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## Suffering *for* water, suffering *from* water: Emotional geographies of resource access, control and conflict

Farhana Sultana

Geography Department, Maxwell School of Citizenship and Public Affairs, Syracuse University, 144 Eggers Hall, Syracuse, NY 13244, USA

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### ABSTRACT

This article argues that resource access, use, control, ownership and conflict are not only mediated through social relations of power, but also through emotional geographies where gendered subjectivities and embodied emotions constitute how nature–society relations are lived and experienced on a daily basis. By engaging the insights from feminist political ecology literatures and emotional geographies literatures, the article demonstrates that resource struggles and conflicts are not just material challenges but emotional ones, which are mediated through bodies, spaces and emotions. Such a focus fleshes out the complexities, entanglements and messy relations that constitute political ecologies of resources management, where practices and processes are negotiated through constructions of gender, embodiments, and emotions. Abstractions of ‘resource struggles’ and ‘resource conflicts’ are thereby grounded in embodied emotional geographies of places, peoples, and resources, enabling us to better understand the ways resources and emotions come to matter in everyday survival struggles. This framing can enrich feminist political ecology theorizations and texture our understandings of commonly-used terms such as access, use, control, conflict and struggles vis-à-vis natural resources in any context. In other words, we are better able to conceptualize and explain how and why people access, use, and struggle over resources the ways they do. A case study of drinking water contamination from Bangladesh is used to develop the theoretical arguments in contributing to existing debates in (feminist) political ecologies.

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### 1. Introduction

Feminist political ecology scholarship has enriched political ecology literatures, and resources management literatures more broadly, by drawing attention to the importance of gender in resource struggles in a variety of contexts (e.g. Carney, 1996; Rocheleau et al., 1996; Schroeder, 1999). Recent work in feminist political ecology has furthered existing debates by demonstrating that gender is performed and negotiated through resource struggles and power relations involving bodies, spaces, and environments (Gururani, 2002; Harris, 2006; Nightingale, 2006; Resurreccion and Elmhirst, 2008; Sultana, 2009a). Such scholarship has argued that subjectivities are negotiated and embodied through social processes, ecological practices, and intersectionalities with other subject positions of class, race, etc. Close analyses of the gendered nature of access, control, and ownership of resources, across different subject positions and geographical locations, enabled scholars to explicate the political ecologies of critical resource management. The present article extends these debates by paying careful attention to the complexities of emo-

tional geographies in resource management to elucidate the conspicuous and hidden ways that natural resources come to affect everyday life. Drawing insights from the emotional geographies literature (e.g. Bondi, 2005; Davidson et al., 2005; Pile, 2010; Sharp, 2009; Smith et al., 2009), the article attempts to show the importance of heeding the various emotions and meanings attached to processes of resource access, use and conflict in order to better understand the emotionality of the resources that exist in everyday struggles. Such analyses enables (feminist) political ecology to further explain and illuminate the ways that resources struggles and politics are not only economic, social, or rational choice issues, but also emotive realities that have direct bearing on how resources are accessed, used, and fought over. Abstractions of ‘resource struggles’ and ‘resource conflicts’ are thereby grounded in embodied emotional geographies of places, peoples, and resources, enabling us to enhance our comprehension of the complex ways resources and emotions come to matter in survival strategies and everyday resource management practices. This article seeks to make contributions in existing (feminist) political ecology literatures in order to enrich our understanding of the ways that emotions come to matter in nature–society relations and influence how and why people use, access, control and conflict over resource the ways they do.

E-mail address: [sultanaf@syr.edu](mailto:sultanaf@syr.edu)

Davidson et al. (2005, p. 3) define emotional geography as one that “attempts to understand emotion – experientially and conceptually – in terms of its socio-spatial mediation and articulation rather than as entirely interiorized subjective mental states” (emphasis in original). Recent scholarship in emotional geographies has argued that emotions are relational and fluid, not in individualized human subjectivities but rather relationally produced between peoples and places (Davidson and Bondi, 2004; Davidson et al., 2005; Smith et al., 2009). Emotions are always embodied experiences, where sites and context matter. While the emotional turn in geography has largely been explored in cultural and feminist geography analyses (e.g. Bondi, 2005; Sharp, 2009; Thien, 2005, 2009; Tolia-Kelly, 2006), I believe that the insights are useful in political ecology and nature–society geography scholarship. Emotions matter in resource struggles, they influence the outcomes of practices and processes of resource access/use/control, and as I argue below, come to shape the way critical resources are managed and experienced in everyday survival struggles. Taking inspiration from the burgeoning emotional geography literature, this article seeks to understand the emotional geographies of resource access and conflicts, and the ways that emotions matter in everyday resources management: which is generally studied as a collection of inter-related spatially, socially, and ecologically mediated acts, but can also be seen to be emotionally mediated. While environments and landscapes can produce varied emotional geographies (see Davidson et al. (2005) collection), what has not been adequately studied is how environmental degradation and resource crises can produce differentiated emotions that influence the very ways that resources are accessed, used, and controlled. The specific resource focused in this article is life-giving, non-substitutable water, and research on arsenic contamination of water in Bangladesh is employed to demonstrate my argument that resource access, use, and control are linked to the emotions that are experienced and negotiated in resource management practices on a daily basis.

Pile (2010, p. 17) stressed that scholars engaging with emotional geography be mindful about “reflecting on why emotional geographies should be conducted in the first place” and “why emotions are important and interesting.” As Sharp (2009) has argued, to study emotional geography is a political and ethical issue. Heeding the critiques put forth by Bondi (2005) and Sharp (2009) to not objectify emotions, I posit that paying attention to emotions allows us to better understand the resources struggles and access/use concerns that are of central interest in (feminist) political ecology scholarship. My goal in this article is to contribute to feminist political ecology by engaging the insights from emotional geography scholarship to enrich explanations of resource struggles, politics, and conflicts. I will not attempt to directly intervene in the ongoing debates within emotional and affectual geographies, but draw inspiration from such scholarship in order to modestly advance the debates and theorizations in feminist political ecology, and political ecology more broadly, with the hopes that future scholars will take such engagements even further (see also Bennett, 2009).<sup>1</sup>

Insights from political ecology and resources management scholarship on access and conflict are important in framing my analysis (e.g. Blaikie and Brookfield, 1987; Dubash, 2004; Leach et al., 1999; Ostrom, 1990; Peluso and Watts, 2001; Ribot and Peluso, 2003; Sikor and Lund, 2009). In addition, scholarship on meanings and understandings of struggles are noteworthy in laying the foundations of my argument. For instance, research by scholars such as Scott (1985) has focused on narrative, gossip and speech

acts in which people engage in their everyday acts of resistance. Moore (2005) has analyzed the ways that narratives of past sufferings during resistance movements are invoked to legitimize claims to land. More closely related to this article, Gururani's (2002) work has looked at the centrality of pleasure and pain that constitute gendered relationships to forest management. These studies are important texts in (feminist) political ecology scholarship and have informed our understanding of resources struggles in different historical, political, and economic contexts. I draw insights from such scholarship to think through the messiness of everyday politics and struggles over a critical resource such as water. I argue that notions of access, use, and control of resources are entangled and interconnected and that analyzing the embodied emotions is critical to explaining the ways that nature–society relationships operate in everyday life in any given context. The processes of access, use and control of resources produce different kinds of emotional geographies, and in this particular case, it is the ‘sufferings’ of people seeking safe water (detailed below). Close attention to the emotional geographies of water are important in explaining how ‘feeling subjects’ (cf. Thien, 2009) relate to water and how water mediates social relations of resource management. Such an analysis can provide more nuanced explications of what constitutes resource conflicts and politics, by showing that conflicts over resources are thus as much about property rights and entitlements as they are about embodied emotions, feelings, and lived experiences relating to the resource. Processes and practices in nature–society relations are found to be not only regulated by rules, norms and customs, but also negotiated through constructions of gender, embodiments, and emotions, producing variegated emotional geographies of nature/water.

In making these arguments, I am aware of the critique that Smith et al. (2009, p. 230) have recently made: “the naturalized connection between women and emotion are akin to (and another version of) the naturalized connection of women and nature that feminists have sought so long to disrupt and historicize.” My hope is to engage emotional geography with (feminist) political ecology analysis without being reductionist or ahistorical, but adding an additional layer of explanation of everyday resource politics and struggles (see also Ettlinger, 2010). To this end, I agree with the Smith et al. (2009) that a focus on embodiment in feminist geography has been useful in emotional geographies research, pointing to the multiplicity of ways that emotions are not feminine, but are constituted as a result of spaces, places, bodies, and experiences. While Smith et al. (2009, p. 11) argue that, “In investigating these taken-for-granted emotional aspects of embodied experience feminists illustrate the intimate connections between the physical (material) and mental health”, I attempt to show the ways that emotions matter in the lived realities that shape the practices of access, use and control of natural resources.

## 2. Water and arsenic in Bangladesh

In a recent article (Sultana, 2009a), I argued that gendered subjectivities are simultaneously embodied, spatialized, socialized, and ecologized in arsenic waterscapes, in that the ways gender comes to matter is inflected each day through practices and performances that are at the same time encompassing of bodies, places and spaces (e.g. inside/outside the homestead), intersectional social axes (e.g. class), and geological (e.g. locational variations in arsenic deposits and local hydrogeology that affect whether water wells are contaminated or not). There are complex ways that waters (of different types, locations, overground/underground, quantities, qualities, reliability, and accessibility) come to constitute gendered subjectivities and shape the ways that people make sense of water crises in their lives (see also Crow and Sultana,

<sup>1</sup> How political ecology and nature-society geography literatures can advance current theorizations in emotional geography scholarship is beyond the scope of this paper, but present opportunities for fruitful work.

2002; Hanchett, 2004; Smith et al., 2000; Sultana, 2006, 2007a,b). In the present article, I want to explore further the nuanced ways that gender–water relations inflect people's sense of suffering and trace the emotional geographies of water. To examine the multiple ways that people cope with, respond to, and relate to waters, I analyze how arsenic contamination of drinking water has resulted in new meanings and realities of access, use, and conflicts in the micro-practices of water in everyday life.

In this regard, context, connections and circumstances are very important in the ways that emotions come to matter in influencing how people relate to one another and negotiate their relationship to water. Focusing on how and why emotions matter in situations of struggle for access and control of resources can help elucidate the processes by which people come to relate to specific resources and the ways that water–society relations play out. Since women fetch water for their households in rural Bangladesh (as in many other places globally), it is the women who feel most directly the pain/struggle/tensions about being able to provide sufficient water for their families. As such, day-to-day living is not just about getting sufficient resources, as the struggles to achieve those resources take a toll and complicate the emotional as well as material lives of women and their families. This has direct bearing on the ways water is accessed, used and struggled over in a locality.

The research engaged in this article is based on ethnographic fieldwork carried out over several years in rural Bangladesh, where contamination of drinking water wells from naturally-occurring arsenic has resulted in acute scarcity of safe water and concomitant poisoning of people. The study involved ethnographic work in 18 villages in four districts, involving semi-structured and open-ended questionnaires with 232 households, case studies, and 15 focus group discussions involving men and women (both jointly and gender-segregated) (see Sultana (2007c) for further methodological details). In all the study areas, there was great disparity in water contamination levels within short distances, as geologic heterogeneity of arsenic in the aquifer resulted in variations in concentrations of arsenic showing up in drinking water. The majority of the drinking water in rural Bangladesh is obtained from tubewells (also known as boreholes), that are generally hand-pumped to pull out groundwater. The discovery of carcinogenic, tasteless, odorless and colorless arsenic in drinking water in the late 1990s has resulted in millions of tubewells becoming unsafe as water was identified to be poisonous. Approximately 35 million people are estimated to be exposed to mortality and morbidity from slow poisoning from chronic exposure to arsenic (known as arsenicosis), which can take years to manifest health complications (such as cancer, organ failure, and ultimately death). Few alternatives exist as viable safe water sources, as surface water sources are generally polluted and had resulted in switching to groundwater in the 1970s and 1980s with the massive promotion of tubewell technology by the government and international aid donors. This had led to over 10 million tubewells being installed both privately and by public institutions (see Sultana (2006, 2007a) for further detail on the arsenic situation in Bangladesh). As a result, tubewells came to dot the landscape as the main source of drinking water, and households would save up to install their own tubewell to access groundwater (as anyone owning land can install a tubewell to pump out groundwater from the aquifer beneath).

However, the relative ease of obtaining water with the introduction of tubewells has become far more difficult as tubewells are tested by the authorities for arsenic, and painted red (if contaminated) and green (if safe to consume from). Since it is impossible for humans to detect the presence of trace amounts of arsenic in water without scientific testing, it is difficult to immediately gauge if one is drinking arsenic-contaminated water or not. Knowing the status of the water source is thus important (i.e. safe or unsafe, green or red, or knowing the levels of arsenic

in the water). The majority of the village households have had to find other sources of water when their tubewells were tested and identified to be unsafe. Due to arsenic's random spatial heterogeneity and the distribution of tubewells and homesteads, some villages have high numbers of red tubewells and very few green tubewells or alternative water options. Generally, the deep tubewells that access the deep aquifer are mostly safe, as the deep aquifer is largely arsenic-free, whereas the vast majority of the shallow tubewells (that are much cheaper and thus more prevalent) access the shallow aquifer where there are high amounts of arsenic in the sediments. This spatiality of distribution of safe water has resulted in a spatialization of power and hardship (Sultana, 2006, 2007a). As a result, where one lives is important to one's water security, as proximity to safe water sources is an important factor in influencing whether or not people try to obtain safe water. Similarly, those with control over a safe water source have additional powers over those who do not. While this generally tends to play out along class lines (as more wealthier households can afford deep tubewells), it is not completely clear-cut, as the distribution of arsenic can disrupt such precise correlations – many poor neighborhoods (*paras*) have green tubewells, and sometimes wealthier homesteads (*baris*) have red tubewells.<sup>2</sup> Nonetheless, arsenic has helped create a situation where safe water control has become both a status symbol and a source of power (Sultana, 2007b). Given the gendered division of labor in water where women are responsible for obtaining domestic water (men do not participate in this feminized activity), the water crisis has made women's everyday life more difficult. It is in such waterscapes that women and girls weave their way through labyrinths of red and green tubewells to fetch water on a daily basis for their families, confronting new and old social realities and embodied emotions of conflict, cooperation, and control.

### 3. Negotiating water access, use and control

“Asymmetrical entitlements to resources – based on gender – constitute a recurring theme. Access to resources – whether by de facto or de jure rights, exclusive or shared rights, primary or secondary rights, ownership or use rights – proves to be an important environmental issue for women virtually everywhere.” (Rocheleau et al., 1996, p. 291)

Groundwater is effectively an open access resource in rural Bangladesh (Sadeque, 2000), where water rights are directly linked to land rights – anyone with land and tubewell technology can secure their access to groundwater. Others without such access to property or money to install tubewells can negotiate user rights through social relations (such as formal or informal kinship and agricultural patron–client relations). Control over water is thus heavily dictated by land and technology ownership; but access to water is mediated by broader social relations (as I discuss below). In other words, control of water needs to be seen differently from access to water, as some people may enjoy the rights to both while others only to the latter (see also Mehta, 2003; Rangan, 1997). Furthermore, secure access is important for those not owning/controlling their own water source. Reliability of the tubewell to produce safe water of sufficient quantity and quality are also factors that influence patterns of access, concentrating people at a few tubewells that produce safe water and have easier access/use rules.

In understanding how people access water, it is important to note that decisions are not just based on some rational mechanism

<sup>2</sup> Purchasing and installing a deep tubewell, which is often pursued by wealthier households, does not necessarily guarantee arsenic-free status (although chances are better of being arsenic-free compared to the cheaper shallow tubewells, but the depth of the deep aquifer varies throughout the country). Local geology and hydrology are thus important.

that exists a priori, but rather in a negotiated reality that involves multiple claims, identities, relations, and emotions. As such, decisions to use particular water sources, or not, are influenced by a range of societal factors as well as individual decisions that have to be negotiated and re-articulated, often on a daily basis. The struggle over access to and control of resources are thus products of individual needs and decisions as well as a multitude of other factors such as institutions, relationships, and emotions. In theorizing access in relation to ownership or control of water, I draw from the notion of access articulated by Ribot and Peluso (2003, p. 153) where access is the ability to benefit from things (natural resources, material objects, institutions, people), rather than a right to things. Most of the political ecology and common property literatures tend to focus on rights rather than ability, where the latter broadens attention to include a variety of relationships and processes that facilitate or constrain people's access to things (e.g. safe water). Sikor and Lund (2009) argue that access can be a form of property rights, where power and legitimacy are needed to authorize such rights, such that power relations operate across institutions and contexts where people may claim access as a form of property rights to critical natural resources. Rights are linked to rules, which make property rights historically-contingent to relations and practices (Langridge et al., 2006; Ostrom, 1990; Ribot and Peluso, 2003; Sikor and Lund, 2009). Resource claims are always about power and control, and locally-mediated customs and conventions influence who has access to what resources. As such, access to natural resources and control/ownership can be very different for different groups of people, and are linked to their overall bundles of power and upon ecological contexts (cf. Leach et al., 1999).

Access to safe water in rural Bangladesh is thus predicated upon a variety of factors, such as ownership of land, ownership of a tubewell, socio-spatial location in relation to a safe tubewell, membership in a water committee, or kinship and/or patron–client relations that enable access. Not everyone owning a tubewell has equal access to safe water, as their water source may be contaminated with arsenic; similarly, ownership can usually translate to control, but this is also gendered as the male member of the household may legally own the tubewell, but the female members may be responsible for controlling its use and regulating outsider access. In areas with large numbers of red tubewells and few green ones, not everyone has guaranteed access to the safe water in their vicinity even if a tubewell is next door, due to formal or informal mechanisms that can constrain that access (see also Sultana, 2009b). While access is often discussed in terms such as proximity, distance, time needed, and physical burdens, it is also linked to socio-cultural factors such as class barriers, power relations, gendered spaces, and emotional labor needed to negotiate water rights (which I discuss in greater detail in the next section). Most people in my study noted that to sustain access to a safe water source, it was generally important to maintain a good relationship with the owners, often pay a fee, clean the area, give free labor in exchange for water, or pay hired labor to get water. Most noted that they had to ensure that existing patron–client relationships or kinship networks were on good footing to obtain water from sources that were not their own; some people noted that they obtained water from government or institutional sources where most people had rights of access (although such sources were often poorly maintained or broken). It was seen that needy households generally relied on public tubewells to obtain water, but if they had to obtain water elsewhere, they tried to remain within similar religious ties or political affiliations. The changing nature of access with the presence of arsenic, distribution of safe/unsafe tubewells, and broader societal relations highlights that access to safe water is malleable and fluid.

Furthermore, access is often tied to use, and this is sometimes less focused upon in natural resources management and political

ecology literatures. Not every access is guaranteed as it can be linked to how the resource is being used: for instance, safe tubewell water is only allowed to be taken if it is for drinking or cooking, but not for bathing, cleaning, washing, or livestock use. As such, access is restricted to the specific usage of the water. Since the discovery of arsenic, greater restrictions are placed on what the safe water is used for, and often drinking water is the only sanctioned usage allowed by owners/managers of safe tubewells. Access rules are also often tied to frequency and amount of water taken, and are thus not unconditional. How access is gained, maintained, and changed thus varies over time and place, and as such, access patterns are dynamic processes and not static (cf. Berry, 1993). The terms of gaining access can also change for a variety of reasons, signifying that the bundles of power that individuals and households hold can change vis-à-vis a resource, and that various power relations can come to mediate the control, access, and use of water. This is exemplified below by the narrative of how Rahman's family negotiates their water access and use.<sup>3</sup> Complex webs of power come to bear on how water is owned, accessed, used, and controlled that affect everyday life:

Rahman's family obtains drinking water from the safe deep tubewell located in the courtyard of the *bari* (household) of Monir, a wealthy family nearby. They are distantly related, and Rahman works on Monir's land as a sharecropper. Rahman's wife Halima helps clean Monir's courtyard sometimes in exchange for using the tubewell water, as long as no water is wasted and it is only used for drinking. Sometimes Halima's children accompany her, and if they are found to play around with the tubewell or make the area messy, they are scolded. When the tubewell is being used by Monir's family members, Halima has to wait or is asked go away and come back again later. Sometimes she goes farther away to Habib's *bari* to get water, especially if she cannot make another trip and is in a hurry. Habib's wife does not like this as Habib and Monir do not get along well, and Halima's family is associated with Monir. Halima sometimes takes the water quietly and tries not to draw any attention, but often she is rebuked or humiliated. Halima says she doesn't like that feeling, but she has no choice if she wants any water. She lamented, "I have a thousand things to do as it is, I can't spend all day just getting water." But Rahman and Halima cannot afford a tubewell of their own, so she says that she will have to manage somehow. She sighed and looked away, saying "We have to suffer a lot for water."

The tenuous access to a necessary resource (water) poses logistical and material challenges as well as emotional ones, especially for the main water providers, women like Halima. The ability to gain and maintain access to safe water sources is entangled with a host of issues that directly affect the water-fetchers and their everyday lives. Access is never fully secure, and has to be re-ensured and re-articulated over time and space. The tubewell may break down, be shut down, or the water may be found to be unsafe after quality testing; the path to access the well be muddy/slippery, broken, or blockaded; the owners may suddenly decide to not give any more water, or ration how much can be taken and when, or request favors in return. Each household without its own water source navigates such uncertainties and engages with new challenges as well as opportunities. A variety of factors come into play in producing everyday insecurities in water, and this has direct bearing on the ways that people relate to each other in a household and between households competing for the same water source. Halima's experience further captures the realities of many poor households:

<sup>3</sup> All names used are pseudonyms to protect the identity of research participants.

Carrying a *kolshi* (round clay pitcher) and a bucket of water is hard for Halima, as she is not very strong. But the amount of water she needs to fetch two or three times a day just for drinking water for her family and her in-laws means she has to carry both the containers of water on each trip. She gets her cooking water from a nearby pond, even though it is not very clean. It is also the pond that everyone bathes and washes in. The pond belongs to Jahangir, another well-to-do farmer, and most people have historically been allowed to use the pond. However, Jahangir recently decided to start aquaculture in the pond, and has decided not to allow people to access the pond anymore (in case they steal the fish as well as because the pond will have high amounts of fish feed and other chemicals). Halima is now concerned that she will have to go farther to the river to get water. "I have to worry about water every day, and I have to fetch the water every day. It never ends," Halima commented on her everyday reality.

Like Halima in her attempts to sustain water security for her family, women throughout villages generally struggle to maintain a diversified portfolio of access to water sources. While 59% of the 232 households interviewed said they get water from a single source, 35% get water from two sources, 5% from three sources, and 1% from four or more sources each day. This entails maintaining the kinds of relationships that would enable accessing and using the various water sources as and when needed. While this is important in ensuring access to different water sources, household members may be exposed to various water qualities from the different sources, especially since 22% of the women reported that their secondary or alternative water source (when the primary source is broken, under maintenance, or no longer socially viable) is often arsenic-contaminated. As a result, people often compromise on water quality in order to ensure sufficient quantity, as water is an essential daily need. Quenching of thirst as well as cooking food were deemed to be needs that could not be avoided or substituted, even if it meant taking risks of consuming contaminated and unhealthy water. Making such choices and decisions is emotionally difficult for many women, as they are aware they are jeopardizing the health of family members in order to ensure that some water is available.

#### 4. Embodied emotions, water access, and sufferings

In my study, both men and women speak about resource access and conflicts through the emotions they experience most notably through the notion of 'suffering'. Analyzing the various forms of 'suffering' that people invoke highlights the emotional geographies of water, where suffering is intersubjective and produced through the realities of access, use, and control of water discussed above. Scholars such as Klouzal (2003, p. 256) have argued that focusing on suffering enriches development research by asking about both "material conditions and the experience of hardship, countering a tendency in development research to ignore subjectivity". She further argues that "attending to emotional pain can heighten awareness of women's agency. Subjective responses tap into human agency and reflect the complexity and the depth of people, a process that involves confronting personalities, values, emotions and relationships as well as the ways psychological needs go unmet. By looking at what women's experiences mean to them, scholars gain insight into under-represented perspectives." Similarly, a notion of suffering is identified by Moore (2005) as a way that people makes claims to entitlements and rights to land in Africa, but it is used more in accordance with historical dispossession and struggles to reclaim land in colonial and post-colonial contexts. In medical anthropological studies, few scholars have looked at emotional distress and suffering caused by water scarcity (Das,

1997; Ennis-McMillan, 2001; Tapias, 2006; Wutich and Ragsdale, 2008). Without objectifying sufferings, I believe paying attention to sufferings can explain resources access and conflict issues more deeply and broadly.

I found that people articulated their suffering ('*koshto*') vis-à-vis water and arsenic to directly and indirectly claim access and user rights to safe water. This is conveyed in two main ways: firstly, '*panir koshto*' ('water hardship') or '*panir jonno koshto*' ('suffering for water'), indicating lack of safe water access, use and control; and secondly, '*panir theke koshto*' ('suffering from water'), indicating the ways that arsenic-contaminated water has affected their lives (e.g. ill health from arsenic poisoning).<sup>4</sup> These describe the various dimensions through which a lack of safe water affects people as well as the ways claims to safe water are made. Thus, 'suffering for water' as well as 'suffering from water' are simultaneous claims made on water – that lack of safe water causes hardship, as well as use of unsafe water causes hardship, both individually as well as collectively. In both ways, water affects lives through its quantity and quality, access and use, and the sufferings that are produced. Therefore, public and private expressions of the sufferings reflect the wide range of emotional and physical experiences in relation to water and the claims that people often make to access safe water.

Since switching to safe tubewells and sharing safe water has been a key official recommendation made to people, various invocations are made to access/use safe water when people do not have control or ownership of safe water sources. People often invoke cultural and religious moral obligations to share water in order to secure their access; others invoked sufferings and poverty to generate sympathy in order to obtain water. Overall, sharing water is deemed to be a religious and customary duty, and people seem more sensitized to water hardship from arsenic awareness campaigns. In general, most people are willing to share water in moments of crisis, as long as it does not impinge on their needs or the needs of their family. But this varies across people and places. As a result, sufferings related to water can result from struggles and conflicts over water.

Paying attention to the multiplicity of ways that struggles over water are manifested, both publicly and privately, is thus important in understanding the simultaneous sufferings for/from water. Fewer safe tubewells and the increasing conflicts over safe water have resulted in various sufferings in arsenic-acute areas. While local water management practices are often "conflict-ridden, exclusive, and characterized by competing knowledge claims" (Mehta, 2003, p. 559), Turner (2004) posits that moral arguments are often as important as material and discursive struggles over natural resources, highlighting that material resource struggles are often manifestations of broader non-material struggles. It is thus important for critical feminist political ecologists to analyze different types of conflicts and their meanings, and not undertake reductionist research that simplifies complexities of village life into conflicts without looking at the relative importance of different types and tenors of conflicts. This points to the importance of noticing the textures and nuances of conflicts and struggles, such that focusing on the overt and public struggles does not overshadow the more hidden and subtle ones. Such analysis enables a closer look at struggles, hardships, and emotional geographies of resources, in order to gauge how resource struggles are experienced and resource management enacted.

The various ways that women related the different degrees of overt conflict over water were terms such as '*jhogra/kaijja*' (argument), '*chillani*' (shouting), '*kotha katakati*' (exchange of words), '*dhakka-dhakki/thela-theli*' (pushing/shoving), '*gondogol*'/'*golmal*'

<sup>4</sup> I explore the health and well-being aspects of arsenic and water in greater detail in a forthcoming manuscript, currently under consideration for the *Annals of the Association of American Geographers*.

(skirmish/conflict), 'jhamela/birokto' (hassle), 'jontrona/betha' (pain), and 'kotha shona' (verbal insults). The more subtle ways they conveyed struggles over water were 'oshonmani/opoman' (humiliation), 'ijjate lage' (loss of pride), 'chhoto kora' (feeling small), 'morjadahani' (feeling belittled), 'bhoganti' (stress), 'mone dukkho' (being hurt), 'lajja laga' (feeling ashamed), 'mone aghat paoa' (emotional distress), 'mon kharap/koshto' (feeling sad), 'akangkha' (anxiety) and 'bishonno' (depressed). People narrated these ranges of their 'abeg/onubhuti' (emotions) in individual interviews, group discussions, and innumerable informal chats. Contaminated water and the subsequent strife over safe water access had affected the ways that people related to each other and influenced social power relations in everyday life. Various verbal expressions of relational emotions of distress, sorrow, rage, fear, frustration, worry, anxiety are often accompanied by physical expressions of silent tears, crying, sighing, keeping one's head down, and looking away. As exemplified by Halima's situation described above, emotional distress becomes part of the process of obtaining water each day, in terms of where to get water from and how to address social hierarchies and power relations in the practices of water-fetching (see also Tapias, 2006; Wutich and Ragsdale, 2008). The embodied emotions of water are experienced in different spaces and to varying degrees, depending on the situation on any given day, and constitute the various sufferings that people experienced with respect to water in their everyday lives. The sufferings are felt corporeally and viscerally, and expressed and articulated in a variety of ways. Emotional geographies were thus made through places, spaces, and water. Attention to such multifaceted manifestations of struggles over water and suffering for water are important in a feminist political ecology of gender-water relations.

Paying attention to emotions also shows how people access existing water rights and maneuver to gain new access to water in order to fulfill everyday duties/tasks. The narratives of experiences and sentiments that people bring to bear on the water crises and their sufferings are also marshaled to enhance their resource claims and to invoke guilt/sympathy in order to access water. People actively maneuver and shift positions, and perform identities, in order to secure their access and rights to water. For instance, mothers often invoked 'bachchar koshto' (child's suffering/pain) of their children in order to access sources of safe water that were not their own (or were closed off to them), rather than invoke their own suffering; denying water for children is deemed more egregious and despicable than denying water for an adult. At the same time, households that own safe water wells feel more obligated to give water to women who have children over those that do not. These negotiations on accessing safe water emotionally connect both the owners of wells and those dependent on obtaining water from it. While power hierarchies play into such emotional topographies, a common understanding of suffering of children without water becomes important in the giving and taking of water.

The notion of suffering was linked to womanhood for most of the women, a common bond that tied the women together (as mothers, daughters, daughters-in-law). Even if the degree of suffering or the nature of it varied, the women shared their sentiments mostly with each other and such inter-subjective relations was a commonality that they felt tied them together as well as validated their gender roles in their households and communities (see also Gururani, 2002). Such inter-subjective emotions are linked to gender norms and constructions of gender in many places. In addition, sympathy and empathy were found to be important components in the social narratives of suffering from/for water. The bonds formed over struggles for safe water were influenced by not just the water scarcity and poisoning, but also the commonalities of experiences and sharing narratives. Similarly, inequalities in the experience of the sufferings are brought to the fore by those

who claim that many others do not face the same problems, or do not empathize and sympathize with households that are acutely facing the various ramifications of the water crises (both in terms of accessing safe water as well as suffering from water poisoning). Such social inequalities in exposure and suffering are generally shared with those in similar positions, but are also brought up with others in order to renegotiate water access (cf. Ennis-McMillan, 2001). This also explains why people access certain water sources, and why they may share a scarce resource with others, due to emotional bonds formed through the water crises.

While both men and women spoke of sufferings related to the water crisis affecting entire families and villages, men mostly spoke about emotions of feeling bad at not being able to purchase a deep tubewell for their families (as it may provide safe water) or feeling sad that water poisoning was affecting someone in their family; they felt their masculinity threatened in their inability to resolve the situation, especially poorer men who did not have the financial or political clout to install deep tubewells (such as Halima's husband Rahman). On the other hand, women expressed a range of emotions linked to water, often focusing on the multiple and linked sufferings of having the responsibilities of fetching domestic water and managing the home. The embodied pain of hauling water, the emotional pain from being told off while fetching water, sense of belittlement felt when having to fetch water from a source not their own or sanctioned by the owners, fear of fetching water at night from far distances, are common experiences that are entangled in the everyday journeys to fetch water. Similarly, fear and worry when children are consuming unsafe water is accompanied by joy and relief at being able to provide arsenic-free and safe water. Such emotions are negotiated and experienced routinely in landscapes of few safe water sources and many poisoned water sources. In navigating these spaces and emotions, the daily journey to fetch water is infused with various emotions and experiences with water.

The emotional geographies of water are comprised of not just the sentiments brought to the fore from the water crises, but the various aspects of water-fetching and water-sharing, such as: meanings attached to places of water wells and the spaces traversed to access the water (private, public, welcoming, uninviting, etc.), the quality and safety of the water, the ease of obtaining the water and being able to take as much as needed, the difficulty or ease of carrying the amount of water, encounters with others in the daily foray in searching for water and the outcome of those encounters, and the events that take place at the water well. A range of emotional sentiments come to constitute water-society relations: beyond the commonly felt sufferings and pain, there is also recounting of previous pleasure in fetching and/or controlling safer/closer water resources, of feeling relief in being able to obtain safe water with ease, of talking about the joy of having one's own uncontaminated well, or the pleasure in going far to get water as an escape out of the house. Emotions of 'shanti' (peace) and 'shukh' (happiness) of drinking safe water, especially from one's own safe well, contrast with the sufferings the majority of the villagers faced. However, it is also important to highlight the 'anondo/khushi' (delight/joy), 'shachchondo' (relief) and 'poritripto' (contentment) felt by those few with some stable access to safe water, or benefitting from occasional access to sufficient amounts of safe water (when they generally do not). While such emotions were less common, they are not insignificant. In the midst of the dire situation, small pleasures of having safe water and healthful water (and not suffering from arsenicosis from unsafe water) are meaningful (cf. Bhavnani et al., 2003).

Being mindful of the language of emotions and speech acts, and not objectifying the individualized expression of emotions but viewing them as inter-subjective and co-produced, allows us to understand the multi-dimensionality and importance of emotions

in everyday life vis-à-vis water and arsenic. The relationality of emotions explains the interactions and connections that people have to each other and to water. The intimate and necessary relationships that people have to life-giving water as well as the social relationships that people have with each other simultaneously constitute the emotional landscapes of water. These speech acts, expressions, and physical actions become part of the everyday relationship that people have to water. The feelings, thoughts, and actions related to water-fetching as well as well-sharing (as a well owner or as one who has to share from someone else's well) are entangled in the overall resource geographies of water in arsenic-affected areas. Paying attention to the emotional geographies of water forces scholars to consider processes and relations that are central to feminist political ecology research. It helps us better understand how people respond to environmental change, and to what end. Analyzing these narratives and invocations encourages us to understand more closely the hidden ways that resource geographies affect everyday lives. It also allows us to understand the ways that emotions are part and parcel of the complex ways that people access and use a resource, one that is viscerally important to their very survival.

### 5. Conflicting emotions, emotions of conflict

Social relationships have strong influences on the outcome of water access. How different groups of people navigate different social relationships to secure their access to water has a bearing (in general terms) on the way that everyday encounters take place at the water well. While most people will seek out a safe well from amongst their kin or neighbors, this is neither an easy nor a given relationship. Hierarchies of power and social differences are felt acutely by those seeking safe water that is not from their own well, and various forms of conflicts and struggles ensue. The most common reasons given by people for conflicts and struggles over water, that led to the various sufferings and emotions, were from people trying to access and use sources that were not their own (for those who depended on other people's wells), in addition to dealing with increased pressure on their own wells by others (for those who owned safe wells). Factors that influenced the struggles over water mostly revolved around power in access and control of water, especially when using someone else's water source (i.e. it became an ownership issue). This was followed by financial issues (if poorer households had not given money for operation and maintenance of the well), and then over other issues that manifest over water collection (pre-existing disputes). These issues were followed by frictions related to overcrowding/queuing, over the amount of water taken, walking over someone else's courtyard/land (trespassing) or facing blocked paths to a water source, accusations of not cleaning the tubewell platform area, accompanied children getting/wasting water, adults and children not operating the tubewells properly or overusing it, and being an outsider (i.e. not a member in the same water project, kinship group, or patron–client relationship). Some of the broader societal reasons people alluded to that aggravated or easily led to conflicts were class differences in sharing a water source, power differences (between individuals and households), religious differences, as well as differences in political party affiliation. Arguments, noise, and crowding at safe tubewells generally was most disliked by tubewell owners. One man put it as follows: “Too many women in one place means too much noise and squabbling; who wants to put up with that daily in his own *bari*?” The gendered and classed tenor of this complaint is made possible by the deeply entrenched patriarchal and socially hierarchical sensitivities in much of rural Bangladesh, as well as by the fact that tubewells are usually located in the courtyards of homesteads (where huts surround the common courtyard), making it the focal point where women from outside can

come to fetch water, but be under the watchful gaze and the hearing range of the owners.

How much emotions really matter in situations of struggle for access and control of resources is brought to the open in everyday encounters, where the manipulation of self and others is significant in the access of water in an area. This is demonstrated by the example given above: the man who chases away people who come to use his tubewell as he feels it is a nuisance for him, which results in the women going to other unsafe water sources because they cannot use the safe water source (causing considerable emotional distress for the women). But several women often challenge restrictions and invoke their sufferings in order to obtain water (often invoking their role as mothers, as mentioned earlier). This does not always work, however. As many women face rejections and restrictions on accessing and using a safe well, they often resort to using unsafe water in order to reduce further confrontation and social strife. Social emotions such as shame, embarrassment, and guilt are often what regulate social behavior and influence conformity or norm-following. These come to play important roles in water–society relations, where social emotions influence who obtains water from where, when, how much, and to what end.

Some women (and their household members) will carefully monitor their behavior and emotions around those they are dependent on for safe water, so as to not upset tenuous relations that enable them to obtain water. Any social infractions such as disagreements, perceived lack of respect (on the part of the well owners), insufficient expressions of gratitude or providing free labor (in return for safe water) can jeopardize the right to access a safe well. As one young woman put it: “We suffer for water in many ways, and put up with a lot everyday just so that we can have some water to drink.” As a result, fetching water comes to involve not only physical labor but also emotional labor, in maintaining appearances of deference, subservience, and conviviality. Having to ‘keep quiet’ or overlook any insults or humiliation were common strategies women employed in order to keep their water access somewhat secure. Social relationships and encounters thus affected daily experiences of water, and public emotions were often controlled. Private expressions of emotions that result from such public experiences often involved complaints to family members, sharing experiences with other women who face similar challenges, or keeping it to oneself. This is particularly keenly felt by young daughters-in-law, who are generally burdened with the task of fetching water throughout the day for their in-laws, and these young women are often fearful of rebuke and punishment if they do not provide sufficient amounts of water in a timely manner. Their emotional realities are compounded by not only the challenges of access outside the home but also negotiating relationships and being the ‘dutiful’ daughter-in-law inside the home. As a result, managing one's emotions, as a result of the difficulties of accessing water or using a water source, thus become wrapped up in the practices of water management. Conversely, social relationships and friendships formed and maintained as part of the labor of gathering water with other vulnerable women, or sharing common sorrows and hardships with both men and women who are facing the water crisis, become ways that people cope with the daily struggles in their lives. Similar experiences can forge bonds or splinter people apart (for instance, the social relations that affect water access and the friendships that are formed through water-fetching labor can become important in other arenas of life; see also Loftus, 2006).

Attention was given in my ethnographic research to not just what is said, but how it was said and the context and consequences of such statements and sentiments. In both the individual interviews and group discussions that were conducted, a range of emotions were expressed and thoughts shared by women and men.

Follow-up interviews and discussions enabled further inquiry and probing into commonly-held sentiments as well as unique experiences.<sup>5</sup> What was observed is that in group discussions, the dynamics of the discussion often revolved around the common sufferings in the water crises (how it was affecting entire communities, the commonalities of difficulties in obtaining safe water, how they coped by sharing water amongst themselves when critically needed, etc.). Also brought into the light were the similarities and differences in experiences with water and with each other. Individual conversations often elaborated on such issues, but sometimes provided further information or counter-narratives of how specific households suffered more than others. In several cases, how specific conflicts that had taken place at water wells were brought up, in order to show the differences in the levels of suffering of people in the locality.

For instance, in one group discussion with fifteen women who lived in a *para* (neighborhood) that was far away from a safe water source, all the women discussed and shared sentiments of the daily challenges they faced in providing water for their families. The issues around access and use of water and the physical and emotional sufferings were more dominant and prevalent in such conversations. But follow-up individual conversations with the women provided insights into how this collective suffering was more textured, in that two of the women (Kulsum and Esha) in the group had slightly better access to the safe well in another *para* (due to kinship connections with the owner) compared to the other women in the group. This helped explain why Kulsum and Esha were less vocal in the group discussions and focused more on the broader concerns of arsenicosis in their area. Their neighbors envied their relatively better access rights to the safe well (i.e. not having to face rejections, restrictions, insults, etc.). Yet conversations with these two supposedly privileged women demonstrated that neither Kulsum nor Esha felt they were suffering much less in the overall picture, but they did acknowledge that they could get water more readily than their neighbors. But they were keenly aware that the access rights they currently enjoyed were very tenuous, and they worried about the day when they may be denied water so readily by their kinfolk who owned the safe well in the other *para*. Esha narrated that even she was told off sometimes by the well owners: "Why do you keep taking *our* water? Go find it somewhere else." Esha was concerned about having her neighbors go with her to this well, as it created more pressure and crowding at the well. Sometimes Kulsum and Esha went with other women in the neighborhood to fetch water together, which helped everyone in the group get water more readily, but this was not possible everyday as different schedules and water needs necessitated that women fetch water on their own or at different times (usually 3–4 trips are made each day to fetch water for a household). While some of the women in the neighborhood tried to go with Kulsum or Esha each day in the hope of minimizing rejections/restrictions/insults, this was not possible all the time; most of the women then resorted to obtaining water from the unsafe red tubewell closer to them. They felt despair and angst in using this water, but often it was the only source that was viable. In this neighborhood, the women were connected and separated over their access rights to a safe water source that influenced the relational aspects of their lives; it was a source of friction and discomfort in their interactions sometimes, but it also bonded them closely in their daily struggles to obtain water.

The private/public display of emotions is brought to the fore in these encounters, as women were navigating through not only their experiences with water access/control but also with each other and their differential power/rights. The emotional labor involved in maintaining water access, as well as any conversations about it, both became evident. Such realities influenced the water-scapes that women could and could not access, and how that spilled over into other aspects of their lives – such as arguments at water wells souring relationships between entire families; or, the joy of being able to pool funds together to invest in a well that bonded families more closely; or, the respite felt when safe water was closer to one's home that enabled women to spend more time doing other tasks. Such varied emotions thus affected the ways that women came to relate to water management practices in their locality, and to the overall water contamination situation.

What is important to note is that conflicts and struggles over water can be publicly manifested (e.g. heated conversations or exchange of words) as well as expressed in less public manners, and this has gendered repercussions.<sup>6</sup> Public displays of conflict over water may be small skirmishes at the water well between women, and not gain much wider sympathy or attention. While women may be willing to share their troubles with close confidantes, many often keep it to themselves. This feminization of the experience of conflict may explain the lack of attention given to water access issues in many households and by policymakers, as it is expected that the womenfolk of the household will stoically fetch water each day in order to fulfill their gendered duties. Overall, while women are facing increasing hardship to fetch water, many feel that it is their duty to bear the sufferings and that they must continue at whatever cost. It is generally assumed the women of the household will take care of the task of fetching water daily without resistance or challenge, and their labor is largely undervalued. Thus, the water conflicts and experiences are often devalued by household members as they impinged on women's labor time, relations, and emotions. As difficulties of obtaining safe water affect the water consumption habits and exposure to arsenic of all family members, conflicts and experiences at the water source have direct bearing on others beyond just the person fetching the water. When obtaining water from a safe source is physically, socially or emotionally too difficult, women often resort to fetching water unsafe tubewells (which may be their own or exist nearby).

Turner (2004) has argued that spatially-fixed resources are more likely to produce more visible conflicts (e.g. at water sources), as more diffuse resources or less spatially-fixed resources may not produce the fixated locations of conflicts. In arsenic areas, this is initially manifested at safe/green tubewells, where the distributions of tubewells spatially locate points of initial resource struggles or conflicts. Such conflicts can have spill-over effects, as arguments at or over water sources affect other domains and relationships between people, and thereafter manifest in other spaces (e.g. public places of bazaars where men argue over water management practices or decisions; in homes when household members discuss/debate conflicts). Spatializing conflicts is also accompanied by temporality, which is another dimension that needs greater attention from scholars. Conflicts over resources can result from long-term political struggles and social tensions over resources rather than one-off or rash outbursts (Carney, 1996; Roy, 1994; Turner, 2004). While conflicts generally do tend to display long-term patterns of struggles and negotiations over access, ownership, or use, they can also be momentary. At safe tubewells, women

<sup>5</sup> As a Bangladeshi woman who has conducted research for a number of years in rural Bangladesh, I had access to people, especially women, that perhaps foreigners or male researchers would not enjoy in the predominantly patriarchal and conservative settings. I believe this facilitated the deeper and frank discussions about emotions, experiences, and sentiments around water. For further discussion about my research methods and ethics, see Sultana (2007c).

<sup>6</sup> Scott's (1985) public versus hidden transcript is useful in this regard, but in terms of the expressions of conflict over water (in Bangladesh) rather than as resistance (in Scott's research). While such expressions can be read as resistance, I am more interested in the meanings of the private/public discussion of conflicts and the related emotions and sentiments.



often have heated exchanges of words and shouting, but the emotions often calm down afterwards. As one woman put it, “*pani nite ektu to hobei*” (roughly translated to “a little fighting will always take place over water”), while another woman stated “*panir kaiija shob shomoy*” (“water conflicts are constant”). For some people, it is a temporal friction or conflict that has to be overlooked in the broader scheme of things. However, not all conflicts are resolved or overlooked, and simmering tensions and enmity do result. Temporality can be transformed to permanence in two ways. One is that pre-existing disputes, enmity, or feuds on other issues manifest themselves at water sources and thus get further entrenched. Often the conflict was not over water, but over other things that came to bear on water. The other manner is that the struggle over water itself produces new conflicts, tensions and enmity that may remain unresolved, and result in souring of overall relations between people and households.

In many instances, the conflicts that women face in fetching safe water do become broader conflicts, especially when disputes and tensions between households and *baris* flare up because of water issues. In such cases, the experience of conflict over water involves more people than those facing day-to-day challenges at the water source, and can take a variety of forms. In one instance, two *baris* were not on speaking terms due to exchange of words between the women that was interpreted to be insults to the household heads (generally the male elders) and thus to the honor of the *bari*. In another instance, dispute over the amount of money contributed towards a shared tubewell led one *bari*'s women to refrain from taking water from the tubewell, even though they had contributed some money, as they felt it was an insult to their families. The women walked much further each day to get water, internalizing the hardship for the sake of family honor. The women felt that their embodied emotions and pains were less important than the sensitivities and honor of the male elders in the household, thereby performing gender subjectivities that increased their sufferings. However, as one woman put it, she would rather die from arsenic poisoning than face constant insults and arguments in fetching safe water elsewhere. Such sentiments are often expressed in private, as a way to vent and express frustrations, but most women dealt with or attempted to resolve their emotions and experiences at water sources to pursue the bigger goal of providing safe water to their families, and feeling contentment of being good wives/mothers who endured sufferings to fulfill their familial duties.

While the arsenic situation has created an environment where social tensions can easily erupt at water sources, the nature of the conflicts are also mediated by the trade-offs people are willing to make at any given moment. If it is worth battling it out to obtain water, some people will take the risk. Others would rather maintain patron–client relationships in order to gain on other fronts (e.g. sharecropping agreements, political patronage). The gendered nature and scale of the conflict is thus important, as women may argue at water points and resolve the situation in whatever ways they deem fit, rather than escalating to the scale of the household or *bari*. In other instances, households and *baris* are involved in conflicts over water and its management practices. As such, the tenor of the conflict, and the scale at which it occurs, are important aspects in understanding the ways that arsenic and water have come to play a role in influencing everyday life. Conflicts at water sources have the potential to spillover and poison social relations amongst groups of people, where arsenic can poison not just individual bodies and families but the entire social fabric in a locality and the emotional ties that bind people.

## 6. Conclusion

My goal in this article was to push the boundaries of theorizations in political ecology more broadly, and feminist political

ecology more specifically, to engage with the emerging literatures on emotional geographies. I believe that nuanced, rich and productive analyses are possible that can greatly expand current debates to better elucidate why and how specific nature–society relations play out the way they do. Through the case of water crises in Bangladesh, I hope to have demonstrated that the emotional geographies of water access, use, control, and conflicts mediate the ways that water comes to affect everyday life in places of water scarcity. In this instance, the joys and relief of having safe potable water co-exist with the pain, fear, despair, conflicts, and overall sufferings *for* and *from* water, where emotions saturate everyday water–society relations. Issues of access and use of water produce a range of emotions and experiences at each water source throughout the day. Conflicts over water are lived, felt, embodied by variously situated subjects in their daily struggles for safe water. As such, broader social relations of power and gendered subjectivities are re/negotiated and re/produced in water–society relations where emotions come to play a key role.

As argued in this article, feminist political ecology can engage emotional geographies literatures to further contribute to the scholarship on resources management and the gendered subjectivities that are produced and negotiated through resource conflicts and management practices. Analyzing the emotional geographies of resource access, use, and control thus allows us to better understand the lived experiences of such realities, and explore how emotions and embodied subjectivities play a role in the ways that natural resources come to influence everyday life. The messiness and entanglements in nature–society relations are better explained through closer analysis of complexities that exist, thereby enabling us to more clearly explain how and why people relate to, use, and find meaning in resources the way they do. Such scholarship encourages scholars to explain resource politics, struggles and access/conflict – themes that are central to (feminist) political ecology scholarship – as being more than about the resource itself or the socio-political power relations involved, but also about the emotions involved as these influence the practices and decisions people make in everyday resources use, control and conflict. Further research in this vein can thus greatly enrich and nuance our conceptualizations of commonly-used phrases like ‘resources struggles’ or ‘resource conflicts’ by engaging critical understandings of emotional geographies of natural resources.

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## References

- Bennett, K., 2009. Challenging emotions. *Area* 41 (3), 244–251.
- Berry, S., 1993. *No Condition is Permanent: The Social Dynamics of Agrarian Change in Sub-Saharan Africa*. University of Wisconsin Press, Madison.
- Bhavnani, K.K., Foran, J., Kurian, P., 2003. *Feminist Futures: Re-Imagining Women, Culture and Development*. Zed Books, London.
- Blaikie, P., Brookfield, H., 1987. *Land Degradation and Society*. Methuen Press, New York.
- Bondi, L., 2005. Making connections and thinking through emotions: between geography and psychotherapy. *Transactions of the Institute of British Geographers* 30, 433–448.

- Carney, J., 1996. Converting the wetlands, engendering the environment: the intersection of gender with agrarian change in Gambia. In: Peet, R., Watts, M. (Eds.), *Liberation Ecologies: Environment, Development, Social Movements*. Routledge, New York, pp. 165–187.
- Crow, B., Sultana, F., 2002. Gender, class and access to water: three cases in a poor and crowded delta. *Society and Natural Resources* 15 (8), 709–724.
- Das, V., 1997. Language and body: transactions in the construction of pain. In: Kleinman, A., Das, V., Lock, M. (Eds.), *Social Suffering*. University of California Press, Berkeley, pp. 67–92.
- Davidson, J., Bondi, L., 2004. Spatialising affect; affecting space: an introduction. *Gender, Place and Culture* 11 (3), 373–374.
- Davidson, J., Bondi, L., Smith, M., 2005. *Emotional Geographies*. Ashgate, England.
- Dubash, N., 2004. Water, markets, and embedded institutions in Western India. In: Peet, R., Watts, M. (Eds.), *Liberation Ecologies: Environment, Development, Social Movements*, second ed. Routledge, New York, pp. 218–243.
- Ennis-McMillan, M., 2001. Suffering from water: social origins of bodily distress in a Mexican community. *Medical Anthropology Quarterly* 15 (3), 368–390.
- Ettlinger, N., 2010. Emotional economic geographies. In: Smith, S., Pain, R., Marston, S., Jones, J. (Eds.), *The Sage Handbook of Social Geographies*. Sage, London, pp. 237–252.
- Gururani, S., 2002. Forests of pleasure and pain: gendered practices of labor and livelihood in the forests of Kumaon Himalayas, India. *Gender, Place and Culture* 9, 229–243.
- Hanchett, S., 2004. *Social Aspects of the Arsenic Contamination of Drinking water: A Review of Knowledge and Practice in Bangladesh and West Bengal*. Report of the Arsenic Policy Support Unit, Ministry of Local Government, Rural Development and Co-operatives, Government of Bangladesh, July 2004.
- Harris, L., 2006. Irrigation, gender and social geographies of the changing waterscapes of southeastern Anatolia. *Environment and Planning D: Society and Space* 24, 187–213.
- Klouzal, L., 2003. The subjective side of development: sources of well-being, resources for struggles. In: Bhavnani, K.K., Foran, J., Kurian, P. (Eds.), *Feminist Futures: Re-Imagining Women, Culture and Development*. Zed Books, London, pp. 256–262.
- Langridge, R., Christian-Smith, J., Lohse, K., 2006. Access and resilience: analyzing the construction of social resilience to the threat of water scarcity. *Ecology and Society* 11 (2), 18.
- Leach, M., Mearns, R., Scoones, I., 1999. Environmental entitlements: dynamics and institutions in community-based natural resource management. *World Development* 27 (2), 225–247.
- Loftus, A., 2006. Reification and the dictatorship of the water meter. *Antipode* 38 (5), 1023–1045.
- Mehta, L., 2003. Problems of publicness and access rights: perspectives from the water domain. In: Kaul, I., Conceicao, P., Le Goulven, K., Mendoza, R. (Eds.), *Providing Global Public Goods: Managing Globalization*. Oxford University Press, New York, pp. 556–575.
- Moore, D., 2005. *Suffering for Territory: Race, Place and Power in Zimbabwe*. Duke University Press, Durham.
- Nightingale, A., 2006. The nature of gender: work, gender and environment. *Environment and Planning D: Society and Space* 24, 165–185.
- Ostrom, E., 1990. *Governing the Commons: The Evolution of Institutions for Collective Action*. Cambridge University Press, New York.
- Peluso, N., Watts, M., 2001. *Violent Environments*. Cornell University Press, Ithaca.
- Pile, S., 2010. Emotions and affect in recent human geography. *Transactions of the Institute of British Geographers* 35, 5–20.
- Rangan, H., 1997. Property vs. control: the state and forest management in the Indian Himalaya. *Development and Change* 1, 71–94.
- Resurreccion, B., Elmhirst, R. (Eds.), 2008. *Gender and Natural Resource Management: Livelihoods, Mobility and Interventions*. Earthscan, England.
- Ribot, J., Peluso, N., 2003. A theory of access. *Rural Sociology* 68 (2), 153–181.
- Rocheleau, D., Thomas-Slayter, B., Wangari, E., 1996. *Feminist Political Ecology: Global Issues and Local Experiences*. Routledge, New York.
- Roy, B., 1994. *Some Trouble with Cows: Making Sense of Social Conflict*. University of California Press, Berkeley.
- Sadeque, S., 2000. Nature's bounty or scarce commodity: competition and consensus over groundwater use in rural Bangladesh. In: Bruns, R., Meinzen-Dick, R. (Eds.), *Negotiating Water Rights*. Vistaar Publishers, New Delhi, pp. 269–291.
- Schroeder, R., 1999. *Shady Practice: Agroforestry and Gender Politics in The Gambia*. University of California Press, Berkeley.
- Scott, J., 1985. *Weapons of the Weak: Everyday Forms of Peasant Resistance*. Yale University Press, New Haven.
- Sharp, J., 2009. Geography and gender: what belongs to feminist geography? Emotion, power and change. *Progress in Human Geography* 33 (1), 74–80.
- Sikor, T., Lund, C., 2009. Access and property: a question of power and authority. *Development and Change* 40 (1), 1–22.
- Smith, A., Lingas, O., Rahman, M., 2000. Contamination of drinking-water by arsenic in Bangladesh: a public health emergency. *Bulletin of the World Health Organization* 78 (9), 1093–1103.
- Smith, M., Davidson, J., Cameron, L., Bondi, L., 2009. *Emotion, Place and Culture*. Ashgate, England.
- Sultana, F., 2006. Gendered waters, poisoned wells: political ecology of the arsenic crisis in Bangladesh. In: Lahiri-Dutt, K. (Ed.), *Fluid Bonds: Views on Gender and Water*. Stree Publishers, Kolkata, pp. 362–386.
- Sultana, F., 2007a. *Suffering for Water, Suffering from Water: Political Ecologies of Arsenic, Water and Development in Bangladesh*. PhD Thesis, Department of Geography, University of Minnesota, Minneapolis, MN, USA.
- Sultana, F., 2007b. Water, water everywhere but not a drop to drink: Pani politics (water politics) in rural Bangladesh. *International Feminist Journal of Politics* 9 (4), 1–9.
- Sultana, F., 2007c. Reflexivity, positionality and participatory ethics: fieldwork dilemmas in international research. *ACME: An International E-Journal for Critical Geographies* 6 (3), 374–385.
- Sultana, F., 2009a. Fluid lives: subjectivities, water and gender in rural Bangladesh. *Gender, Place, and Culture* 16 (4), 427–444.
- Sultana, F., 2009b. Community and participation in water resources management: gendering and naturing development debates from Bangladesh. *Transactions of the Institute of British Geographers* 34 (3), 346–363.
- Tapias, M., 2006. Emotions and the intergenerational embodiment of social suffering in rural Bolivia. *Medical Anthropology Quarterly* 20 (3), 399–415.
- Thien, D., 2005. After or beyond feeling? A consideration of affect and emotion in geography. *Area* 37 (4), 450–456.
- Thien, D., 2009. Death and bingo? The Royal Canadian Legion's unexpected spaces of emotion. In: Smith, M., Davidson, J., Cameron, L., Bondi, L. (Eds.), *Emotion, Place and Culture*. Ashgate, England, pp. 207–226.
- Tolia-Kelly, D., 2006. Affect—an ethnocentric encounter? Exploring the “universalist” imperative of emotional/affectual geographies. *Area* 38 (2), 213–217.
- Turner, M., 2004. Political ecology and the moral dimensions of resource conflicts: the case of farmer–herder conflicts in the Sahel. *Political Geography* 23 (7), 863–889.
- Wutich, A., Ragsdale, K., 2008. Water insecurity and emotional distress: coping with supply, access, and seasonal variability of water in a Bolivian squatter settlement. *Social Science and Medicine* 67, 2116–2125.