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Ecodevelopment, Gender, and Empowerment: Perspectives from India's Protected Area Communities

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Abstract
Book abstract:

Feminism has re-shaped the way we think about equality, power relations and social change. Recent feminist scholarship has provided new theoretical frameworks, methodologies and empirical analyses of how gender and feminism are situated within the development process.*Global Perspectives on Gender and Space: Engaging Feminism and Development* draws upon this framework to explore the effects of globalization on development in diverse geographical contexts. It explores how women's and men's lives are gendered in specific spaces as well as across multiple landscapes.

Keywords
feminism, eco-development, globalization, India

Disciplines
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Perspectives from India's Protected Area communities

Ruchi Badola, Monica V. Ogra and Shivani C. Barthwal

Introduction

Over 150,000 protected areas (PAs) covering at least 24 million km^2 (IUCN/UNEP 2009) exist for the purpose of safeguarding terrestrial and marine-based flora and fauna, thereby helping to maintain essential ecosystems and to conserve the Earth's unique natural biological heritage. While the ecological benefits of biodiversity conservation accrue at local, national, regional and global scales, the social costs of conservation have been borne disproportionately by members of local communities. Over 50 percent of PAs worldwide are inhabited by local populations (Torri 2011) and in India, this figure is at least 65 percent (Kothari *et al.* 1989). Negative local impacts associated with the creation of PAs typically include loss of livelihoods, conflicts with wildlife and park authorities, forcible relocation and social and cultural displacement; indigenous and poor communities are especially vulnerable to these negative impacts (Kothari *et al.* 1996; Brechin *et al.* 2003; West *et al.* 2006).

Gender-based divisions of labor in these communities typically assign the responsibility for the collection of PA-based resources that fulfill domestic needs (such as fuelwood, fodder, water and edible or medicinal plants) to women. However, women are often structurally excluded from institutions of environmental management due to the persistence of traditional gender-based power hierarchies that privilege men's knowledge and experiences (Guijt and Shah 1998), or which include them only as tokens (Agarwal 2001). Such hierarchies intersect with other economic, ethnic and cultural structures of discrimination and bias (Rocheleau *et al.* 1996; Elmhirst and Resurreccion 2008). In rural India especially, gender and class/caste-based hierarchies tend to collectively reinforce longstanding patterns of elite and male privilege, authority, and knowledge about matters environmental or otherwise (Agarwal 1992 and 2000; Badola 1998).

As this chapter will explore, these long-established trends may be changing in PA communities that experiment with Integrated Conservation and Development

Projects (ICDPs), known in India as "ecodevelopment." Numerous studies from around the world have shown that caste/class issues strongly shape local-level experiences with both PAs and ecodevelopment (see, for example, Kothari *et al.* 1996; Rangarajan and Saberwal 2003; McShane and Wells 2004; Woodroffe *et al.* 2005; Baviskar 2003; Saberwal and Chhatre 2003). More specific analyses of the ways in which gender functions as an equally critical and mediating variable are rare and scattered in the literature on PAs in India (for exceptions, see case studies by Chandola *et al.* 2007; Ogra 2008; Pandey 2008; Torri 2010). However, Flintan (2003) and Vernooy (2006) are good examples of existing work on gender and natural resource management in sub-Saharan Africa and other parts of Asia, respectively. This chapter attempts to help redress the gender gap in the literature on ICDPs by specifically focusing on the gendered nature of contributions to ecodevelopment project participants around Indian PAs. In so doing, it also furthers understanding about the conditions under which ecodevelopment can be a means for empowerment for both women specifically, and their communities.[1]

For both instrumentalist and ethical reasons, PA managers and conservation advocates in India have begun taking a more active interest in linking "conservation" with vaguely defined notions of "women's empowerment" as part of their overall approach to ecodevelopment (Alers *et al.* 2007; Mishra *et al.* 2009; Ogra 2012a). The promotion and creation of women's collective groups (sometimes a variant or extension of a commonly maintained, traditional women's institution known as *mahila mangal dal*) remains a key feature of this approach (Pillai and Suchintha 2006; Rao 2006). Promotion of livelihood diversification strategies reflecting active engagement with markets, microfinance and home-based activities (along with the creation of new spaces for women to discuss and prioritize village-level social and environmental issues) have also been key features of these groups (Ogra 2012a). While an emerging literature examines the short- and long-term implications of microfinance for gender relations (see Aladuwaka and Oberhauser, this volume) and feminist political ecology continues to examine the links between collective action and empowerment outcomes (e.g. Rocheleau *et al.* 1996; Agarwal 2000; Resurreccion and Elmhirst 2008; Cruz-Torrez and McElwee 2012; Parpart *et al.* 2002; Cornwall and Anyidoho 2010; Ebyen 2011), relatively little is known about what the conservation community's deepening interest in women truly suggests for gender relations in sites targeted for ecodevelopment or in terms of the advancement of women's practical and strategic needs (Moser 1993) at individual or collective scales.

This chapter seeks to foster a much-needed discussion of these important issues within both the conservation community and among feminist researchers. We contribute to this wider discussion by presenting relevant field-based perspectives from four PAs in the Indian Himalayas. Our guiding questions are as follows: To what extent are contributions to ecodevelopment planning and related outcomes linked to gender? What, if any, have been the gender-differentiated impacts of ecodevelopment? And what lessons can be drawn for improving the design, effectiveness and empowerment potential of the ecodevelopment model in practice? To

begin, the following section provides a contextual overview of the ecodevelopment experience in India.

Ecodevelopment in India: stages of theory and practice

The passage of the Indian Wildlife Protection Act in 1972 led to rapid expansion of a PA network that presently covers approximately 4.74 percent of the country (WII 2012). From just six national parks and fifty-nine wildlife sanctuaries in 1970 (WII 2012), the total number of PAs at the close of 2012 was 664 (IUCN/UNDP 2009). However, this growth has been accompanied by an intensification of both discursive and physical conflicts about the meaning and practice of conservation (Gadgil and Guha 1992; Torri 2010). Nevertheless, while retaining the assumption that inviolate core zones are required for long-term and effective conservation planning, PA policies and practices around the world slowly began to embrace the "participatory" approaches used in the field of rural development throughout the 1980s and 1990s.

In 1982, ecodevelopment was proposed by a task force of the Indian Board for Wildlife as a new strategy to reduce people–park conflict (IWBL 1993). Envisioned as a site-specific set of new incentives for conservation, including support for rural development and alternative income-generating opportunities to reduce forest dependence, and to and fulfill the promise of community participation, the primary objective of ecodevelopment in this first stage (1982–92) was to compensate local communities for lost access to resources and to reduce their dependence on the PA (Badola 1995). In practice, these initiatives tended to be isolated and fragmented "development" activities, without clear and direct linkages to conservation through sustainable resource use. Projects centered on infrastructure development as compensation for the curtailed use of PA resources (e.g. construction of schools, water tanks, community halls or village approach roads), leaving PA authorities "grappling with explanations to justify these as 'ecodevelopment' " (Mishra *et al.* 2010: 1362). At some sites, ecodevelopment interventions included the introduction of new varieties of hybrid cattle, distribution of smokeless *chullahs* (stoves), training in beekeeping and experiments with ecotourism (Karlsson 1999)—each intended to induce a reduction in biomass extractions from PAs.

An intensified emphasis on local participation (which tightened conservation-development linkages), partnerships with local stakeholders and conservation NGOs (intended to generate public support for the nation's PAs), and a focus on creation of village-based microplans characterized a second stage of ecodevelopment. Chief among the eighty government-supported initiatives in place by the mid 1990s, was the India Ecodevelopment Project (IEP) (1996–2001), described as "perhaps the most widely debated wildlife project ever undertaken in India" (Singh and Sharma 2004: 300). Funded by the World Bank/GEF, the IEP covered seven PAs and included some of the most important tiger reserves. Central to the IEP and related approaches was the creation of a new village-based institution: the ecodevelopment committee (EDC). With a member-secretary from the

Forest Department to maintain the conservation interests of the PA, chief among the EDC's duties was to create a site-specific set of ecodevelopment planning objectives and activities through means of participatory processes (Bhardwaj and Badola 2007) and awareness building about the value of conservation, the PA network and sustainable resource use (Singh and Sharma 2004). Typical EDC microplans included PA-based activities such as: habitat restoration and improved protection measures; village-based activities such as growing of useful fuel/fodder species at the PA border; distribution of alternative cooking technologies; and receiving development assistance (Karlsson 1999; Baviskar 2003; Pandey 2008; Mishra *et al.* 2010).

Ecodevelopment in the 1990s continued to be premised on the assumption that a direct relationship exists between poverty alleviation of PA communities and improved PA protection (Mishra *et al.* 2009). However, given that the *sine qua non* of ecodevelopment continues to be conservation of PA resources (and not development of livelihoods in the PA communities), the overall approach has drawn much criticism. Observers have argued that this form of development has inadequate participatory aspects (Singh and Sharma 2004; Pandey 2008), is prone to corruption (Karlsson 1999; Pandey 2008), serves the interests of the elite/powerful (Baviskar 2003; Dejouhanet 2010) and excludes women from meaningful involvement (Chandola *et al.* 2007; Ogra and Badola 2008). While they have emerged primarily in response to practices in the context of the IEP, these critiques have also led us to question whether a possible third stage of practice is emergent, i.e. one in which empowerment is implicitly (or explicitly) among the objectives. The following section addresses our collective field-based experiences in the Indian Himalayas for insight and comparative examples.

Ecodevelopment in the Indian Himalayas

The tremendous historical, cultural and economic diversity characteristic of India's PA network complicates attempts to generalize. Thus, we focus on the cultural landscapes of the Indian Himalayas, which are similar enough to provide useful points of comparison, yet are also sufficiently varied to support analysis and discussion of the transformative potential of ecodevelopment practice. With approximately179 PAs (WII 2012) for the protection of the ecologically fragile landscape and biodiversity conservation, the Indian Himalayan region (Figure 11.1) is also highly significant from a social standpoint. The high dependence on natural resources, consolidation of the PA network and subsequent denial of traditional resource rights, have led to widespread mistrust, alienation and loss of livelihood security. Women living in villages adjacent to PAs have been strongly affected by the designation of PAs due to the gender-based division of labor typical to the region.

Ecodevelopment projects in and around four Himalayan PAs were initiated with the objectives of improving biodiversity conservation outcomes though reduction of local-use pressures, minimizing conflicts and improving the well-being of the local people. While community empowerment was envisioned

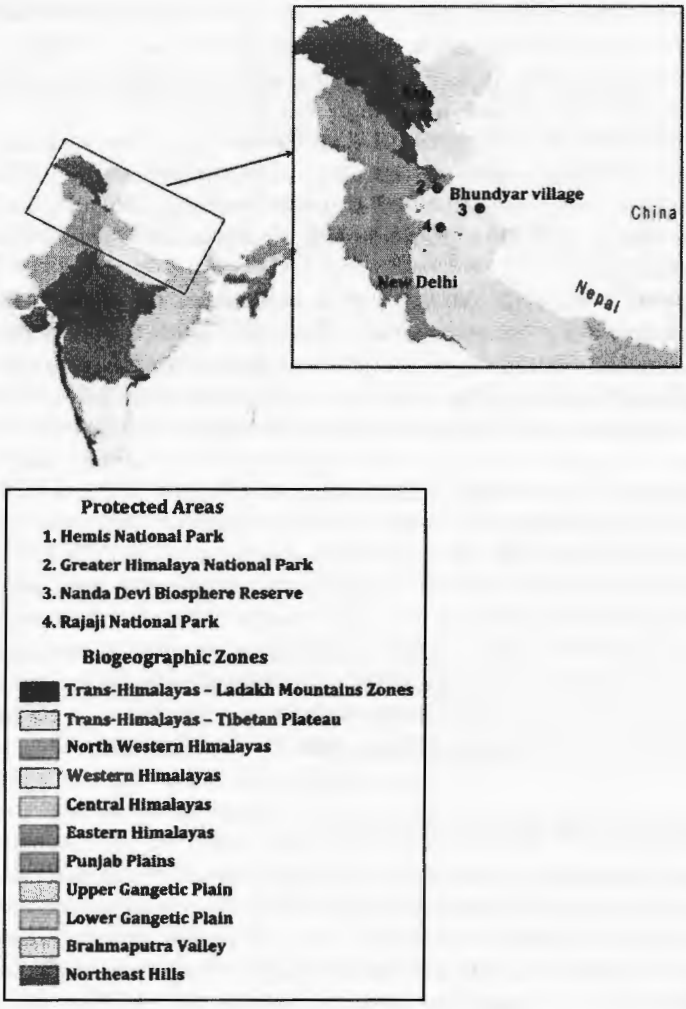

Figure 11.1 Selected protected areas and biogeographic zones in India. (Field survey, 2006.)

through participation-related objectives, some sites had specific goals emphasizing women's empowerment. However, conceptualizations of empowerment varied between sites (see Tables 11.1–3). Our combined fieldwork at these sites spans the period 1997–2012. During this period, at least one of us has supervised or conducted a wide range of data collection activities in the case study communities. The research methods have been largely qualitative, emphasizing participant-observation, in-depth interviews, focus group discussions, household questionnaire surveys and literature review. Participatory rural appraisal (PRA) exercises were also conducted in each PA community; for example, participatory mapping

exercises were used to identify gender-based uses of space, and gender-based time budget analysis was used to help us identify ecodevelopment-related labor practices. Participant-observation and interviews were used to gather personal narratives about participants' experiences with ecodevelopment. The following section contains our findings from the four case studies.

Hemis National Park

The Hemis National Park (HNP), located near the city of Leh (Jammu and Kashmir State) (Figure 11.1), is home to wild carnivores of significant conservation value (Table 11.1). Human population density is significantly lower at 3.5 persons/km^2 than that for the state of Jammu and Kashmir (99.7 person/km^2) in the approximately twenty-three hamlets inside the HNP. Local communities in and around HNP are relatively homogeneous in terms of religion, culture and traditions (Table 11.1). While outmigration of males aged fifteen to forty years is common, traditional practices of animal husbandry (rearing goats, sheep, yaks and pack animals) continue to be one of the main occupations of people living inside the HNP boundary. The average household agriculture landholding size is 2.05 acres and the average annual household income is approximately US$1,853 (Chandola 2012). Though differences in economic status are observable, our fieldwork suggests that these differences have not resulted in the high societal stratification typical of the rest of India. The gender dynamic is liberal; cultural practices of polyandry help to explain why women have traditionally been accorded high status in Ladakhi society and are central to household-level decision-making (Rizvi 1983; Norberg-Hodge 1991).

Since the creation of the HNP in 1981, the denial of basic infrastructure facilities (such as roads) has resulted in negative local attitudes toward the PA management. Medical and market facilities are reached by foot after a half- to two-day journey, which has been seen by locals as a lost opportunity for employment. In an effort to respond to these grievances and to further reduce anthropogenic pressure on the park, ecodevelopment activities were initiated in 2003. Several types of tourism associated with income-generating activities were introduced, including trekking home-stays, "parachute" cafés and camping. At the time of our most recent fieldwork (2011), nearly all the households along the trek routes of the HNP had set up guest rooms for tourists as part of the initiative. The J&K Wildlife Protection Department involved the local NGO, Snow Leopard Conservacy (SLC), in order to develop a strategy to improve the sustainability of local communities' income in consultation with the community members (Jackson *et al.* 2003) (Table 11.2).

During in-depth fieldwork (2005–6 and 2011), we observed that men and women both participate actively in these activities and that the sphere of labor-related activities for males and females is spatially segregated along gendered lines. While men work as guides, "pony men" and "trek operators" on routes in the PA, women are mainly responsible for home-based activities including managing guests and making local products for sale, such as apricot jam and woollens

Table 11.1 Socio-economic and geographic characteristics of selected Protected Areas in India

	Hemis National Park (HNP)	*Great Himalaya National Park (GHNP)*	*Nanda Devi Biosphere Reserve (NDBR)*	*Rajaji National Park (RNP)*
Protected Area category[a]	National park	National park	Biosphere reserve	National park
Area[a]	4,750[2] km	1,171[2] km	5,881[2] km	826[2] km
Biodiversity focus[a]	Snow leopard, mountain ungulates	Snow leopard, Asiatic black bear, Himalayan brown bear	Snow leopard, leopard, Himalayan black and brown bears, Himalayan musk deer	Large mammals (tiger and elephant)
Location/ biogeographic zone[a]	Trans Himalayas	North Western Himalayas	Western Himalayas	Upper Gangetic Plain
Local community	Ladakhi Buddhist[b]	Himachali[e, f]	Garhwali and Bhotia (Tolcha)[h]	Garhwali, Gujjars[k]
Employment/alternatives/ opportunities	Animal husbandry, Tourism, self-employment[b]	Agriculture, horticulture, animal husbandry[e, f]	Agriculture, animal husbandry, hydro-electric projects, tourism, services, NTFP extraction[h]	Agriculture, animal husbandry, services, handicrafts, NTFP extraction[k]
Religious composition of the community	Buddhist[b]	Hindu and Muslim[e, f]	Hindu[h]	Hindu and Muslim[k]
Community composition in terms of class	Homogenous[b]	Heterogeneous	Heterogeneous	Heterogeneous
Typical gender dynamics in terms of gender differentiated roles	Liberal[e]	Conservative[e, f]	Some areas are liberal and some areas are conservative[h]	Conservative[k, l]
Human–wildlife conflict	Prominent (58% households suffer livestock loss)[b, d]	Prominent (A total of 1,322 livestock loss during 1989–1998)[g]	Prominent (98% households reported crop damage due to wildlife)[i]	Prominent[l] (91% of study households reported crop loss due to wildlife)
People–park relation pre-ecodevelopment	Mistrust: not ready to negotiate[b]	Hostile: aggressive to the PA staff and property[e, f]	Hostile: aggressive to the PA staff[h]	Hostile: aggressive to the PA staff[k, l]
People–park relation post-ecodevelopment	Friendly[d]	Friendly[e, f]	Conflict on how to manage the resources[j]	Moving towards neutral[k, l]

Sources: [a]WII (2012); [b]Jackson and Wangchuk (2004); [c]Norberg-Hodge (1991); [d]Chandola (2012); [e]Saberwal and Chattre (2003); [f]Baviskar (2003); [g]Chauhan (1999); [h]Silori and Badola (1995); [i]Sahie (2011); [j]Basak (2008); [k]Chandola *et al.* (2007); [l]Oryx, 2008

Table 11.2 Overview of ecodevelopment initiatives in selected Protected Areas in India

	Hemis National Park	*Great Himalayan National Park*	*Nanda Devi Biosphere Reserve*	*Rajaji National Park*
Year of ED* initiative	1999 (started as APPA – Appreciative Participatory Planning and Action)[a]	1994[c]	1999 (Bhundyar Valley EDC)	1999[g]
Stages of community participation in ED	Socially acceptable contributing significantly to people's livelihood[a]	Socially acceptable contributing significantly to people's livelihood[d]	Socially acceptable contributing to alternative livelihood[e, f]	Have not moved much beyond micro-planning and awareness
Role of NGO in ED	Facilitator[a]	Provider of marketing links[d]	None	None
Programs under ED	Local home-stays, treks and cafès' (livelihood activities)[a]	Village-stay; treks; capacity building; Women Saving and Credit Groups (WSCG)[d]	Waste management; capacity building; eco-fee collection[e, f]	None
Committee managing ED initiatives	*Amma Chokspa* (mother group, i.e. women groups), Youth society[b]	*Devta* (diety) Committees; EDC; WSCG[c, d]	EDC; Women's Self-help Groups[e, f]	EDC; Women's Self-help Groups[g, h]
Committee goals	Employment; self-sustenance[a, b]	Employment; self-sustenance[d]	Employment; self-sustenance[e, f]	None
Funds utilized for	Plantations, civil works such as maintenance of footpaths, monastery etc.; capacity building	Civil works such as maintenance of footpaths, temples etc.; capacity building[c, d]	Civil works such as maintenance of footpaths, temples, etc; capacity building; waste management[e, f]	Civil works such as maintenance of footpaths, temples, community halls, etc.[g, h]

Sources: [a]Jackson and Wangchuk (2004); [b]Author's observation; [c]Saberwal and Chattre (2003); [d]Pandey (2008); [e]Seaba (2006); [f]UNEP and WCMC (n.d.); [g]Chandola *et al.* (2007); [h]Ogra and Badola (2008).

Note:
*Ecodevelopment (ED)

Table 11.3 Impacts of ecodevelopment in selected Protected Areas in India

	Hemis National Park	*Greater Himalaya National Park*	*Nanda Devi Biosphere Reserve*	*Rajaji National Park*
Gender sensitive	Formulated opportunities for men and women on the basis of their gender roles[a]	At later stage of ED,* gender role recognized[c, d]	No recognition of gendered roles[e]	No recognition of gendered roles[g, h]
People's reaction to ED	Embrace[a]	Embrace[c, d]	Embrace[e, f]	Neutral[g, h]
Changes in social relations post-ED	Provided equal opportunity to all[a, b]	Intensified upper and lower class differences[c, d]	Economic up-liftment of those who were directly involved in ED activities[e, f]	None[g, h]
Employment opportunity for women	Yes[a, b]	Not specifically until WSCG formed[c, d]	Not specific[e, f]	Not specific[g, h]
Changes in gender relations	Men and women empowered through economic and social opportunities[a, b]	WSCGs empowered women through economic, social and political opportunities; men inspired by the success of WSCGs[c, d]	Men empowered through economic and social opportunities; younger, educated women empowered through economic opportunity;[e, f]	None[g, h]
Conservation outcome	Conservation-conscious community[a, b]	Conservation-conscious community[c, d]	Conservation-conscious community[e, f]	None[g, h]

Sources: [a]Jackson and Wangchuk (2004); [b]Chandola (2012); [c]Saberwal and Chattre (2003); [d]Pandey (2008); [e]Seaba (2006); [f]UNEP and WCMC (nd); [g]Chandola *et al.* (2007); [h]Ogra and Badola (2008).

Note:
*Ecodevelopment (ED)

(Figure 11.2). Women also manage the "parachute cafés" (freestanding tea and snack bars constructed from discarded parachute cloth). The cafés are located near the villages, enabling women to balance their cafe-related and household responsibilities. While managing home-stay is an individual household responsibility, managing parachute cafés and camping sites are communal activities which ensure equal participation and benefit-sharing among the participating households (Figure 11.3). Additional revenue is generated from fees collected for use of campsites near the village grazing grounds (approximately US$1 per tent). Part of the total revenue generated from camping sites and parachute cafés goes to a common village fund and/or the *gompa* (monastery) fund while the rest is distributed among the families managing the camping sites and the café. The decision on revenue sharing is through mutual agreement among the villagers (men and women). The egalitarian gender relations in Ladakhi society have made it possible for both men and women to participate equally in decision-making pertaining to village and monetary issues at the household level and even at the village forums (Table 11.3).

The creation of homestay-based tourism has made it possible for women to participate in income-generating activities in new ways (contributing to overall

Figure 11.2 Ladakhi woman picking apricots. (Photo by Shivani C. Barthwal, 2006.)

Figure 11.3 Nimaling pasture at Hemis National Park. (Photo by Shivani C. Barthwal, 2006.)

goals of "community" empowerment as well as to individual-level empowerment), since the money from such activities mostly goes directly to the women. However, women in participating households from which working-age members have out-migrated have relatively greater labor demands. This scenario may prove to be less of a disadvantage than appears at first sight. During our fieldwork, for example, we were assigned one such home for the stay, as it was this particular household's turn. Realizing that our stay was to be solely organized and run by a woman who had a toddler in her lap, we were concerned for her: How would she manage both her guests as well as her baby? Her response was that "such good income" (US$11 per guest, per night) was well worth the modest efforts required to provide clean beds and food to the visitors; in addition, she expressed the opinion that the interesting social interactions with her guests was an additional benefit. During the times when she needed to work intensively for the guests, it was observed that the neighbors happily offered to look after her child. We found that this favor was reciprocated and was a common occurrence.

Great Himalayan National Park

The Great Himalayan National Park (GHNP) and adjacent conservation areas are located in Kullu district of Himachal Pradesh and together encompass an area of

1,171 km^2. Of this area, 754.4 km^2 are designated as the GHNP, while 265.6 km^2 are contained in an ecodevelopment-focused "ecozone" that lies adjacent to two Wildlife Sanctuaries (Sainj WLS and Trithan WLS). On the western edge of the park, approximately 160 villages are located in a 5 km wide ecozone. The local community is comprised predominantly of agro-pastoralists, who follow a religious tradition of local deity (*devta*) worship (Table 11.1). Villages are stratified into deeply entrenched caste-based categories in which the more powerful *Brahmins* and *Rajputs* occupy one end of a spectrum, and poorer and historically "untouchable" communities (known as Scheduled Castes or SCs) lie at the other. Members of *Brahmin* and *Rajput* communities are better endowed in terms of land and access to resources than SCs (Tucker 1997). As with caste-mediated interactions, a relatively conservative gender dynamic (privileging men) can be observed; this dynamic places a disproportionate and large burden of farm, forest and household labor demands squarely on women.

The global criticism of exclusionary practices and increasing local resentment for lost livelihood opportunities led to inclusion of the GHNP in the IEP. Throughout the project, the initiatives were focused on creating and increasing membership of EDCs, irrespective of membership criteria and linked to a need to have representatives from all sections of society. The resulting EDC was thus dominated by village elites, who were also the members of the powerful *Devta* committees (Saberwal and Chhatre 2003). While a conservative gender dynamic contributed to an atmosphere of non-participation by upper-caste women among both Hindus and Muslims, caste hierarchies among the Hindus formed a barrier for the meaningful participation of members of the SCs. The EDC was eventually declared unsuccessful and funding was stopped in 1999 (World Bank 2002) (Table 11.2). Engagement with ecodevelopment nevertheless continued under a park director who sought to directly integrate women's interests into new ecodevelopment activities (Pandey 2008). Women of poor and PA-dependent households, who had little or no participation in prior village development activities, were targeted for organization into Women Saving and Credit Groups (WSCG) of twelve to fifteen members each. Members were encouraged to save at least one rupee (conversion rate: INR1 =US$55) daily and accept the group's interest-free loans in support of new and "alternative" livelihood activities (Table 11.3).

Our site visits, observations and interactions with WCSG members and ecozone residents over the past ten years demonstrate that communities in these areas are now successfully operating small-scale businesses using their own savings. They are generating new income through activities such as vermi-composting, medicinal herb propagation, apricot oil production, hemp-based handicrafts and the cultivation of organic vegetables and cash crops. Moreover, benefits to the entire family accruing from women's contributions to the household income base are leading to changes in women's status and household standing. WSCG members engaged in personal capacity building through literacy classes and training for value-addition of the local produce are finding enthusiastic support from their male household counterparts. Some of the WSCG members have since been elected to governance positions as members of local administrative bodies. Encouraged by

the changes associated with this "pro-women" approach to ecodevelopment, many men have sought participation as well; for example, men have undergone training for new work as tourism guides, porters, cooks, and, perhaps most importantly from a conservation perspective, have agreed to give up illegal herb collection from the Park in exchange for the benefits of ecodevelopment. Park-supported strengthening of market linkages and marketing efforts have also helped to provide the critical opportunity for locals to sell their products within the wider state of Himachal Pradesh, to retail outlets in the capital of New Delhi, and even abroad (United Kingdom).

Nanda Devi Biosphere Reserve

Nanda Devi Biosphere Reserve (NDBR) comprises three zones: buffer, transition, and two core areas (the Nanda Devi National Park and Valley of Flowers National Park) (Table 11.1). There are forty-seven villages in the buffer and thirty-three villages in the transition zone. *Bhotia* and *Garhwalis* are the main ethnic groups of the area. Historically, local livelihoods for both communities have been based on trade and marginal agro-pastoralism (Table 11.1). The income of people living in the buffer zone is lower (INR11,100/hh/yr) than that of people living outside the NDBR (INR 13,340/hh/yr) (Saxena *et al.* 2011). While women have traditionally held a high status in both Garhwali and Bhotiya culture (Dash 2006), daily responsibilities and expectations in NDBR follow gender-based divisions. Both communities privilege men in terms of control of money, while women have greater control over household resource allocation in day-to-day living.

In response to the growing impacts of tourism and adverse livelihood consequences that followed the declaration of the Valley of Flowers National Park, ecodevelopment initiatives at NDBR were started in 1999 in Bhundyar village (Seaba 2006) (Table 11.2). By 2003, a range of income-generating options was implemented, such as the collection of "eco-fees" from mule owners and the creation of numerous tourism-related activities (Figure 11.4). Jobs were envisaged to benefit villagers across lines of age and gender: village youths (boys and girls) are paid to collect eco-fees and check receipts, while adult males staff various check-posts, check receipts and operate a mule rotation system. Adult women were encouraged to join the EDC in order to help manage the total revenue collected.

Ecodevelopment in Bhundyar has yielded mixed results in terms of broadly defined community participation, as well as in terms of social empowerment and changes in the overall gender dynamic (Table 11.3). While it has streamlined and regulated tourism in the valley, ecodevelopment has led to employment for only a small number of people—mostly men. In describing shortcomings, Seaba (2006) noted that the distance between villages and the ECD meeting place was an obstacle to widespread member participation. We found this to be particularly problematic for older residents, who were not involved in the day-to-day activities despite being EDC members. Second, while the absence of older women and men was particularly noticeable in the EDC activities, female members in general

Figure 11.4 Entry gate at Bhundyar Valley, Nanda Devi Biosphere Reserve. (Photo by Vinay Bhargava, 2006.)

appeared to have little influence in the ecodevelopment decision-making process. Third, although a few educated young women did get employment opportunities in EDC activities, adult women often acted as proxies for their husbands or silent spectators, and they often limited their participation to simply adding their names to member attendance rosters. Our observations are also consistent with those reported by Silori (2007), who notes that the ecodevelopment activities in the area are characterized by unequal distribution of the economic benefits and lack of employment. Lastly, in contrast to the experiences in HNP and GHNP, we found that there was an overall lack of men's willingness to make real space for women in the ecodevelopment process. On balance, these activities do not appear to have led to significant outcomes for women; rather than presenting an alternative vision for equity through conservation, the creation of the EDC appears to have reproduced existing gender and age hierarchies.

Rajaji National Park

Rajaji National Park (RNP) lies at the foothills of the Himalayas in the state of Uttarakhand. RNP is an important site that is under considerable developmental pressure; it includes a large area of the fragile Shiwaliks system and houses the northwestern-most population of the Asiatic elephant (*Elephas maximus*) (Table 11.1). In addition to a relatively small group of seasonal grass collectors and forest workers, RNP has two main resident communities: *Van Gujjars*, a Muslim pastoral community that relies on park resources to support its buffaloes, and small-scale subsistence agriculturalists. Agricultural communities in and around the park vary widely in terms of degree of religious and ethnic heterogeneity and in terms of caste-based social stratification (Table 11.1). In general, these

societies maintain a conservative gender dynamic in which men dominate transactions related to the local cash economy and maintain control over household decision-making and resources.

RNP represents one of the more complex examples of people–PA relations due to the long standing climate of hostility and mistrust between various stakeholders and user groups (Table 11.1). Resource extraction by the user groups, economic loss due to livestock predation and crop damage and resulting antagonistic reactions have led to a seemingly intractable situation of conflict. From 1999 to 2002 however, ecodevelopment was initiated at the RNP border in a few PA-dependent villages on an experimental basis (Table 11.2).

Unlike the cases described above, ecodevelopment work at RNP did not proceed much further than the microplanning stage. Based on repeated visits to the sites in the year following the project conclusion, we found little or no evidence of the empowerment of the community as a result of the ecodevelopment process (Table 11.3). Women were not involved in EDC decisions regarding forests, resource use and conservation; they were also poorly represented in the committees themselves. In addition, women had very little knowledge or understanding about the project in general. In a follow-up survey we conducted at one site, for example, only half of the women respondents even knew about the committee, and they were ignorant of both its function and of the procedures for becoming a member. Social norms restricted women's participation, especially in study villages with *pardha* (female seclusion) practice. Conservative gender dynamics typical in the RNP villages reinforced longstanding behavioral expectations that women should not speak loudly in front of elders or men—further undermining the potential for ecodevelopment to promote the active participation of women.

Multiple field visits (2002–7) also showed that women are too busy fulfilling household needs to find time for political participation, particularly when the meetings are inconveniently scheduled. Years after the project was over, we found that even those women who recall the EDC initiatives still expressed a feeling that they were not educated enough to say or contribute anything significant. Men similarly reported to us a belief that due to women's illiteracy and general levels of ignorance about "extra" household matters, there was no need for them to participate in any such future meetings. Not surprisingly, perhaps, women reported that in the future they would prefer to have separate meetings (i.e. without men). However, women who were otherwise willing to participate expressed reservations about the mixed-community (user-group) format of the ECD planning meetings. Those from a higher caste were reluctant to go to a common forum in which women from lower-caste groups were also invited.

When we returned to the RNP sites in 2012 for another update and to gauge interest in restarting ecodevelopment activities, we found that the interests of male and female members continued to reflect their "traditional" gender roles. Asked how funds should be used if ecodevelopment were to be attempted again, men in our focus group wanted the funds of EDC to be utilized for providing training and loans for business, whereas women were eager to reduce forest-based work and wanted to see afforestation in the village using useful fodder species. In response

to the notion of introducing new cooking gas (LPG) connections, the women we interviewed were more interested to learn about existing government programs intended to promote "development" of poor households, more broadly conceived, than to learn about the gas program specifically.

Participation, gender and ecodevelopment practice in Indian Protected Areas

The case studies in this research offer several insights about the potential for ecodevelopment to intersect in meaningful ways with empowerment objectives, specifically through the support of sustainable livelihoods (DFID 2000) and the reduction of gender-based inequities. We summarize some of the key outcomes of the projects in Table 11.3 and return to our guiding questions to reflect on their meanings below.

India is a country of diverse cultures and class structures, which are represented in the case studies of four National Parks from the Himalayas. As illustrated in Tables 11.2 and 11.3, ecodevelopment activities within these sites varied in their basic approach to involve local communities in conservation initiatives. For example, the activities started at the HNP were targeted at improving the financial capital of the local community by using existing natural and social capital in a sustainable way. However, work initiated in the GHNP and RNP emphasized an objective of creating EDCs (Table 11.2). Unlike in the HNP, activities in these two sites were also funding-driven rather than need-driven. Considerations related to gender issues also varied between sites. In viewing the approach adopted for ecodevelopment in the HNP, it is clear that gender-segregated workplaces were considered as assets rather than obstacles to creating opportunities for meaningful participation of men and women (Table 11.3). However, in the GHNP the need for a gender-sensitive approach came much later and was somewhat in response to disappointment from men about EDC (Table 11.3). At the GHNP, men were ultimately inspired by women's successes. The relatively homogenous nature of Ladakhi society can also be viewed as an asset in the HNP case. Perceived homogeneity helped ecodevelopment to succeed in the HNP because participants felt unified, and the examples of GHNP and RNP illustrate the value of starting with the creation of smaller, homogenous sub-groups prior to scaling up to a necessarily heterogeneous village-level EDC.

Though we can cautiously conclude from our case studies that ecodevelopment is capable of providing meaningful opportunities for empowerment at both collective and individual scales, we would emphasize that simply modifying the EDC institutional structure is not enough to adequately challenge entrenched gender norms and interacting caste/class hierarchies. Rather, we suggest that a wider and transformation-oriented approach is more appropriate; one that enables both men and women of all sub-groups to witness and experience the benefits of participation. Understanding how and when this will be possible will require deep analyses of how livelihoods and power sharing in PA communities are not only gendered and structured by other markers of status, but also how these communities are

themselves affected by the broader political economy of the surrounding region. It is within the larger region that their ecodevelopment partners in government, markets and the NGO sector operate, after all—and within which the PAs are themselves situated (driving, for example, male outmigration and other livelihood strategies).

At this slightly broader scale, then, we also suggest that there remains a need to build more trust directly between community and PA representatives as part of changing norms for women's (especially poor and non-dominant caste women's) and other disadvantaged groups' participation in natural resource management, specifically. In order to overcome the cultural constraints that continue to be associated with mixed-gender interactions in this context, women foresters and NGO-affiliated motivators (who otherwise tend to be exclusively male) could be called upon to help further demonstrate the value of engaging women in the process of ecodevelopment planning. However, we would caution that use of female staff alone will not be sufficient and that related institutional efforts to adequately train, retain and support a gender-sensitive staff must continue.

What, if anything, can we conclude about gender-differentiated impacts of ecodevelopment and related questions about the potential for this form of development to support empowerment objectives? We believe that both within and between cultural communities, the ecodevelopment initiatives in the HNP and GHNP have contributed to women's and men's empowerment in meaningful ways. The employment opportunities created through ecodevelopment initiatives in the HNP and GHNP have diversified the livelihood options of the agro-pastoral community and provided them with greater financial security. The income from additional livelihood sources is being used for the education of the younger generation. Moreover, many women in these sites are now responsible for their own monetary decisions and have asserted a greater voice in conservation-related decision-making. In these areas, women's increased agency as actors at both household- and village-levels is being achieved through financial means rather than through the forest-based and "domestic" contributions that mountain women of an earlier generation relied upon for status (Badola and Hussain 2003; Ogra 2008). Women involved in ecodevelopment have also increasingly become champions of wider social causes and developments for their villages/regions. Similarly, men in some sites, having realized the potential of women to contribute to income and the economic security of the household, have joined their wives in their activities or are openly supportive of what they now see as ambitions that benefit the whole family. As one woman in the GHNP told us, "Ecodevelopment has increased the love between husband and wife."

The ecodevelopment initiatives in the RNP and NDBR, on the other hand, have not been able to spur changes in gender relations or promote women's empowerment. This is mainly due to unchallenged male domination of the process and related attempts by elites to capture the lion's share of potential economic benefits. This is a continuation of well-documented patterns of resistance to women's empowerment through participation in rural development projects more

broadly (Gujit and Shah 1998). One possible reason for this unchallenged domination could be the tacit acceptance of "patriarchal bargains" (Kandiyoti 1998) by both ecodevelopment advocates as well as the women they hope will become "empowered" through meaningful participation. For example, as a recent study of community-based wildlife conservation practices ironically illustrates, the success of a given conservation project may be linked to its ability to work within, rather than to challenge, traditional gender roles and related gender-based power hierarchies (Ogra 2012b). At the same time, opening a discussion at the RNP about ecodevelopment did help to reveal the need for improved levels of awareness within the community about existing and complementary government programs that address the development needs of poor and female-headed households (often the same individuals).

We are encouraged by cases where gender-sensitivity through ecodevelopment has led to the meaningful participation of women, increased livelihood security for both men and women and enhanced nature conservation. However, we must note that while individual women's practical needs for increased income and livelihood security are gradually being addressed by livelihood diversification and access to microcredit, it is perhaps still too early to tell whether women's larger, collective strategic needs (e.g. for equity in terms of power in other arenas of decision-making and benefit-sharing) are really being addressed by ecodevelopment initiatives around PAs. As our case studies illustrate, such outcomes will be largely place-specific and dependent upon the attitudes toward change by a range of actors and stakeholders. Anticipating the kinds of changes that may be associated with the introduction of ecodevelopment at any site will also be predicated upon an understanding of what the PA, itself, has meant for local communities—and how these meanings, too, are informed by gender and class/caste.

How can gender analysis ultimately contribute to debates about the meaning and effectiveness of ecodevelopment? In our view, an underlying cause of the failures of ecodevelopment (and indeed, of community-based conservation in a larger sense) has been the inability or unwillingness to look beyond "community" and thoroughly explore its components. Resource managers and conservation advocates have long recognized that class/caste-based societal divisions and hierarchies play crucial roles in shaping human use of the environment; why is the same not yet true for gender relations? If advocates of ecodevelopment wish to address environment and development concerns, they must take into account how the underlying conflicts are shaped by both more obvious socio-economic factors as well as less "visible" gender-based dimensions.

It will be important for ecodevelopment advocates to remember, however, that men and women cannot be essentialized into single homogenous groups and that gender roles are guided in different ways by place-specific cultural norms; thus, the meaning and implications of gender equity/inequity changes geographically. Moreover, gender identities are "always cross-cut by and inscribed in other forms of inequality" (Kandiyoti 1998: 140), i.e. along lines of caste, class, ethnicity, religion, age, sexual orientation and other social markers. Nevertheless, it will be

worthwhile for practitioners to, at a minimum, expect to: (1) hold separate meetings for men and women at various stages of EDC creation; and (2) hold them at times and locations that are convenient for community members (rather than the practitioners). As we have argued elsewhere (Ogra 2012b, Badola *et al.* 2012; see also the 2012 Bhutan +10 Declaration), we repeat here our conviction that data collected during and as a result of such meetings should be disaggregated by gender (and ideally subjected to additional, finer scales of analysis). Without even such a basic level of gender analysis to guide planning and practice, ecodevelopment will never reach its potential to truly be a cornerstone of effective and sustainable development practice for PA communities in the future.

Finally, the gender-based examination at the NDBR in particular contributes another layer of complexity by clearly signaling the need to extend analyses into age-based heterogeneity. Ecodevelopment advocates would do well to further consider the implications of inter-generational differences in setting priorities related to PA ecozones and for tourism zones in particular. India's youth represents a vibrant, rapidly growing and increasingly educated sector of the population, with skills and interests that will continue to be valuable in our globalized "information age"—particularly in terms of shaping the direction of sustainable ecotourism around PAs. Their voices must also be heard for any long-term ecodevelopment planning to be viable.

Conclusion

Several overarching trends emerge from this analysis of gender aspects of ecodevelopment within protected areas. First, a commitment by PA authorities to demonstrate the benefits of a gender-centered approach contributed to the positive outcomes observed at the HNP and GHNP. In contrast, ecodevelopment activities at the NDBR and RNP did not focus on the heterogeneity of the community in a meaningful way—and despite rhetoric of participation, an entrenchment of male/elite power perpetuated a longstanding reluctance to share power, especially with women. Second, domination of the ecodevelopment planning process by elites and men at these sites ensured that women developed no real stake in ecodevelopment planning outcomes. Therefore, the limited efforts to challenge or re-envision traditional gender roles (in particular, the division of labor and role in household decision-making) doused any spark of meaningful change that might have been ignited by the planning process. Third, as suggested by the RNP and GHNP cases, a reluctance to cross caste boundaries reminds us that although caste-based discrimination in India has been outlawed for decades, structural inequalities persist as part of the cultural and socio-economic landscape. Fourth, tangible and positive outcomes can serve as models for other potential ecodevelopment sites given communities' willingness to overcome perceived barriers and deep-seated prejudices (against both park authorities and within their own villages).

Although the particular combination of related activities is site-specific, broader communication between and within PA communities about the empowerment

potential of ecodevelopment will be critical. Our experience in the Himalayas is necessarily limited to a few PAs across a landscape rich with potential sites for transformative ecodevelopment initiatives. What would a complete gender analysis of such efforts across the entire region—or even the globe—reveal? We close with a call for urgently needed support for a wide range of critical and rigorous studies (both quantitative and qualitative) that can be used to further document the gendered dimensions of the full range of ecodevelopment initiatives, as well as for research that empirically assesses the linked conservation outcomes. Such studies would, by necessity, need to embrace complexity—both of the myriad human systems driving the broader political economy of the PA regions and of the overlapping ecological systems for which the PAs themselves exist. (In many cases, we should note, the human and environmental systems are likely to be at odds with one another.) Additional areas that we feel are currently ripe for study include gender-based analyses of the increased use of microcredit as a path to alternative livelihoods around PAs, detailed examinations of the gendered aspects of PA-based tourism (ecotourism home-stays and guided treks, in particular), focused analyses of gendered social networks and gendered uses of social capital to promote sustainable livelihoods through ecodevelopment and interrogations of the competing uses of "empowerment" in these practices. We look forward to a tide of feminist research that seeks to answer these and other such questions.

Meanwhile, this limited study has shown that weakening gender and class/caste hierarchies through ecodevelopment is in some cases possible. Related efforts to redress the underlying power inequities—a prerequisite for empowerment—will hold an important key in unlocking the transformative potential of sustainable and alternative livelihoods development around PAs, both in India and elsewhere. In addition, although women within and across divisions of caste/class/age/ethnicity will obviously play a major role in this process, we believe that men will play perhaps an even more critical role in terms of responding to increasing demonstrations that improvements for women yield benefits for the entire family and, in turn, their communities. Likewise, PA communities will undoubtedly begin to bear witness to the benefits that follow when park dependence and illegal extraction activities are replaced by self-prioritized, culturally appropriate and low-impact resource use habits that are compatible with prevailing conservation objectives and laws. We are hopeful that the new generation of PA managers and other conservation advocates will be trained in theories and models of sustainable development that emphasize the important role of gender equity and that employ notions of gender that emphasize intersectionalities.

In sum, though ecodevelopment is by no means a panacea, when done in a way that directly includes objectives to reduce and ultimately eliminate gender-based inequities as both the means and the ends, ecodevelopment can, and will, support a broader and deeply meaningful transformative process in and around the world's protected areas. It is a tall order, but one we feel is worth making.

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Note

1 While acknowledging the contested and context-specific uses of the term "empowerment," we join the Pathways of Women's Empowerment research consortium in recognizing empowerment as process-based and as occurring for people when they are "able to imagine their world differently and to realise that vision by changing the relations of power that have kept them in poverty, restricted their voice and deprived them of their autonomy" (Ebyen 2011: 2).

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