource manager/s) were initially receptive and relatively open to discussions, with time, there was increasing resistance to conduct interviews. This could be because the co-author was an ‘outsider’ as a Nepali female researcher. Dam development is a contentious activity in the region and the human resource department in both organisations suspected that there was a hidden motive of collecting confidential hydropower data. The researcher was regularly reminded that hydropower was a symbol of national integrity and that the special permission (provided to her) to enter hydropower development offices and sites—was not to be *misused*. Other challenges to conduct interviews included limited time allotted by the respondents, the unwillingness of the senior managers to be interviewed and the reluctance from most staff members to share information. The workplaces were often

crowded and the lack of privacy discouraged conversations relating to sensitive issues. No interviewees agreed to meet outside the workplace. Lastly, the management was extremely reluctant to share any written documents, so we could collect and review only secondary data that were accessible on the organisational websites. The sensitive nature of the research explains the steps taken here to ensure the confidentiality and anonymity of the respondents and the organisations. Finally, the small research sample size and the few women staff members in both organisations did not allow us to compare the experiences of female respondents working at different levels/hierarchies in the two organisations. The findings presented thus tend to universalise the experiences of women vis-à-vis men—although we are well aware that gendered experiences are impacted by class/position hierarchies.

4. Results: performing masculinities

In this section, we discuss how the practice of engineering and the performance of masculinities reiterate one other. The respondents, particularly men from different departments in both organisations, associated the discipline of engineering with social values such as power, status, prestige and ability. These are precisely the values also associated with masculinity. Becoming an engineer is often a mark of honour for a male individual as well as for his family, conforming to personal and societal masculine ideals and expectations. Societal expectations in the first place, encourage, privilege and demand that men, rather than women, pursue ‘valued’ engineering education and careers. Many male informants in this study reported that expectations from family, friends and the society largely influenced their career in engineering. The hydropower sector in particular, symbolises ‘male’ capabilities to restructure and control nature (water)—in line with the age-old demonstration of masculinity through the control of nature. This symbolic masculinity of technical know-how and skills in the building and execution of dams, ascribes to its architects, mostly male engineers and technicians, masculine values of achievement, power and success.

Traditionally, manliness is defined as a man’s ability and responsibility to provide for his family and be financially secure and socially acclaimed (Connell 1995). These traits for manliness are fulfilled by the role of the hydropower engineer. The need for men to be providers was particularly pronounced in the respondents’ responses. For them, an engineering profession is a social compulsion rather than an issue of personal interest. In the sections below, we discuss three issues that show the intertwine of performed and reproduced masculinity and the practice of engineering. We conclude these analyses with an example of a young female engineer, which shows how the performance and culture of masculinity disallows and discourages change in individual values, beliefs and practice towards greater gender equality.

4.1. Reshaping nature—taking risks and being men

Engineering work, which requires re-shaping and re-ordering “rugged terrains”, is vastly exaggerated by the men who service this sector as immensely risky, and the ability to undertake such risks are perceived and positioned as a testimony of masculinity:

For civil engineers, every moment of life is a challenge. Once you are in the field, you never know whether you will return home safe or not. My initial years were very challenging, because, firstly, as I was starting my career, it was the period where I had to prove my calibre for further growth in the organisation. Secondly, I was in foreign land and had to adapt with the social setting around by any means. Thirdly, I was not able to bring my spouse along to such rugged terrain. Fourthly, project site at that time was not well developed: neither had they mobile facilities, good road network nor televisions. Because of remote location of the project, we didn't get balanced food diet and other basic needs. Fifth, language was a great barrier for us, we didn't know the local dialect of the region. We would communicate with the locals in gesture (male, 55, organisation X).

The ability to do such tasks requires, according to the respondents, risk-taking skills and capabilities, which is believed to be inherently wired in men—an evidence of men's masculinity (DDI 2009). The building of large dams, which one would expect to be planned well enough to minimise risks, is perceived and experienced as highly risk-prone. By working in remote locations, blasting tunnels through solid mountains of rocks, stopping and containing the flow of mighty rivers, male technicians across the hierarchy of the institution demonstrate their ability to take risks and achieve the unachievable. The men we spoke to proudly presented their heroic competence and risk-taking behaviour, which they claimed made them distinct, different from others, including women. A civil engineer, stationed at the dam site, spoke of the challenging nature of his work:

There is risk. [...] Engineers, especially those who do night shifts, bear huge risks. Recently, one of our engineers was injured near the eye. You won't believe, you will be scared even to listen to these facts... One has to go 350 meters down a vertical shaft in the rocks and in water, and work there. You need a strong heart for such kind of work. There is a case of someone who died while working in that depth. Even when a small stone fall [sic], it works like a bullet when it travels to 350 meters. Of course, we wear helmets for protection, but this does not compare at all to the risks involved. One person died, and another person had his hands broken—all on this site. You need a strong heart. Our engineers, surveyors, CEO, they all work there. There is risk everywhere (male, 48, organisation Y).

The scale of risks varies for different staff depending on their position and expertise. However, almost every male respondent in both organisations, technical and non-technical, shared their own versions of hardships, even those not involved in construction work, such as this respondent:

While implementing environment management plans, we need to go to forest areas with forest officials. On the way, one often has to spend entire nights in the vehicle. When I was in Arunachal Pradesh, I had to sleep in the vehicle one night due to a snow blockade. Females cannot handle such situations (male, 43, organisation X).

In our interviews, we noted several parallels drawn between masculinity and being an engineer in the hydropower sector in the way in which the respondents narrated their job. They presented their job as masculine and challenging, socially and physically risk-prone and needing adaptation skills and capabilities. They frequently used metaphors of 'army life' and 'forced bachelorhood' to describe their work in the hydropower sector, metaphors that are associated with masculinity.

According to the respondents, not all men are able to conform to these masculine norms of being tough, risk-taking, working long hours and living without their family. These men eventually move out of job or, forced by the compulsions of enacting their masculinity, learn to perform such tasks.

There is reluctance at the initial phase, when a fresher is assigned a job in a rough terrain, but slowly the mind comes to the track. I have spent more than 30 years in these areas, as I didn't have any other option. It has been 15 years that I am working in this company. If I get a better opportunity, I will quit my job tomorrow. But until such opportunity comes, I have to work here, so I have to fix my state of mind accordingly. It is difficult to work in this company; those who work here have a difficult family life. But what can one do, they [men] have to work (male, 48, organisation Y).

Such perceived performativity reinforces stereotypical images of men as the 'authentic worker', a phenomenon that reinforces and encourages masculine organisational practices that are valued in the capitalist economic system, such as working long hours, staying in the office beyond office hours, being available for work 24/7. Time commitment is indeed considered highly important during both construction and operation activities: as a male HR manager shared, "They [the men] work continuously. For civil engineers, there is no day or night. They have to visit dams, tunnels, they have to keep the machines in process, it is very difficult to work in such environment" (male, 36, organisation Y).

The long hours work culture is not only limited to work at the project sites but is widespread across offices. It is promoted as a natural aspect of hydropower work, blending synonymously with the culture and practices of male employees who work in locations outside cities and towns, who live alone, away from the families. When such male workers are accompanied by their wives and family

(on site), they can continue to commit time to work, because their wives take care of (unpaid) domestic tasks. Being able to ignore family obligations adds to the image of being tough men, and this works well, because unlike women employees, male employees are not tied down with domestic work obligations – what is more, unpaid reproductive work is natural and normalized in the capitalist economic system (Federici 2012).

However, as we noted, not all men want to perform or enjoy risk-prone tasks. In our interviews, many men spoke of challenges, ranging from altitude sickness, hearing impairment due to continuous work at the powerhouse, gastroenteritis due to poor food habits, sleep disorder, vitamin D deficiency and breathing problems, loneliness, depression, suicidal tendencies etc. For example, an engineer stated, “We have to finish the project, it’s a compulsion. The work is tough, blasting is done day and night, and if something happens, we have to deal with that. Many suffer from breathing problems. Those who do such work are compelled to do so” (male, 38, organisation Y).

The men who cannot keep pace with the demands of a hegemonic masculinity, or care about their personal health and emotional wellbeing are often identified and devalued for being ‘feminine’, for opting for softer jobs, for crying like women:

Respondent (R): [...] It is not that all males are apt for a field job, there are many who cannot cope and opt for softer official work.

Interviewer (I): Do you have such examples?

(R): Yes, there are many cases. If they are posted to the project site, they go to their boss and beg them to let them stay at office. They cry and so on. It’s just that; in percentage females are less, but even all males cannot do such work (at the project site) (male, 47, organisation X).

For some, this way of life has caused irreversible changes to their social situation. An elderly mechanical engineer with more than 30 years of work experience in hydropower feared his retirement and going back to his hometown. He reported he could no longer attach himself to his hometown or his family. Early in his career, he could not live with his wife and son because of his work. Now, his wife has died and his son is working abroad. He seldom visits his relatives, although they live close by. According to him, work has transformed his social relationships and the way he relates to people. His life has a meaning only in terms of meeting organisational goals, thereby devaluing aspects of life related to human well-being.

When the organisational culture does not recognise or value human and social needs of employees, it impacts personal lives. When employees regularly put in extra hours of work and undertake work in isolating settings, social relations are stressed and compromised. More than half of the 31 male respondents reported that they had irreversibly compromised marital relations, including cases of

divorce. The first author often heard statements such as the following during her interviews: “it is difficult to get a good matrimonial match for a male hydropower staff” and “every time my wife and I argue, she says that if she would have known the nature of my profession, she wouldn’t have agreed to marry me”. Ironically, these statements are at odds with the notion that such professions translate to highly eligible and socially attractive men. It was not unsurprising that the few females working in the hydropower sector shared similar challenges. We heard of several female engineers who quit their job after getting married. Some of them switched to different professions, in less “hostile” settings.

4.2. Playing the rules of a hegemonic masculinity

In this section, we discuss how masculinity is not just about attributes of being a man, of maleness—but equally about performing and maintaining a culture of hierarchy and subordination—what Judith Butler (1990) identifies as ‘gender being performative’. As we discussed above, male respondents saw women in their organisation as subordinate and less capable. These notions of subordination and hierarchy are culturally prevalent in the organisations we researched, serving to maintain power and difference in many different ways, not just between women and men, but also among men. There are different ways in which hierarchy is maintained and practiced in any organisation. Consequently, staff at different levels rarely mingles with each other, except when, male staff are from the same state and of the same ethnic background. Women and men mostly avoid interactions across hierarchical levels and both genders maintain a safe distance from each other. Crossing these socially-defined boundaries results in negative gossip that brings a negative social image. For instance, a female staff in organisation X, living with her daughter in the hydropower colony, mentioned how she rarely participates in informal gatherings at or outside work with her male colleagues. Some men shared similar reasons for maintaining distance from their female colleagues – even those at the same organisational level (tier). Fuller (1996) and Lupton (1999) describe how such practices, where gender identities define the yardstick of appropriate social behaviours for women and men, aligns to an idealised masculine culture. Such positional, age and gender hierarchies within the organisation reinforce inequalities in terms of access to information, opportunities and benefits, especially for staff working at the lower positions in the organisation, where incidentally, most women are staffed.

A masculine culture inhibits feminine attitudes of transparency, emotive gestures of kindness, thoughtfulness and disruption of power barriers. During the interviews, some men became quite emotional while sharing their experiences of loneliness or of the burdens of masculinity enforced by society. Feminine qualities were often ridiculed by others. Being emotional is considered out of place at work. A request to contact and interview a female engineer who is based at the power house site was commented upon by her colleagues (including women): “You should certainly meet her. She is emotional at everything”. And everyone in

the room laughed. Most respondents perceive women to be inherently emotional, an attitude that is thought to be an obstacle to the smooth operation of the project: “With boys (sic), it is easier to work. If we say something to girls (sic), they will cry and then we can do nothing” (male, 48, organisation Y).

Both women and men deal with these perceptions and practices by not disclosing their emotions. They try to hide and control their feelings to avoid the label of being feminine at the office and to adjust themselves according to normative organisational values—being masculine, being physically and mentally tough always at work (Migliaccio 2009). Liebrand (2014) terms this behaviour as self-normalisation or self-disciplining, an act entrenched in the organisational culture, where juniors copy the behavioural practices set by their seniors. For instance, we observed that men in junior positions try to spend time with men in senior positions, including the head of the organisation. Most junior staff do not leave the office until the boss leaves, they try to please senior staff, by attending to their professional as well as personal needs, and ensure their visibility for a successful career. Men also take part in extracurricular activities that reaffirm their masculinity. For instance, they engage in sport activities considered masculine like tennis and cricket. By doing so, men create relations of masculinity with other men, which both reaffirms their masculinity and ensures the practice of masculinity and hierarchy in the organisation (Migliaccio 2009).

Female staff also try to conform to hegemonic masculine norms. For instance, a female Human Resources manager identified herself as no less than men and pointed out how she has managed her work in a challenging situation without showing any emotions. We spoke about her pregnancy and childbirth:

I: How did you manage then?

R: Because of my work, my child got less (breast)feeding. I used to go home during lunch hours. I had maternity leave, but my husband was in a private company, so he did not enjoy paternity leave. I had decided that I will manage anyhow.

I: Could you have asked for a transfer? Why did you not do that?

R: Just like that, I mean...no specific reasons. I haven't approached anyone for postings, transfer, which everyone does. I haven't sought help from anyone. I am doing everything on my own. No obligations, no favour till date, nothing for 12 years, whatever I could do, I did. That is my way. People say that I am strong. Even if I have problems, I don't share these with anyone. I don't think it will be of any help. There is this trend where most of the females emotionally win over situations [cry] but I am not that kind of person (female, 35, organisation X).

In this narration, she criticises feminine behaviours (breastfeeding, seeking help, expressing emotions and feelings) and dissociates herself from other women while emphasising how she has privileged masculine practices. Despite conforming to

hegemonic male seniors' masculinities, she still struggles in being the 'model employee' and regrets that she is not allowed to do field visits despite her multiple requests and reported that male senior staff "do not acknowledge my work, do not listen to [women like] us and do not want to hear our views" (female, 35, Organisation X).

The case study (presented below) of a young female engineer which was shared with us by a male engineer during one of our interviews, brings together all the issues we have highlighted in this section. It makes for a classic case of what Dryburgh (1999) terms as 'impression management': how the performance of masculinity does not bring the same benefits to male and female employees, because women's (gendered) needs and obligations still stand in the way, even when they are reduced and/or made invisible. On the contrary, masculine organisations allow men to maintain their masculinity and demean everything else that challenges norms of a hegemonic masculinity. According to Lorber (1984), the unsuitability of jobs for women is justified on grounds of incapability, potentially disruptive sexual liaisons, disruptions to work (by pregnancy, childcare etc.), whereas organisational culture and practices are not questioned.

R: We selected a local female engineer for a project site in X. The job was advertised in the local media. She (aged 26) was a brilliant candidate and outranked all other 30 candidates who had applied for the position. I had my own cousin among the applicants, however, it would have been an injustice to her if I wouldn't have appointed her, because she was qualified. Well! we selected her despite knowing the anticipated challenges that we might face because of hiring a female engineer. She was competent, dedicated and determined. There was no way to explain that she was not fit for the job. So she was appointed for the field site. Once she started her job in the field, problems started. We have staff quarters in the field. She was young and local boys started gathering near the powerhouse and began harassing her.

I: What about her male colleagues?

R: They said, 'Sir! We tried to defend her for couple of times, but it did not work. Local boys began threatening us'. You see, when a young girl is there, gossips are usual. That girl was psychologically affected; she told me she does not wish to stay there. What could I do? I said 'Ok'. She returned back. And she quit her job. It's been six months and she is still undergoing medical treatment. I still encourage her and tell her if she wishes to join office in any other responsibilities, we can take her in. However, she shared that she has lost her interest and has been unwell. So, I no longer insist. I was encouraging, because I know that she has the capacity (emphasis), however, later I felt guilty – maybe it would had been better not to select her—she could have escaped this psychological trauma. Well! She had strong determination. Only if she could have had a female beside her, she would have fought back. However, I cannot employ a female only for her.

[...] After she returned back, everyone said that it was the girl's fault, even one of my senior colleagues said that she shouldn't have gone there and that it was definitely her fault. I felt bad for her, but see, what can we do, changing mind-sets will take hundreds of years. It is the environment from where we come from. In our friends' circle here, there is a different perception for local females – they say: “girls over here are very ‘easy going’”. They say this because they see boys and girls easily mingling with each other. This is not in their culture, so they see this as ‘easy going’. It is even difficult for me to utter the word, how females are described by males. It is the mind-set. Because of these reasons, most of the female engineers opt for desk job.

This case study shows five interconnected threads. The first is about a manager (male, 45, Organisation X), who portrays himself as supportive and unbiased by supporting gender-equitable recruitment and work structures. The second is about how a female engineer *too (sic)* can be knowledgeable and determined, but in the end, being a woman, cannot cope and deal with risk-prone work conditions in remote locations. The third narrative is of the protective male/s—in this case, male colleagues who ‘tried’ to support and defend her, and the manager as well, who tried to make the situation work. However, here, their practiced masculinity was against the professional hegemonic organisational masculinity, that of professionals, who keep to their work and do not mix work and what happens outside of formal job duties. The fourth is of hierarchy and difference, the story of local men who are culturally different, who taunt and harass women—those who created adverse circumstances for the female engineer forcing her to leave work. The fifth and final thread is of how this profession and career is, at the end of the day, unsuitable for women if a dominantly conventional gendered division of tasks and abilities is to be maintained and reproduced.

The last thread is guided by a conventional type of masculinity, which reaffirms women's place in the private domain. The women who embody masculine behaviours and cross feminine boundaries not only jeopardise themselves, but also their male colleagues, and are to blame for such inconveniences. In the example above, most work colleagues in the organisation criticise the female engineer for not adhering to feminine boundaries, concluding that what happened was her fault. It is interesting to note that the senior manager blames himself for this situation—first for allowing and agreeing to a female engineer to work in the field site, and then in his relative inability to protect her. Such framings legitimise on the one hand, men's domination and influence over women's choices; and on the other—men's ability and responsibility to *protect* women. The local men in question never received any condemnation for their actions, the male engineers or rather the system of patriarchy allows this performance of masculine oppression to continue—the claim being that this is deeply embedded in the local culture, and/or that women are to blame for violating gendered boundaries and norms.

5. Discussion and conclusion

To which extent is the performance of masculinities in hydropower organisations relevant to assessing initiatives towards greater gender and social justice in the governance of global commons? We believe that the performance of masculinities in these two hydropower organisations—a semi-autonomous large public company and a small private company—are representative of masculinities in the hydropower sector in most South and Southeast Asian countries that are also marked by relatively rigid gender and social hierarchies. Our argument is that it is not possible to promote gender equality in the implementation of hydropower projects without addressing (the performance of) masculinity in the organisational culture and everyday practices of the hydropower sector. Changing behaviours, attitudes and practices in how hydropower projects are designed, implemented and operated will require profound shifts in organisational culture and societal values—shifts that gender toolkits alone are unlikely to bring.

First, our research draws evidence to how a masculinity of identity encourages men to opt for engineering careers and in turn, how the performance of engineering work reaffirms their masculinity (Butler 1990). In other words, men perform their masculinity by opting for careers that allow them social status along with the ability to earn and take care of the family. Choosing the engineering pathway in the hydropower sector is one of the strongest performances of masculinity one can choose as a professional career. In addition to a high salary, career growth and social status, the masculinity of hydropower engineers is reaffirmed by their ability to shape and control nature; take risks and ensure that difficult tasks (such as stopping rivers from flowing) are successfully completed. When men endure tough conditions, men reaffirm their masculine identity. At the same time, this helps demonstrate that feminine attributes do not complete such risk-prone work. The ability to cope with tough work and tough living conditions becomes a sign of being men, being masculine. In such a context, paying attention to, being sensitive to gender and social impacts of hydropower development would not only be seen as irrelevant, but more importantly perceived as a threat to masculinity—both of the engineers, as well as the work.

Secondly, the performance of masculinities at work and in personal contexts: demonstrating the ability to not complain about difficult work in difficult conditions; able to live without family and homely comforts for extended periods of time—is essential to remain and succeed in the organisation. This further legitimises and re-entrenches gender inequalities, re-establishes hierarchies between male and female staff members—and justifies the male staff members to live away from their families, stay long hours in the office and relegate all (unpaid, unvalued) domestic tasks to female partners.

Finally, the performance of masculinities not only affects men's attitudes towards gender equality but also the ability of all staff to engage in equal, caring social relationships. This nature of performing masculinities systematically discredits empathy and emotions: competent hydropower professionals, be they

men or women do not show their emotions or complain about hardships. As professionals, their commitment is to work and this is pursued, even when it results in irreversible changes to personal relationships, threatening the well-being of those they love. But conditioned as they are, 'real men' or for that matter, 'professionally-able women' do not question these work conditions. Can one expect such stoicism at work to translate to sensitivity to gendered impacts of hydropower development? Would a gender toolkit enable this transformation in attitudes, behaviours and practices at work? This is not to say that all staff in the hydropower sector are, or become, insensitive to gender and social justice. Rather, we make the point here that emotion, sensitivity are not values that are encouraged and/or rewarded. In fact, we see a high organisational resistance to practice and stand by such values. It is no wonder then, that with or without gender toolkits the hydropower sector in India has little to report on achieving equality and social justice.

To conclude, our findings based on two hydropower companies in a specific region of India raise important questions on the rhetoric of global hegemonic discourses and practices of sustainable, ethical development. Instead, our findings resonate with earlier studies by ecofeminists on how hegemonic masculinities contribute to perpetuating social and environmental woes (Flood et al. 2007). The performance of hegemonic masculinities reinforces the denial of the ethics of caring and distributive justice as organisational values. It is not possible to end one without tackling the other.

Literature cited

- Ahlers, R., J. Budds, D. Joshi, V. Merme, and M. Zwartveen. 2015. Framing Hydropower as Green Energy: Assessing Drivers, Risks and Tensions in the Eastern Himalayas. *Earth Systems Dynamics* 6:195–204. DOI: <https://doi.org/10.5194/esd-6-195-2015>.
- Ahmed, S. 2005. *Flowing Upstream: Empowering Women Through Water Management Initiatives in India*. Cambridge University Press.
- Brouwers, R. 2013. Revisiting Gender Mainstreaming in International Development: Goodbye to an Illusionary Strategy. *ISS Working Paper General Series 556*, The Hague: International Institute of Social Studies of Erasmus University Rotterdam.
- Butler, J. 1990. *Gender Trouble. Feminism and the Subversion of Identity*. London, UK: Routledge.
- Carney, J. 1996. Converting the Wetlands, Engendering the Environment. In *Liberation Ecologies: Environment, Development, Social Movements*, eds. R. Peet, and M. Watts, 165–186. New York: Routledge.
- Collinson, D. L. and J. Hearn. 1996. *Men as Managers, Managers as Men: Critical Perspective on Men, Masculinities and Management*. London: Sage Publications.
- Connell, R. W. 1995. *Masculinities*. Los Angeles: University of California Press.

- Connell, R. W. and J. W. Messerschmidt. 2005. Hegemonic Masculinity Rethinking the Concept. *Gender & Society* 19(6):829–859. DOI: <https://doi.org/10.1177/0891243205278639>.
- Cornwall, A. 2000. Making a Difference? Gender and Participatory Development. *IDS Discussion Paper* 378, Brighton, UK: IDS.
- DDI. 2009. *Holding Women Back: Troubling Discoveries – And Best Practices for Helping Women Leaders Succeed*. Pittsburgh: Development Dimensions International.
- Deemer, B. R., J. A. Harrison, S. Li, J. J. Beaulieu, T. DelSontro, N. Barros, J. F. Bezerra-Neto, S. M. Powers, M. A. dos Santos, and J. A. Vonk. 2016. Greenhouse Gas Emissions from Reservoir Water Surfaces: A New Global Synthesis. *BioScience* 66(11):949–964. DOI: <https://doi.org/10.1093/biosci/biw117>.
- Dryburgh, H. 1999. Work Hard, Play Hard: Women and Professionalization in Engineering – Adapting to the Culture. *Gender & Society* 13(5):664–682. DOI: <https://doi.org/10.1177/089124399013005006>.
- Duflo, E. and R. Pande. 2007. Dams. *The Quarterly Journal of Economics* 122(2):601–646. DOI: <https://doi.org/10.1162/qjec.122.2.601>.
- Eyben, R. 2010. Subversively Accommodating: Feminist Bureaucrats and Gender Mainstreaming. *IDS Bulletin* 41(2):54–61. DOI: <https://doi.org/10.1111/j.1759-5436.2010.00123.x>.
- Eyben, R. 2013. *Uncovering the Politics of “Evidence” and “Results”. A Framing Paper for Development Practitioners*. Sussex: The Big Push Forward.
- Federici, S. 2012. *Revolution at Point Zero. Housework, Reproduction and Feminist Struggle*. Oakland: PM Press.
- Flood, M., J. K. Gardiner, B. Pease, and K. Pringle. 2007. *International Encyclopedia of Men and Masculinities*. USA and Canada: Taylor & Francis.
- Fuller, P. 1996. Masculinity, Emotion and Sexual Violence. In *Gender Relations in Public and Private. Explorations in Sociology*, eds. L. Morris, and E. S. Lyon, 226–243. London: Palgrave Macmillan. DOI: https://doi.org/10.1007/978-1-349-24543-7_12.
- Goldman, M. 2001. Constructing an Environmental State: Eco-governmentality and other Transnational Practices of a ‘Green’ World Bank. *Social Problems* 48(4):499–523. DOI: 10.1525/sp.2001.48.4.499.
- Gough, C. and S. Shackley. 2001. The Respectable Politics of Climate Change: the Epistemic Communities and NGOs. *International Affairs* 77(2):329–346. DOI: <https://doi.org/10.1111/1468-2346.00195>.
- Harcourt, W., ed. 1993. *Feminist Perspectives on Sustainable Development*. London: Zed Books.
- Harding, S. G. 1986. *The Science Question in Feminism*. Ithaca: Cornell University Press.
- Hill, C., T. N. Thuy, J. Storey, and S. Vongphosy. 2017. Lessons Learnt from Gender Impact Assessment of Hydropower Projects in Laos and Vietnam. *Gender and Development* 25(3):455–470. DOI: <https://doi.org/10.1080/13552074.2017.1379777>.

- Joshi, D. 2011. Caste, Gender and the Rhetoric of Reform in India's Drinking Water Sector. *Economic and Political Weekly, Review of Women's Studies* 46(18):56–63.
- Joshi, D., J. Platteeuw, J. Singh, and J. Teoh. 2018. Watered Down? Civil Society Organizations and Hydropower Development in the Darjeeling and Sikkim Regions, Eastern Himalaya: A Comparative Study. *Climate Policy* 1–15. DOI: 10.1080/14693062.2018.1557035.
- Liebrand, J. 2014. *Masculinities Among Irrigation Engineers and Water Professionals in Nepal*. PhD, The Graduate School of Wageningen School of Social Sciences. Wageningen, Netherlands: Wageningen University.
- Longwe, S. H. 1997. The Evaporation of Gender Policies in the Patriarchal Cooking Pot. *Development in Practice* 7(2):148–156. DOI: 10.1080/09614529754611.
- Lorber, J. 1984. Trust, Loyalty, and the Place of Women in the Organization of Work. In *Women: A Feminist Perspective*, ed. J. Freeman. Palo Alto: Mayfield Publishing Co.
- Lupton, D. 1999. *Risk*. London: Routledge.
- Malovic, D., H. Engelmann-Pilger, N. Arsenijevic, K. B. Gassner, E. Merle-Beral, G. Monti, J. Pooley, L. K. Inouye, J. Levin, and J. Kellenberg. 2015. *Hydroelectric Power: A Guide for Developers and Investors (English)*. Washington, DC: World Bank Group. DOI: <http://documents.worldbank.org/curated/en/917841468188335073/Hydroelectric-power-a-guide-for-developers-and-investors>.
- Manchester University. 2017. £7.5m Grant to Ensure Next Generation Dams Promote Sustainable Development. August 2, 2017. Retrieved from: <http://www.manchester.ac.uk/discover/news/75m-grant-to-ensure-next-generation-dams-promote-sustainable-development/>.
- McCully, P. 1996. *Silenced Rivers – The Ecology and Politics of Large Dams*. London and New Jersey: Zed Books.
- McDowell, L. and G. Court. 1994. Performing Work: Bodily Representations in Merchant Banks. *Environment and Planning D: Society and Space* 12(6): 727–750. DOI: <https://doi.org/10.1068/d120727>.
- Mehta, L. and B. Srinivasan. 2000. Balancing Pains and Gains: A Perspective Paper on Gender and Large Dams. Contributing paper for WCD Thematic Review 1.1. World Commission on Dams, Cape Town, South Africa.
- Merchant, C. 1980. *The Death of Nature: Women, Ecology, and the Scientific Revolution*. San Francisco: HarperCollins.
- Mies, M. and V. Shiva. 1993. *Ecofeminism*. London: Zed Books.
- Migliaccio, T. 2009. Men's Friendships: Performances of Masculinity. *The Journal of Men's Studies* 17(3):226–241. DOI: <https://doi.org/10.3149/jms.1703.226>.
- Milward, K., M. Mukhopadhyay, and F. F. Wong. 2015. Gender Mainstreaming Critiques: Signposts or Dead Ends? *IDS Bulletin* 46(4):75–81. DOI: <https://doi.org/10.1111/1759-5436.12160>.

- Moser, C. and A. Moser. 2005. Gender Mainstreaming Since Beijing: A Review of Success and Limitations in International Institutions. *Gender & Development* 13(2):11–22. DOI: <https://doi.org/10.1080/13552070512331332283>.
- Mosse, D. 2008. Epilogue: The Cultural Politics of Water—A Comparative Perspective. *Journal of Southern African Studies* 34(4):939–948. DOI: <https://doi.org/10.1080/03057070802456847>.
- Mukhopadhyay, M. 2004. Mainstreaming Gender or “Streaming” Gender Away: Feminists Marooned in the Development Business. *IDS Bulletin* 35(4):95–103. DOI: <https://doi.org/10.1111/j.1759-5436.2004.tb00161.x>.
- Mukhopadhyay, M. 2014. Mainstreaming Gender or Reconstituting the Mainstream? Gender Knowledge in Development. *Journal of International Development* 26(3):356–67. DOI: <https://doi.org/10.1002/jid.2946>.
- Panda, S. M. 2007. Mainstreaming Gender in Water Management – A Critical View. *Gender, Technology and Development* 11(3):321–338. DOI: <https://doi.org/10.1177/097185240701100302>.
- Parpart, J. L. (2014). Exploring The Transformative Potential of Gender Mainstreaming in International Development Institutions. *Journal of International Development* 26(3):382–395. DOI: <https://doi.org/10.1002/jid.2948>.
- Plumwood, V. 1993. *Feminism and the Mastery of Nature*. Routledge.
- Powell, A., B. Bagilhole, and A. Dainty. 2009. How Women Engineers Do and Undo Gender: Consequences for Gender Equality. *Gender, Work and Organization* 16(4):411–428. DOI: <https://doi.org/10.1111/j.1468-0432.2008.00406.x>.
- Rai, S. 2008. *The Gender Politics of Development*. London: Zed Books.
- Rao, A. and D. Kelleher. 2005. Is There Life After Gender Mainstreaming? *Gender & Development* 13(2):57–69. DOI: <https://doi.org/10.1080/13552070512331332287>.
- Resurreccion, B. P. and R. Elmhirst, eds. 2008. *Gender and Natural Resource Management. Livelihoods, Mobility and Interventions*. London, UK and Sterling, VA, USA: Earthscan.
- Rocheleau, D., B. Thomas-Slayter, and E. Wangari, eds. 1996. *Feminist Political Ecology: Global Issues and Local Experience*. New York: Routledge.
- Saldana, J. 2009. *The Coding Manual for Qualitative Researchers*. London, UK: Sage Publications.
- Schneider, H. 2013, May 8. *World Bank Turns to Hydropower to Square Development with Climate Change*. Washington Post. http://www.washingtonpost.com/business/economy/world-bank-turns-to-hydropowerto-square-development-with-climate-change/2013/05/08/b9d60332-b1bd-11e2-9a98-4be1688d7d84_story.html.
- Shiva, V. 1988. *Staying Alive: Women, Ecology and Survival in India*. Delhi: Kali for Women.
- Simon, M. 2013. *Balancing the Scales – Using Gender Impact Assessment in Hydropower Development*. Oxford: Oxfam.

- Standing, H. 2007. Gender, Myth and Fable: The Perils of Mainstreaming in Sector Bureaucracies. In *Feminisms in Development: Contradictions, Contestations and Challenges*, eds. C. Cornwall, E. Harrison, and A. Whitehead, 101–111. London: Zed Books.
- Sultana, F. 2009. Fluid Lives: Subjectivities, Gender and Water in Rural Bangladesh. *Gender, Place & Culture* 16(4):427–444. DOI: <https://doi.org/10.1080/09663690903003942>.
- Swyngedouw, E. 2011. Whose Environment? The End of Nature, Climate Change and the Process of Post-Politicization. *Ambiente & Sociedade* 14(2):69–87. DOI: <http://dx.doi.org/10.1590/S1414-753X2011000200006>.
- Theobald, S., R. Tolhurst, H. Elsey, and H. Standing. 2005. Engendering the Bureaucracy? Challenges and Opportunities for Mainstreaming Gender in Ministries of Health Under Sector-wide Approaches. *Health Policy and Planning* 20(3):141–149. DOI: <https://doi.org/10.1093/heapol/czi019>.
- Udas, P. B. and M. Z. Zwarteveen. 2010. Can Water Professionals Meet Gender Goals? A Case Study of the Department of Irrigation in Nepal. *Gender & Development* 18(1):87–97. DOI: <https://doi.org/10.1080/13552071003600075>.
- Verma, R. 2014. Business as Unusual: The Potential for Gender Transformative Change in Development and Mountain Contexts. *Mountain Research and Development* 34(3):188–196. DOI: <https://doi.org/10.1659/MRD-JOURNAL-D-14-00072.1>.
- WCD. 2000. Dams and Development: A New Framework for Decision Making. *Final Report of the World Commission on Dams*. London and Sterling, VA: Earthscan Publications Ltd.
- WEC. 2015. *World Energy Resources Report. Charting the Upsurge in Hydropower Development*. London UK.
- Yates, J. S. 2012. Uneven Interventions and the Scalar Politics of Governing Livelihood Adaption in Rural Nepal. *Global Environmental Change* 22(2):537–546. DOI: <https://doi.org/10.1016/j.gloenvcha.2012.01.007>.