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<u>Article</u>

How Biodiversity Conservation Policy Accelerates Agrarian Differentiation: The Account of an Upland Village in Vietnam

Wolfram H. Dressler^a, Phuc Xuan To^{b, #}, and Sango Mahanty^b

^aForest and Nature Conservation Policy Group, Wageningen University, The Netherlands

^bResource Management in Asia-Pacific Program, ANU College of Asia and the Pacific, Australian National University, Canberra, Australia

"Corresponding author. E-mail: phuc.to@anu.edu.au

Abstract

This paper shows how the implementation of Vietnam's recent biodiversity conservation policy in Ba Vi National Park has increased the economic value of nature, created sustained conflict, and exacerbated agrarian differentiation in an upland village in northern Vietnam. Increased global and national interest in biodiversity conservation has intersected with markets for ecosystem services that attempt to commoditise biodiversity resources in Ba Vi National Park and reconfigure conservation as market-based development. Efforts to marketise conservation have simultaneously increased the financial value of forestland and drawn new capital investments. In Ba Vi, local elites have captured these new forms of wealth through their connections to political parties, reinforcing the already unequal distributions of wealth and power. Coupled with political power, rising land value has also allowed local elites to become landlords, with the capacity to further dispossess other villagers. The resulting skewed access to natural resources has widened the gap between poor and wealthy villagers, and contributes to their over-exploitation of forests within the Park through informal agricultural expansion. The ensuing local conflicts have also negatively affected livelihoods and biodiversity resources.

Keywords: biodiversity conservation policy, commoditisation, agrarian differentiation, conflicts, Dao, Ba Vi, Vietnam

INTRODUCTION

Market-based approaches to conservation that provide incentives for actions to secure valued ecosystem services (Wunder 2005) have hit fertile ground in Vietnam. In Vietnam's post-socialist environment, neoliberal notions of decentralised management and commodification of ecosystem services (Igoe and Brockington 2007) imbricate with existing state-centric management regimes, with inherent tensions and contradictions (McElwee 2011, 2012). Recent research has sought to understand the livelihood implications of such

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conservation initiatives (Pham et al. 2009; McElwee 2010; Nguyen 2011), but the social outcomes of such schemes are less well understood (Corbera and Pascual 2012), particularly as they intersect with processes of agrarian differentiation and change¹ (see Dressler 2011). This paper brings together understandings of an agrarian political economy with evidence from a payment for ecosystem service scheme at Ba Vi National Park, to examine the complex relationships between market-based conservation and processes of agrarian differentiation in Vietnam.

Vietnam is one of the world's most biologically diverse countries (CBD 2008). However, the loss in forest cover from over 40% in the 1940s to about 30% by the 1980s (Nguyen et al. 2001; CBD 2008), have sharpened government attention to the issue of biodiversity decline and nature conservation (Ministry of Forestry 1991). Several legal frameworks have been established to protect national 'biodiversity resources', the most significant being the Law on Forest Development and Protection of 1991 and the Biodiversity Law of 2008.²

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Since 1990, the shift in forest management from timber extraction to protection has been strongly shaped by donor agencies and international non-governmental organisations, which provide considerable financial and technical support (Zingerli 2005; Sowerwine 2004). Protected areas have served as the main strategy for biodiversity conservation and, in the Vietnamese context, emphasise pristine environments without human disturbance. Although the ethical and pragmatic value of a 'people-free' nature has long been contested by social scientists (see Peluso 1993; Neumann 1998; Li 2008), the past exclusionary approaches promoted by government managers and conservation agencies often continue unabated, as evidenced in recent debates between academics and practitioners (Terborgh 1999; Wilshusen et al. 2002; Adams and Hutton 2007; Schmidt-Soltau 2009; Curran et al. 2010). In the Vietnamese context, protected areas still follow a management model that largely excludes villagers from resource access and use, notwithstanding efforts at community engagement and development in buffer zones (MARD et al. 2006). The implications of such an approach are significant, given the substantial increase in the area of Vietnam's protected land from 880,000 ha in 1986 to 2.4 million ha in 2006, with a corresponding increase in the number of protected areas from 73 to 128 for the same period (Nguyen 2007; McElwee 2010). A maze of legal frameworks and regulations now support biodiversity conservation (MARD, UNEP, WCU et al. 2006), with over one hundred legal documents covering the subject (Zingerli 2005).

A fundamental challenge in the national drive to preserve biodiversity is the reconciliation of conservation and development objectives (McElwee 2011). International, national, and local interests in biodiversity conservation now clash as local farmers struggle to sustain their livelihoods in and around protected areas, especially national parks (Zingerli 2005; Sowerwine 2004; McElwee 2011). We examine how the combination of existing park management regimes, which treat parks as a 'public good', strongly intersect with market-based approaches that, interacting with the local political economy, facilitate elite control over forest landscapes and curb resource access by the poor, and fuel local contestations over resources. While clearly not an 'absolute' form of neoliberal conservation in Vietnam, we argue that a strong form of market-oriented conservation-an offshoot of conservation's neoliberal turn-has fused with governance policy that draws on notions of 'public good' with faith in 'flexible' markets to secure financial benefits through conservation (McCarthy 2005). This trend is increasingly evident in the global expansion of conservation-particularly the interventions unfolding with, and through, protected areas-which is increasingly enmeshed in capitalist structures that straddle the state, private sector, and civil society (Igoe and Brockington 2007; Castree 2008). As such, proponents of neoliberalism have increasingly been able to steer conservation discourses and practices toward hybrid market-oriented governance solutions that manifest in buffer zones-landscapes already undergoing localised shifts from extensive subsistence to more intensive, commodity production (Büscher and Dressler 2012; To 2007). The outcome, we argue, involves conservation actors in Vietnam deploying market-oriented solutions to offset extraction with conservation, while simultaneously creating opportunities for state officials and local elites to accumulate capital and profits via local conditions (Arsel and Büscher 2012: 55).

Our case study village in the buffer zone of Ba Vi National Park in northern Vietnam illustrates how the government's efforts to further commoditise land and resources in protected areas is viewed in contrasting ways by different actors. The case shows that the forestlands of Ba Vi National Park—long used by villagers for food crops, and extraction of timber and non-timber forest products—have gained new market value through biodiversity conservation policy and practice. As forest resources have become higher value commodities (see also McElwee 2011), local actors with political connections and power have worked with park officials to garner control of these valuable resources—a process mediated by state and private sector actors.

In Ba Vi, recent efforts to implement and finance biodiversity conservation overlay a history of ongoing reform of tenure and access to forest resources that had already begun to facilitate local livelihood differentiation. As such, the 'draw' of new incentive structures for conservation then reinforced the ability of politically connected households to capture additional land holdings and resources. The case shows how local elites use and derive benefits from these newly accumulated assets by exploiting fellow villagers' labour and other opportunities to create revenue from capital investments. As a result, the national park has become a contested field for different groups of actors to articulate their views and exploit resources, fuelling conflicts that further impact local livelihoods and forest resources.

METHODS

Our analysis draws on data from three months of field research conducted in 2004 and follow-up visits to the study site in 2005 and 2009. The case study village, named *So*, was selected for several reasons. The resettlement history of the village (twice between 1970 and 1990) enabled detailed analysis of land and resource access changes and its relationship to agrarian differentiation, and how the latter was affected by marketbased interventions for biodiversity conservation. *So* village is also representative of the socio-economic and land allocation profile of the other villages bordering the Ba Vi National Park.

Data were gathered through semi-structured interviews and focus group discussions with informants from the Park's Management Board, local authorities, and villagers. Interviews were based on a stratified sample of 25 households, about one fourth of the total households in the village. In-depth interviews were also conducted with key respondents, which included land contractors living in *So*, Park officials, and households who did not receive land.

Participant observation of household activities, including cultivation, grazing, and the collection of non-timber forest

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products inside the Park boundaries helped us understand the day-to-day practices of the villagers. Secondary data sources such as government reports and statistics provided information on the Park's history and the results of the land contracting inside the Park.

CONSERVATION POLICY, CONFLICTS, AND AGRARIAN DIFFERENTIATION

Rapid forest loss³ in Southeast Asia underpins major losses in biodiversity (Nyhus and Tilson 2004). Global conservation institutions like the International Union for Conservation of Nature (IUCN) and World Wide Fund for Nature (WWF) have provided frameworks and incentives for national governments to conserve biodiversity. In theory the IUCN classification of protected areas enables various levels of human use⁴, but countries such as Vietnam have applied the strictest form of protection to such territory, akin to the IUCN's category I, 'strict nature reserve', or wilderness area, or II, 'national park' (Torri 2011). Indeed, many governments and conservation agencies consider national parks as landscapes integral to the national 'cultural tapestry' and, in some cases, a global heritage value for the common good. However, the reigning management approach still reflects a 'people free' nature philosophy, but it now attempts to integrate resources users with alternative livelihoods and emerging marketsfor instance for 'ecotourism'-to ensure they become less dependent on, or pulled from using, forest resources in Parks altogether (Cronon 1996; Dressler 2011; Arsel and Büscher 2012). As histories of management have controlled access to forests through punitive measures, the notion of extracting people from or managing them near, forest landscapes is now being facilitated and supposedly resolved through technical measures and diverse financing schemes.

International conservation actors are increasingly framing forest landscapes in terms of ecosystem services that can be allocated an economic value (Wunder 2005; Kinzig et al. 2011). Once valued, the provision of ecosystem services can be secured through agreements that recompense resource stewards for conservation activities that limit their resource use in various ways; some scholars have referred to this as a form of 'primitive' accumulation or enclosure (Kelly 2011), or socio-cultural, physical containment (via market logic) (Büscher 2012), whose effects are as yet uncertain (McElwee 2011). There is concern that valuing ecosystem services to finance their conservation will both alienate local people from customary practices and livelihoods, whilst liberating (their) spaces for biodiversity conservation, and inserting new markets with fewer constraints (Dressler 2011; Kelly 2011). A growing body of critical literature highlights how the removal of resource-dependent people from nature facilitates the categorisation and valuing of forests, landscapes, and ecological services in monetary terms to finance conservation. By stripping the social value of nature, further justification is provided for expansive capitalist development that supposedly redirects funds towards biodiversity conservation (Garland 2008; Igoe et al. 2010; Corson 2010). Although local forest-dependent peoples have often resisted 'coercive' preservationist approaches to biodiversity conservation (Peluso 1993), such resistance has been 'countered', initially through integrated conservation and development projects in the 1990s, and now by incorporating local peoples' livelihoods into financing activities such as payments for ecosystem services that support, or are already part of, broader capitalist development (Dressler and Roth 2011).

While various policies and programs attempt to include local needs, concerns, and aspirations into the conservation mainstream, with the aim of reconciling conservation and development, emerging forms of devolved conservation have done little to change the status quo. Most devolved initiatives have rearticulated older modes of governance by incorporating farmers into livelihood programs that have them produce more commodities with fewer resources whilst criminalising the extensive use of forests (Dressler and Roth 2011). The political economic processes that drive devolved conservation are now decidedly market-based, such that the production of ecosystem services is given an economic value to give rural farmers an incentive to abandon extensive land uses that clear forests (Brockington and Duffy 2010; Sullivan 2009). Following such market logic, market-based conservation should generate returns on investment, demonstrating market and conservation potential. In effect, the local economic benefits of new market involvement must outweigh the forgone opportunities of using forests for other purposes—the basis of which generates local remittances and profits that 'pay' for conservation (Milne and Niesten 2009). In the process of involving local users in such schemes, however, land and forest resources may be further commercialised such that the "economic arguments about service values... will... outweigh noneconomic justifications for conservation", sidelining other social, cultural and ecological values (Redford and Adams 2009: 785). At the same time, new markets that are generated have less to do with conservation than capital investments and returns (Sullivan 2009). As market-based conservation initiatives overlap with, and connect to, land-based production and consumption, some scholars observe more rapid forms of resource partitioning, privatisation, and commodification unfolding in rural spaces (Dressler 2011).

In many frontier areas of Southeast Asia, we now see rural peoples' social relations and agricultural lands becoming privatised and commodified through the combined pressures of agricultural change and capitalist development (for Vietnam, see Sikor 2001, and Sikor and Pham 2005; for Indonesia, see Li 2007; for other areas, see Nevins and Peluso 2008). Amongst these, biodiversity conservation has intersected with both local livelihood changes and market structures to facilitate the partitioning and commercial valuation of nature, which, in practice, articulates with existing governance regimes (McElwee 2011). While the process and outcomes of agrarian change can benefit those in positions of power and authority, those peripheral to, or incorporated into, capitalist structures on unequal terms are often worse off down the line (Akram-Lodhi 2007; Nevins and Peluso 2008; Potter 2008). When market-based conservation interventions intersect with, and accelerate, unequal forms of agrarian change, newer, connected markets can emerge through which managers, marketers, tourists, and locals partition, objectify, and revalue nature as capital to conserve an increasingly monetised 'natural' landscape (Garland 2008). In much of the region, conservation actors push interventions that objectify and revalue nature in monetary terms and, in doing so, help stoke agrarian change by shifting social relations of production and exchange toward intensified commodity production (for Palawan, see Dressler 2011).

Market-based conservation interventions do not unfold in a socio-political and economic vacuum. Rather, they intersect and exacerbate preexisting inequalities in the local agrarian political economy while contributing to processes of socioeconomic differentiation: "the process of change in the ways in which different groups in rural society-and some outside of it-gain access to the products of their own or others' labour, based on their differential control over production resources and often... on increasing inequalities in access to land" (White 1989: 26). In the Vietnamese context, broad political and economic transitions, most notably collectivisation and the transition to a market-oriented economy, have created major opportunities for resources to be garnered and for access to be renegotiated (Sikor 2001, 2011; Henin 2002; Sowerwine 2004; Kerkvliet 2005). However, the question of whether macro level changes and interventions drive agrarian differentiation or reflect existing socio-political and economic disparities is open for debate (Sikor 2001; Li 2001). Li (2001: 88) proposes that managerialist conservation, of which the management of Ba Vi is an example, may have only a limited role in driving agrarian differentiation processes, although they may unwittingly impact the surrounding conditions for such change. Yet, this depends on how the nature of the intervention articulates with macro and micro political economies and ecologies; indeed, the rise of neoliberal conservation has had profound impacts on local livelihoods elsewhere by introducing myriad ways and means to facilitate market exchanges layered with, or above and beyond, older market dynamics (Dressler and Roth 2011; Büscher and Dressler 2012). The nexus between conservation and agrarian differentiation therefore remains crucial to examine, with significant implications for social equity and welfare.

In terms of the relationship between conservation and agrarian differentiation, implementing biodiversity conservation policy through national parks has already shown evidence of intensifying local conflicts and reinforcing unequal commodity relations, land holdings, and surplus production (see Dressler 2006; Sato 2000). The addition of payments for conservation can thus have the effect of increasing both the monetary value of resources, and competition for these, especially since few national parks in Southeast Asia sit entirely outside of capitalist frameworks. We explore below how the current conflicts in Ba Vi largely stem from the convergence of market-oriented

biodiversity conservation and agrarian change, reinforcing the political economic processes that widen the gap between the rich and the poor, particularly in terms of access to agricultural land and forest resources for surplus production and income generation (see Ravallion and van de Walle 2003; Akram-Lodhi 2004 2005; McElwee 2011). The next section features how the implementation of conservation policy is embedded in local socio-political contexts and market forces, and examines how both combine to promote agrarian differentiation in the study village.

CONSERVATION POLICY, PROTECTED AREAS, AND AGRARIAN CHANGE IN VIETNAM

Established in 1962, Cuc Phuong forbidden forest was Vietnam's first protected area—a forest area where human activities were banned. Since then, the number and size of protected areas has rapidly increased, particularly after the country's reunion in 1975. By 2006, there were 128 protected areas totaling about 2.4 million ha (Nguyen 2007). The rapid expansion of protected areas in the country is partly attributable to the government's concerns about forest loss resulting from economic liberalisation and market-led development in the 1980s-the process known as Doi Moi (renovation), advocating for less state control over the forestry sector and small-holder production. In many ways, forest loss was the outcome of mismanaged State Forest Enterprises (SFEs) under the Ministry of Forestry (currently, the Ministry of Agriculture and Rural Development), and by local authorities at the district and provincial level (McElwee 2009).⁵ In response to this loss, the government shifted its forestry sector objectives from production to conservation. Although timber revenue played an important role in the national budget, the government prioritised biodiversity conservation within the forestry sector's agenda (Nguyen et al. 2001). The shift led to various government policies and regulations such as the Law on Forest Protection and Development 1991, the Law on Environmental Protection 2005, the National Strategy on Biodiversity Conservation 1995, and the Biodiversity Law 2008. Moreover, Western donors and conservation organisations offered major technical and financial support for conservation-a contrast to the situation before 1986, when there was almost no international support for conservation in Vietnam (Department of Forest Protection and World Wildlife Fund 2002). From 1995 to 2005, funding for conservation activities reached USD 150 million in the government budget, with another USD 205 million from donor agencies (MARD, UNEP, WCU et al. 2006). Growing global and national awareness about biodiversity conservation thus resulted in the insertion of new financial capital as the basis for conserving diverse flora and fauna, and associated resources.

Concurrent to this, the government set out to decentralise state forestry and conservation practice, pressing that forestland be devolved to households under longer term leases, which, under the 1993 Land Law, granted farmers land use certificates

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to lease, exchange, inherit, transfer, and use land as collateral (Scott 1999: 460).⁶ Households secured forestland title in return for signing forest protection contracts compelling them to exploit forests in a sustainable manner, particularly via replanting and protection initiatives (Sikor and Nguyen 2007). Transferring rights over forestlands to a few households led to a loss in access and use amongst others who had used the same lands on a customary basis of prior use, giving rise to contestations and conflicts (Sikor and Nguyen 2007). In communities where locals 'shared' access to, and use of, forest resources, the allocation of forestlands to individual households under title denied others their right to extract resources for subsistence, undermining traditional institutional structures with more powerful locals securing rights over forest lands. This shift started the process of smallholder 'privatisation' and, often, more intensified production (Henin 2002).

In time, the overlap of formal forestland and informal customary rights gave rise to access restrictions, unequal social and economic benefits, and livelihood marginalisation (Sikor and Tran 2007). As we show, the local elites with political connections and leverage had come to control the distribution of forestlands and the flow of surplus production from forests, which was further reinforced by financial benefits stemming from a more market-oriented conservation (Porter 1993). Despite the significant reforms that stoked economic productivity in both rural and urban areas (Beresford and Fraser 1992), land and forestry reforms were thus mapped onto, and partly held hostage to, the existing political economy of forest production and soon protected areas.

Ba Vi National Park

Ba Vi National Park lies in Ha Tay province⁷, about 60 km from Hanoi and accounts for 15 rare plant species, 7 plant species particular to the Ba Vi area, 129 medicinal plant species, and 24 rare animal species.8 Ba Vi National Park's landscape has long been used by farmers and bureaucrats under different policies and programmes. During the colonial period, the forest area in Ba Vi was selected for hill stations by French administrators, who built many villas to which they could escape to avoid the summer heat in the capital city (Sowerwine 2004). After independence in 1954, the Vietnamese government nationalised all forests and Ba Vi Mountain came under the management of the Ba Vi state forest enterprise. From the 1950s to the 1970s, the state management of Ba Vi focused on resin production, with tea at lower elevations and forest protection at the highest elevations. During the 1960s and early 1970s, the government logged elevations of 400 m and above where large diameter timber trees still existed. In 1977, this recently logged area became Ba Vi National Forest Reserve, which covered an area of 2,140 ha from the 400 m contour upwards. Dao villagers living within the Reserve were required to move below the 400 m elevation, giving rise to Hop Nhat village (the precursor of So village). Formally, villagers were forbidden from practicing swidden in the Reserve, but in practice many swidden plots were still maintained there. To assist the resettled Dao villagers, the World Food Organization (FAO) supported the villagers with an afforestation project in the late 1980s. Participating households received 1–2 ha of land between the 100 and the 400 m contour, with 30-year titles outside the boundaries of the Reserve. This was to be used for eucalyptus farming and crop cultivation integrating eucalyptus, and generally overlapped with the households' swidden land.

In 1991, the government upgraded Ba Vi Forest Reserve to Ba Vi National Park, conserving what was now beginning to be called biodiversity. The area of the Park expanded to include land from the 100 m contour upwards, for a total area of 7,377 ha, which included the household land granted under the FAO project. Yet the newly established Park Management Board belonging to the Ministry of Agriculture and Rural Development did not recognise prior villager land allocations.

All the land from the 100 m contour and upwards became the new Park area, although the land between the 100 and the 400 m contour was already being cultivated by farmers from surrounding villages. To protect the Park's biodiversity resources, the Ministry of Agriculture and Rural Development established a Management Board served by about 80 staff, most of whom were forest guards. The Park authority sought to enhance local forest protection by establishing four forest stations in the buffer zone from where guards were tasked with controlling villagers' activities within the Park boundaries.

The new Park area embraces all lands above 100 m.⁹ For management purposes, three zones were designated in the Park: the land from the 400 m contour upwards was considered to hold the richest biodiversity and was marked for strict protection; the 100 m to 400 m zone was identified as an ecological rehabilitation zone; and the buffer zone (100 m and below) was designated for multiple use and managed collaboratively by the management board with local households.

The establishment of the Park in1991 once again forced the Dao villagers in *Hop Nhat* to resettle, this time below the 100 m contour, creating the new village of *So* which consisted of 95 households within the redefined Park boundary. To facilitate the move, each relocated household received one ha of land in the buffer zone for gardens and housing. Figure 1 shows the current configuration of villages and Park lands.

Since the early 1990s, the Park Management Board decided to contract the land within the Park to local households living near the Park for forest protection purposes. The contracting process peaked in the mid-1990s in response to Government Decree 01 issued in 1995, which mandated that land in the protected area be contracted to different groups including local households for forest protection purposes. Under the policy, the Ba Vi management board contracted out most of the land between the 100 and the 400 m contour. The results of land contracting were highly unequal, favouring those with political connections, and the socially marginalised were left without land. How biodiversity conservation policy accelerates agrarian differentiation / 135

				Source: To 2007
100m and below	100m-400m	400m-800m	800m-1000m	1000m–1200m
Resident area, home gardens, wet rice fields	Swiden land for cassava and cana. Fast growing trees of villagers and indigenous trees of the Park	Degraded forest	Old secondary forest	Rocky mountain peak
Household control for home gardens. PC commune control for wet rice land	The land is under control of the Park, but contracted to individuals, households, and tourist companies	Open forest	Multistoried forest area under control of the Park	Shrubs, grasses, moss
Buffer zone	Ecological rehabilitation zone	Strictly protected zone		



LAND CONTRACTING IN BA VI NATIONAL PARK

A year after the National Park's establishment, the Park Management Board decided to contract land within the Park to local people living near the protected area. This decision was made ahead of the Government's policy on protection contracts for protected areas, in light of the Park Management Board's belief that its limited human resources were unable to protect the forest resources in the Park. In doing so, the board believed that by contracting out land locally, villagers would assume duties to protect forests (interview, Park Deputy Director, April 2005). Land contracts signed between the head of the Park and local villagers spelled out the rights and responsibilities of each party, and the mechanisms for enforcing those rights and duties. Land contractors were allowed to keep their land rights for 50 years; and were paid in cash in exchange for their efforts to protect the forest (see below).

The first round of land contracting occurred from 1992 to 1993. However, at the time, due to a shortfall in government finances, the Park Management Board did not make the promised payments to land contractors. As a result, many villagers did not want to receive the land and, questioning the Park's legitimacy, avoided participating in the scheme altogether. By signing a land contract with the Park Management Board, it was as though villagers recognised the Park's claim to the land, while giving up their own traditional claims to the same land. As villager resentment grew, the Park Management Board could only contract out a small amount of land; in the end, villagers in only four out of 11 communes near the park participated in forest protection contracts. Ba Vi commune, to which *So* village belongs, was not included in the first round of contracts.

Since the mid 1990s, land contracting accelerated in Ba Vi National Park and other protected areas in Vietnam. This arose from Government Decree 01 in 1995, which aimed to promote forest protection and biodiversity conservation, and mandated the contracting of land in protected areas to landholders, including local households. Similar to the land contracting arrangement in Ba Vi, an incentive mechanism for forest protection was upscaled through Decree 01, with payments made to landholders for forest protection. The head of the technical department of Ba Vi National Park proudly told us "we were ahead of the policy [Decree 01]; the government learned a lot from us when developing Decree 01" (interview, April 2005). Decree 01 specified that local households would be contracted to protect and rehabilitate forests by planting seedlings in critical watersheds and lands in protected areas. The government provided annual funds to Park Management Boards to contract and pay local households to carry out forest protection. At the end of the 1990s, the government's payment for tree planting was set at about 2.5 VND/ha (150 USD) and for protection at VND 50,000/ha/year (3 USD). From 2006 onwards, these payments were increased to 6 million VND/ ha (USD 400) for tree planting, and to 100,000 VND/ha/year

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(USD 6) for forest protection. In places like So village where total household income was low, payments derived from forest protection were deemed to be a good source of income by the land contractors. Moreover, contracted households were allowed to invest in their allocated land and were entitled to the profits generated from their investment as long as the investment did not harm local biodiversity. Households had to comply with forest protection plans prepared by the Park Management Board and follow technical guidance from the Park Management Board to protect, conserve, and improve biodiversity. Contracts could be withdrawn if plans and management guidelines were violated. Although Decree 01 did not specify the total forest protection fee to be paid to households, it did state that the payment should be used in ways that contributed to biodiversity conservation and enrichment. In addition, Decree 01 required the Park Management Board to provide technical training and support in the form of loans, credit, and production inputs (e.g., fertilisers, seedlings) to households involved in conservation contracts. The Park Management Board was mandated to monitor household compliance with contracts.

In response to Decree 01, the Park Management Board undertook a second round of land contracting between 1995 and 1999, this time including most of the land between the 100 and the 400 m contour (rehabilitation zone), and covering the remaining communes that were excluded in the first round. Land above the 400 m contour was not contracted because the management board believed that only the land in the 100 and the 400 m contour was prone to 'over-exploitation' by the villagers.

In the process of allocating land to the landholders under protection contracts between 1995 and 1999, the Park Management Board also responded to advances from a range of other actors who were not formally entitled to such land. Decree 01 prioritised original Park residents living in the buffer zone for land distribution, but around 45% of the contracted land went to individuals and companies from outside the buffer zone (Table 1).

Amongst buffer zone residents, those receiving land had direct socio-political connections with the Park officials and/ or had to pay authorities to receive land. As shown in Table 1, a total of 53 households in the buffer zone obtained more than 2,000 ha of land, or 39 ha per household on average. All of these households had members who were local cadres and thus had political connections and status at the time of allocation. Some of them received the land free of charge, while others gained it by paying kickbacks to Park officials.

In So, only six out of 94 households received land from the Park with a total allocated land area of 266.9 ha, or an average area of 44.5 ha per household. Aside from these six households, the remaining 88 households received no land during the contracting process. Table 2 shows the result of land contracting in So village in detail.

In So, villagers had only small areas of paddy land (around 0.08 ha per household with 4–5 household members on average). The yield from this small area only provided households with 3–4 months worth of rice per year. Households

Table 1	
Recipients of land contracts between	1995 and 1999

Land recipients	Number of	Area
	recipients	received (ha)
Households residing in buffer zone	53	2,070
Government organisations in Hanoi	2	418
Individuals from Hanoi	15	558
Individuals from Ha Tay outside	17	756
buffer zone		
Tourist companies	3	135
Park officials	6	198

Source: To 2007

 Table 2

 The result of land contracting in So village between 1995 and 1999

Household receiving the land	Total area of
	land received (ha)
Secretary of the political party of the commune	28.9
Commune chairman	57.8
Commune vice chairman	49.4
Village chairman	70.4
Secretary of the political party of the village	9.3
Commune's accountant	51.1

Source: To 2007

compensated for this (paddy-based) rice shortage by clearing more lands for swidden inside the Park. On average, each household in *So* had 0.28 ha of swidden land in the Park. Their access to that land was made possible by the six land contractors residing in *So*. These contractors provided them with land for growing cassava on the condition that they also planted acacia and other exotic tree species on the same plots of land on behalf of the contractors. The villagers' access to the land was terminated when the canopy between these trees closed, although villagers often sabotaged tree growth in order to maintain their access to the land for agriculture.

PROCESSES REINFORCING SOCIAL DIFFERENTIATION AT THE PARK

At the time, Ba Vi National Park's Management Board operated on the paradigm that protecting biodiversity in the Park required resource-dependent villagers to fully comply with its forest protection and biodiversity conservation regulations (To 2009). However, the implementation of this objective was achieved through the market-oriented mechanism of forest protection contracts with financial incentives of USD 3/ha/ year and of tree planting contracts (USD 150/ha) for villagers prior to 2006¹⁰. In time, the intersection of market-oriented conservation and the local agrarian political economy increased the market value of intact forestland and biodiversity within the Park. This was reflected both in the allocation of forest protection contracts by the Park Management Board, and the management objectives of the Board. As the forestland became a valued commodity for the contract revenues they generated and the value drawn from being within or near the Park boundaries, poorer local households had much greater difficulty securing contracted forestlands inside of the Park. Only those with good connections to the officials of the Park were able to obtain forestland contracts, particularly in the second round of contracting. As Table 1 shows, those involved with the Park Management Board and/or those who were wealthy enough to pay kickbacks to Park officials, usually in the order of VND 200,000 (USD 12) could obtain the land. All 53 land recipients in the buffer zone were local village and commune officials, receiving a total of 2,070 ha of land in the park. Many people living outside the buffer zone-areas not prioritised for land contracting-still received large areas of land through the contracting process. The resulting elite capture meant that very few 'ordinary' local villagers received forestland contracts in the face of stiff competition for higher value forestland, because personal and political connections were decisive factors.

After obtaining the contracts, many landholders used them to generate further wealth. About 10 out of 17 land contractors who lived outside the buffer zone sold their land rights to tourist companies for large sums of money. Meanwhile, the three tourist companies that had managed to obtain original forestland contracts established tourism resorts, which have since generated significant profits and transferred greater value to neighboring landholdings (interviews with managers of Thac Da and Ao Vua tourist companies, June 2005). Thus, land rights have frequently changed hands, with many land contractors in villages and communes selling on their original land rights obtained via land contracts to other actors, particularly tourist companies.

In this way, then, the contracting of forestland has accelerated capitalist investment at the park periphery, as well as generating revenues for contractees from tree planting and forest protection activities. Although Park officials retained some of these funds, landholders with large areas of contracted forestland were able to derive considerable income from forest planting and protection activities, which further reinforced their wealth and power through their control over land access. As conservation payment and contracting schemes were wrapped up in an unequal political economy, the uses of contracts and payments helped the wealthier classes draw more land and finances. The next section describes, in greater detail, how and why these processes promoted social differentiation in *So* village.

Unequal benefits from contracted forestland

In *So* village, villagers who rose in prominence derived their power and status from political connections, particularly with the Park's Management Board, which enabled them to obtain and control access to the land via contracts. Already elite in terms of their political networks, these contractees gained further economic advantage by controlling significant areas of forestland, which increased the dependence of landless villagers on them. In addition to securing land, these actors also made deals with Park officials to receive money from the forest protection and tree planting programs, despite their biodiversity protection efforts being minimal. Only rarely did contractees visit their allocated forest areas and facilitate the agreed upon forest protection and biodiversity enhancement actions mandated in Decree 01, or in the land contracts they had signed. Where the allocated land had no or little vegetation, these actors were able to tap tree-planting fees in a similar way-obtaining payments without implementing the measures agreed upon. This was achieved by preparing a tree-planting plan which specified the total area and location of the land to be planted and associated budget. The plan was submitted to the Park Management Board for approval, but there was little monitoring of the implementation, as the land contractors colluded with the park officials: for both forest protection and replanting agreements, income was divided between the contractee and the Park officials who had helped the former access the relevant program. The land allocation and contracting system thus reinforced the elite status of participating households, while strengthening their connections with the Park officials and other government officials.

Unlike protection activities, tree planting is labour intensive, involving clearance of the site, digging holes, and planting seedlings. To mobilise such labour, the local elites who held land contracts made agreements with fellow villagers, giving them access to the land in exchange for their labour. As many households in the village needed land for cultivation, the land contractor effectively 'rented' the land to villagers for crop cultivation; in exchange, the villagers were required to plant seedlings on the same land so that food crops were planted between rows of seedlings. In this process, however, the original contract holders captured all the payments associated with tree planting and forest protection from the Park Management Board. In effect, the sub-contracted villagers provided labour for tree planting activities, with only minimal benefits in terms of the produce they cultivated. More than 50% of the (non-contracted) households in the village were in this situation.

Another strategy used by the local elites to benefit from land contracts at a minimal cost was to replace the indigenous species that were more suited to biodiversity objectives with fast growing trees such as acacia. This was done with the consent of the park officials. Benefits derived from acacia at the time of harvest—a major economic incentive for the land contract next to income from land sale and contract payments-were again divided between the local elites and the Park officials. Once the acacia canopy was closed (about 2-3 years after planting), the sub-contracted villagers were no longer permitted to plant crops. In some cases, the village elite rented the land to outsiders from neighboring villages following the same cropping arrangement. In addition to providing their labour for seedling establishment and care, these neighbouring villagers had to pay around USD 300 annually as rent per hectare of land. Over time, the village elite were able to accrue considerable capital from their fees for tree planting and forest protection, timber sales, and informal land rental.

The pre-existing process of differentiation in So village,

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where villagers already had differing levels of political and economic status (Sowerwine 2004), was further facilitated by the market orientation of the conservation system. Differential levels of political power translated to unequal access to land, and related material and financial benefits. The local elites captured most of the available land and monopolised access to the land and any benefits associated with it; fellow villagers that were less well off were largely excluded from the land allocation and any benefits arising from the initial allocation and contracting process. As a result, social relations have become increasingly unequal and conflictual between the local elites and other villagers. To illustrate, villagers in So called the local elites chu dat (landlord) and called themselves nguoi *lam thue* (servants), with some even suggesting that 'we are going back to feudalism.'(Household interview, So village, February 2005). Akram-Lodhi (2005) has observed a similar pattern elsewhere in Vietnam:

an emergent group of rich peasants with relatively larger landholdings, amounts of capital stock, and use of hired labour-power... This class can be set beside a numerically preponderant class of relatively small peasants, with smaller landholdings and amounts of capital, a heavier reliance on family labour... The evidence further demonstrates the rapid growth of a class of rural landless who are largely separated from the means of production, who survive by intermittently selling their labour, and who are the poorest segment of rural society (Akram-Lodhi 2005: 73).

Our findings from So village highlight several issues. Implementing biodiversity conservation policies at the local level in the face of agrarian change has partly helped in increasing the market value of land, and the associated financial benefits arising from it via conservation and tourism. This change in land value has articulated with, and reinforced, already unequal socio-political relations. Differential access to land has in turn reinforced relationships where the labour of non-contractees can be exploited for the 'production' of biodiversity benefits and associated revenues. Land has also been sold to fuel economic development in the form of tourism. In this sense, the locally powerful elite have benefited in multiple ways from market-oriented biodiversity conservation, deriving both political and economic benefits at the expense of other local actors. The elite acting in alliance with Park officials has reinforced the existing imbalance in power relations. The process has thus reinforced and more strongly delineated existing social strata amongst the Dao.

The implementation of biodiversity conservation activities in the face of rapid economic development has turned the village from one where people had similar livelihood opportunities during the socialist and early post-socialist era (Sikor 2001; Hy 2003), to a more differentiated society. The local elites, situated at the interface of government (Ministry of Agriculture and Rural Development, The Park Management Board, etc.) and other villagers, have used their political power and connections to capture land and other resources, while engaging other villagers in exploitative labour relationships. The interaction of agrarian change and biodiversity conservation over time has helped exacerbate and sharpen initial inequalities.

Local conflicts

The political economic process outlined above has revealed how the underbelly of a long standing conflict (Salemink 2011; Rambo and Jamieson 2003) gives rise to newer conflicts partly spurred on by market incentives (Sikor 2011; Sowerwine 2004; To 2009; McElwee 2011). In So village, the local farmers first contested overlapping claims to land. The government's declaration of the Forbidden Forest in 1991 denied villagers' traditional claims to swidden land. However, fellow villagers did not recognise the new regime, rather they exercised their claims to customary lands, based on their prior occupation and use. Viewing the government's latest claim to the land as illegitimate, villagers continued to practice swidden on their plots, ignoring the government regulations on forest protection and biodiversity conservation. The villagers resisted government and elite claims over forestlands in various ways and means-the basis of redressing perceived inequality. In areas where villagers conducted cropping alongside plantation activities (as outlined earlier), they considered trees to be an obstacle to food crop production. Here, villagers secretly cut down, uprooted, and trampled the trees; they plucked off the tops of small trees, stripped the bark or burned the base of mature trees. In their original swidden plots within the Park, villagers planted bamboo in the hope of securing and stabilising their claim to the land. Bamboo had several advantages in this light: it is a long cycle grass (about 20 years) that also provides regular income from bamboo shoots and cannot be harmed by free-grazing cattle.11 Park staff treated such acts of resistance as criminal and subjected violators to fines and bans. When Park officials tried to destroy villagers' swidden crops, open fights broke out with Park staff. For example, a villager whose 3-month old cassava plot in the forest was destroyed by an official, recalled "I was holding a sickle in my hand... I don't know what would have happened if my wife had not taken it away". Learning from this incident, another villager expressed "They [Park officials] are more inhumane than our worst enemy... they take our children's food away."

Conflict thus reflects the villagers' resistance to forest protection and biodiversity conservation policies that have reinforced inequality from socio-economic differentiation. In this sense, conflict could be seen as an important strategy adopted by villagers to fight the inequality triggered by implementation of the policy. Villagers not only resisted complying with the government's conservationist objectives, but also strongly opposed local elite capture. They often used negative language, such as 'mean', 'greedy' and 'criminal', to describe the local elites who held forestland contracts. They used public venues such as village or commune meetings to express their demands to dismantle the exploitative practices of the local elite. They also sent petitions to relevant government organisations. So far, however, their attempts have been unsuccessful. The Park authorities justified the elite monopolisation of land by stating "We do not have enough staff and financial resources to manage a large number of land contractors [if the land were distributed to all households]"(Focus group discussion with Park officials, April 2005). While failing to reconfigure elite land holdings, villagers also chased away outside villagers who had rented land from the local elites, secretly uprooted cassava, allowed their cattle to 'sabotage' crops and trees, and burned down guardhouses on these lands. Eventually, the outsiders were unable to farm the land and it was returned to the original contractee.

Meanwhile, the local elites adopted various mechanisms to maintain their benefits from, and control over, forests and capital. For example, they used forestland certificates granted to them by the Park Management Board to bolster their land claims, using the contracts to threaten villagers who worked on these lands without their consent. When needed, they enlisted support from the Park officials and local authorities.

Additional conflicts emerged among local elites as a result of their competition for land. Given the high market value of the land, the six land contractors in the village sought to increase the area of land under their control. The more powerful among the local elites, in terms of their political connections and, now, capital, were able to take land from the less powerful local elites. This occurred with the help of the Park officials, either by legal land transactions and/or extra-legal means. For example, the former village chairman lost all his land (70.4 ha) to the vice-chairman of the commune, which was made possible with the help of two Park officials. These officials borrowed the land use certificates from the former chairman and never returned the papers to him. Only later did the former village chairman find out that the land had been given to the vice-chairman of the commune. In another instance, Park officials forced the wife of the late commune party secretary to sell her allocated land to a tourism company. The officials threatened to confiscate the land if the land was not brought into 'proper' use (i.e., investment in tree planting). As the woman failed to invest, she had to sell all the land (28.9 ha) to the tourist company. The park officials then received a financial kickback from the company.

These instances highlight the ongoing and contingent nature of differentiation, where apparent elites are further differentiated according to their political and economic capital, and their ability to use political connections to sustain the latter. The concentrated exchange of land was reflected in the growing connections between state authorities and capital accumulation, which was reinforced as market-oriented governance intersected the local political economy.

Commoditisation effects on biodiversity resources

The newly empowered local elites—a small group of about six land contractors—monopolised access to forestland as an important source of wealth. However, this group neither appreciated the objectives of biodiversity conservation set by the Park authorities nor the villagers' need for food crop production. In many ways, they used the government's biodiversity conservation programs to garner capital beyond what would have been possible without the government's incentive contracts for forest protection and biodiversity enhancement. Meanwhile the biodiversity outcomes were undermined by their focus on fast-growing, high value species rather than indigenous species, as well as the cultivation of food crops, through which barren land would be maintained and revalued monetarily. Authorities turned a blind eye to villagers' sabotaging saplings. The ecological outcomes of this process were severe, with most land in the ecological rehabilitation zone remaining deforested after almost 15 years. As a Park official told us in April 2005 "If all the trees planted on the land had survived there would be ten layers of forest here."

The biodiversity benefits were further mitigated by villagers' resistance to government conservation policies and to elite capture of valued lands and forest resources. State control over forestland access and use sustained direct local response to increased inequality (see Scott 1985; Caouette and Turner 2008). Many villagers viewed local elite capture of land at the expense of other villagers as morally unacceptable and an infringement on their right to subsist. In So village local elites and villagers were relatively equal in economic status before the start of forestland contracting: each household had about 1–2 ha of land for housing and gardening, small paddy lands distributed by the cooperative, and almost no off-farm income. This was supported by villagers' comments during fieldwork, for example: "we were the same *economically* when we moved here to the new village So" (Focus group discussion with villagers in June 2005; emphasis added). However, it was differing political assets that most determined their access to the forestlands and contracts offered by conservation schemes, favouring those villagers who already wielded political power. In time, the local elites' accumulation of wealth by controlling access to the land and village labour was deemed unacceptable, resulting in various acts of resistance. Eventually, both biodiversity resources and local villagers lost out, and the government's attempts to protect biodiversity in the Park were unsuccessful.

Spatial expansion of differentiation and commoditisation

The processes of differentiation discussed above were not contained spatially, but spread to neighbouring regions of Ha Tay province. The Park soon became one of the most attractive destinations for investment for urban elites. Spurred on by the marketisation of land, partly attributable to the Park's commercial orientation, large areas of agricultural land and forestland were converted to residential land and industrial space for development. Between 1995 and 2002, more than 3,500 ha of land in the province, including large areas of the Park buffer zone, were designated for tourism complexes and golf courses. For instance, in 1997 a project to develop an ethnic minority village for culture and tourism purposes

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commenced, for which 900 ha of land was allocated in the Park's buffer zone. Furthermore, infrastructure development continued apace in the vicinity of the Park. In 1998, the government launched the Hoa Lac High Tech Zone project in the Mieu Mon urban area of Ha Tay. Some 1,650 ha of land in Thach That district, 15 km away from the Park were used for this project. The construction of the Lang-Hoa Lac National Highway, which connects southwest Hanoi to the high tech zone, has increased the accessibility of the Park. In 1995, Hanoi National University was allocated 1,000 ha of land in Thach That district, 15 km away from the Park. As the park has become more accessible, the tourism industry has made direct claims to Park authorities for land in the Park, through land leases obtained directly from the Park (see Table 1) or through land contractors.

Information obtained from a land broker in the Ba Vi area revealed that many who purchased land from contractors 'sold' it to tourist companies or to other private individuals for large sums of money. The sale of the land was not officially allowed, but occurred with the knowledge and involvement of Park officials. The land sales themselves generated a lot of money for the land contractors concerned. For example, knowing a tourist company wanted to buy a large area of land inside the Park for tourism and housing purposes, a Park official who doubled as a land broker obtained more than 80 ha of land and then (by coordinating several land contractors whose lands were located next to each other) offered the tourist company a total of 318 ha of land for the substantial figure of USD 2 million (personal communication with the land broker, May 2005). With thousands of tourists visiting the park annually, local elites who initially exploited the land contracting practice were guaranteed financial benefits. Visitors now came to the park to experience its advertised "clear climate produced by tropical and sub-tropical pristine forest", "amazing landscape" and facilities in the form of "swimming pool, sport spaces, hotel, conference room, botanical gardens and more..."¹² The intersection of conservation contracts with land acquisition and sales extended already unequal access to, and ownership of, land not just in the park vicinity, but also well beyond it. The intersection between political dynamics, economic development, and market-oriented conservation projects thus reinforced the commodification of the forestlands and forest landscapes at the Park, ensuring that they and the surrounding areas gained a higher market value.

CONCLUSION

This paper examined how the convergence of biodiversity conservation, agrarian change, and markets has reinforced new financial values for forestlands and resources, exacerbated differentiation, and supported forms of capitalist development in the uplands of Ba Vi National Park. We find that marketbased conservation has converged with local and nationally sanctioned development surrounding the Park to fuel local disparities in power and status, thereby driving conflicts. As such, the state's use of 'market based' mechanisms, such as contracts for forest protection, has reinforced the extent of agrarian differentiation, underpinned patronage, and capital accumulation, as elites took advantage of the increased land value. The outcome contributed to local dispossession and polarised wealth accumulation. As shown, powerful actors worked through conservation policy and practice by drawing on connections to political power to implement policies in ways that financially benefit them the most.

Differentiation was not only characterised by highly skewed access to forestland and biodiversity conservation programs, but also by the changing nature of social relationships among different groups of actors. More distinct and disparate social strata can be seen in *So* village as a result of this blend of regulatory and newer market-based approaches to conservation, as well as growing private sector investment in ecotourism ventures and urban housing. In this process, both local villagers and forests emerge as the losers.

The evolution of different social strata in So village reflects ongoing and profound changes in the Vietnamese uplands. Often portrayed as an egalitarian and classless society, state policy in the Vietnamese uplands in theory provides relatively equal access to the means of production, particularly land. This narrative enables the government to control forestlands and rural livelihoods with a sense of 'legitimacy' over and from the rural population—70% of whom still engage in agricultural production. The very idea of egalitarianism-problematic as it is-has also served as a foundation for the state to claim that the government is of the people, by the people, and for the people (*nha nuoc cua dan, do dan va vi dan*). However, the combination of biodiversity conservation, agrarian change, and market-driven differentiation described in Ba Vi challenges the notion of a classless and egalitarian upland society. Although economic opportunities were relatively evenly distributed prior to the conservation regime at Ba Vi, political capital was not. Party elites were thus more easily able to tap into lucrative biodiversity conservation contracts, which undermined the livelihoods of their fellow villagers, while reinforcing social divides (see McAfee 1999; Li 2008; McElwee 2010).

Our findings raise several important implications. The dynamic processes of agrarian differentiation in upland areas such as Ba Vi are underpinned by existing power configurations, which mediate resource allocation and distribution in market terms. The emergence of the local elites in the Dao-inhabited So village highlights the importance of these micro-politics with regard to resource access and control in the context of emerging markets and conservation interventions. On the ground, certain actors can accumulate wealth and improve their circumstances, but this is often at the expense of those cast as marginal, unproductive and/or vulnerable, particularly compared with the lowland majority, Kinh (Rambo 2005). As more powerful individuals draw on political connections and associations to 'manage' conservation to increase their property holdings, they reinforce their wealth through the authority and control of the governance structures connected with resources in greater demand (Berry 2009). As Berry (2009: 23) notes "heightened fears of potential displacement, rising competition *How biodiversity conservation policy accelerates agrarian differentiation /* **141**

over land has given rise to intense contestation, as people challenge one another's claims..."—a process which has been markedly evident in *So* village where forestland contracts have heightened the value of land, staging new struggles across class structures over access and use.

This paper also shows, as Balmford and Whitten (2003) argue, that the costs of protected areas are still often borne by marginal producers while benefits accrue to local elites as well as national and even global actors. The Ba Vi case shows that newer 'market-based' attempts at biodiversity conservation were, in this respect, at least partly a rearticulation of coercive conservation (Dressler and Roth 2011). Rather than being 'softer' and 'people friendly', market-oriented conservation at Ba Vi bore negatively on the rights and livelihoods of the villagers in So, whilst enabling the local elites to garner new capital and engage in exploitative labour relationships. The question thus remains as to whether market-based approaches to biodiversity conservation offer local users socially appropriate livelihood support when unfolding in complex political economic conditions, and whether the 'draw' of such interventions is justifiable relative to 'long-standing' resource uses. Without attention to these processes of social differentiation, the Ba Vi case highlights that market-oriented approaches may simply reinforce the exclusionary approaches of earlier forms of national park management.

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Notes

- 1. In this paper, agrarian change refers to a recursive process whereby rural sectors move from being predominantly agricultural to predominantly industrial and urban (Cramb et al. 2009).
- Other important regulations include the Land Law of 1993 and the National Biodiversity Conservation Strategy of 1999 which ratifies the Convention on Biological Diversity, signed by Vietnam in 1995.
- 3. The forest cover dropped from 280 million ha in 1990 to less than 60 million ha in 1989 (Poffenberger 2006).
- For the strict definition of protected area developed by IUCN, see http://www.iucn.org/about/work/programmes/pa/pa_products/wcpa_ categories/
- From 1955 to 1960, about 560,000 cu. m of timber was extracted each year. From 1976 to 1980, the annual logging volume was 1.6 million cu. m (Nguyen et al. 2001).
- The land use certificates held tenure rights based on 20 year renewable leases on land for annual crops, and 50 year renewable leases on land for perennial crops and forestland (McElwee 2009).
- 7. Ha Tay province was merged into Hanoi in August 2008.
- 8. http://www.vuonquocgiabavi.com.vn/Default.aspx?p=2
- 9. In 2003, the government decided to expand Ba Vi National Park to 12,000 ha, but the implementation of the extended park demarcation is subject to ongoing negotiation, conflict, and resistance. This article

primarily focuses on the area of the Park prior to the expansion.

- 10. Starting from 2006, these figures increased to USD 5 and USD 400 respectively.
- 11. Usually villagers harvest bamboo shoots when they are about to emerge from the ground. For this reason, free grazing does not harm the shoots.
- Ba Vi National Park website http://www.vuonquocgiabavi.com.vn/ Default.aspx?p=2. Accessed on February 3, 2011.

REFERENCES

- Adams, W. and J. Hutton. 2007. People, parks, and poverty: political ecology and biodiversity conservation. *Conservation & Society* 5: 147–183.
- Akram-Lodhi, H. 2004. Are landlords taking back the land? An essay on the agrarian transition in Vietnam. *The European Journal of Development Research* 16: 757–189.
- Akram-Lodhi, H. 2005. Vietnam's agriculture: processes of rich peasant accumulation and mechanisms of social differentiation. *Journal of Agrarian Change* 1: 73–116.
- Akram-Lodhi, H. 2007. Land, markets and neoliberal enclosure: an agrarian political economy perspective. *Third World Quarterly* 28(8): 1437–1456.
- Arsel, M. and B. Büscher. 2012. Nature[™] Inc: changes and continuities in neoliberal conservation and market-based environmental policy. *Development and Change* 43(1): 53–78.
- Balmford, A. and T. Whitten. 2003. Who should pay for tropical conservation, and how could the costs be met? *Oryx* 37: 238–250.
- Beresford, M. and L. Fraser. 1992. Political economy of the environment in Vietnam. *Journal of Contemporary Asia* 22(1): 2–19.
- Berry, S. 2009. Property, authority and citizenship: land claims, politics and the dynamics of social division in West Africa. *Development and Change* 40(1): 23–45.
- Brockington, D. and R. Duffy. 2010. Conservation and capitalism: an introduction. *Antipode* 42(3): 469–484.
- Büscher, B. 2012. Payments for ecosystem services as neoliberal conservation: (reinterpreting) evidence from the Drakensberg, South Africa. *Conservation & Society* 10(1): 29–41.
- Büscher, B. and W. Dressler. 2012. Commodity conservation: the restructuring of community conservation in South Africa and the Philippines. *Geoforum* 43(3): 363–656.
- Caouette, D. and S. Turner (eds.). 2008. Agrarian angst and rural resistance in contemporary Southeast Asia. New York, NY: Routledge Press.
- Castree, N. 2008. Neoliberalising nature: processes, effects, and evaluations. Environment and Planning A 40(1): 153–173.
- CBD (Convention on Biological Diversity). 2008. 4th Country report on Vietnam's implementation of the Biodiversity Convention. Ministry of Natural Resources and Environment. Hanoi: Vietnam Environment Administration.
- Corbera, S. and U. Pascual. 2012. Ecosystem services: heed social goals. *Science* 335(10): 355–356.
- Corson, C. 2010. Shifting environmental governance in a neoliberal world: US AID for conservation. *Antipode* 42(3): 576–602.
- Cramb, R.A., C.J.P. Colfer, W. Dressler, P. Laungaramsri, Q.T. Le, E. Mulyoutami, N.L. Peluso, and R.L. Wadley. 2009. Swidden transformations and rural livelihoods in Southeast Asia. *Human Ecology* 3(37): 323–346.
- Cronon, W. 1996. Uncommon ground: toward reinventing nature. New York, NY: W.W. Norton & Company.
- Curran, B., T. Sunderland, F. Maisels, S. Asaha, M. Balinga, L. Defo, A. Dunn, et al. 2010. Response to 'Is the displacement of people from parks only 'purported' or is it real?' *Conservation & Society* 8(2): 99–102.
- Department of Forest Protection and World Wild Fund for Nature. 2002. De Xuat Chien Luoc Quan Ly He Thong Khu Bao Ton tai Viet Nam 2003-

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2010 (Strategic recommendations for managing protected area systems in Vietnam 2003-2010). Hanoi: Cong Doan Publishing House.

- Dressler, W. 2006. Co-opting conservation: migrant resource control and access to national park management in the Philippine uplands. *Development and Change* 37(2): 401–426.
- Dressler, W. 2011. First to third nature: the rise of capitalist conservation on Palawan Island, the Philippines. *Journal of Peasant Studies* 38(3): 533–557.
- Dressler, W. and R. Roth. 2011. The good, the bad and the contradictory: neoliberal conservation governance in rural Southeast Asia. *World Development* 39(5): 851–862.
- Garland, E. 2008. The elephant in the room: confronting the colonial character of wildlife conservation in Africa. *African Studies Review* 51(3): 51–74.
- Goldman, M. 2011. Strangers in their own land: Maasai and wildlife conservation in Northern Tanzania. *Conservation & Society* 9(1): 65–79.
- Henin, B. 2002. Agrarian change in Vietnam's northern upland region. *Journal of Contemporary Asia* 32(1): 3–28.
- Hy, V.L. 2003. *Postwar Vietnam: dynamics of a transforming society*. Lanham, MD: Rowman and Littlefield.
- Igoe, J. and D. Brockington. 2007. Neoliberal conservation: a short introduction. *Conservation & Society* 5(3): 432–449.
- Igoe, J., K. Neves, and D. Brockington. 2010. A spectacular ecotour around the historic bloc: theorising the convergence of biodiversity and capitalist expansion. *Antipode* 42(3): 486–512.
- Kelly, A. 2011. Conservation practice as primitive accumulation. *Journal of Peasant Studies* 38(4): 683–701.
- Kerkvliet, B. 2005. The power of everyday politics: how Vietnamese peasants transformed national policy. Ithaca, NY and London: Cornell University Press.
- Kinzig, A.P., C. Perrings, F.S. Chapin III, S. Polasky, V.K. Smith, D. Tilman, and B.L. Turner. 2011. Paying for ecosystem services—promise and peril. *Science* 334(6056): 603–604.
- Leach, M. and R. Mearns. 1996. *The lie of the land: challenging received* wisdom on African environment. Oxford: International African Institute.
- Li, T. 2001. Agrarian differentiation and the limits of natural resource management in upland Southeast Asia. *IDS Bulletin* 32(4): 88–94.
- Li, T. 2007. The will to improve: governmentality, development, and the practice of politics. Durham, NC: Duke University Press.
- Li, T. 2008. Contested commodifications: struggles over nature in a national park. In: *Taking Southeast Asia to market: commodities, nature, and people in the neoliberal age* (eds. Nevins, J. and N. Peluso). Pp. 124–139. Ithaca, NY and London: Cornell University Press.
- Madhusudan, M. and T.R. Shankar Raman. 2003. Conservation as if biological diversity matters: preservation versus sustainable use in India. *Conservation & Society* 1: 49–59.
- McAfee, K. 1999. Selling nature to save it? biodiversity and green developmentalism. *Environment and Planning D: Society and Space* 17(2): 133–154.
- McCarthy, J. 2005. Devolution in the woods: community forestry as hybrid neoliberalism. *Environment and Planning A* 37(6): 995–1014.
- McCarthy, J. and S. Prudham. 2004. Neoliberal nature and the nature of neoliberalism. *Geoforum* 35: 275–283.
- McElwee, P. 2009. Reforesting 'bare hills' in Vietnam: social and environmental consequences of the 5 Million Hectare Reforestation Program. Ambio: A Journal of the Human Environment 38(6): 325–333.
- McElwee, P. 2010. Resource use among rural agricultural households near protected areas in Vietnam: the social costs of conservation and implications for enforcement. *Environmental Management* 45(1): 113–131.
- McElwee, P. 2011. Who should manage the land? Common property and community responses in Vietnam's shifting uplands. In: Upland transformations in Vietnam (eds. Sikor, T., P.T. Nghiem, J. Sowerwine, and J. Romm). Pp. 75–91. Singapore: National University of Singapore Press.

- McElwee, P. 2012. Payments for environmental services as neoliberal market-based forest conservation: panacea or problem? *Geoforum* 43(3): 412–426.
- Meyfroidt, P. and E.F. Lambin. 2009. Forest transition in Vietnam and displacement of wood extraction abroad. *Proceedings of the National Academy of Sciences* 106: 16139–16144.
- Milne, S. and E. Niesten. 2009. Direct payments for biodiversity conservation in developing countries: practical insights for design and implementation. *Oryx* 43(4): 530–541.
- MARD, UNEP, WCU (Ministry of Agriculture and Rural Development, United Nations Environment Program, and World Conservation Union). 2006. Protected areas policy study: draft technical report. Hanoi.
- Ministry of Forestry. 1991. Vietnam forestry sector review and tropical forestry action programme: main report. Hanoi: Ministry of Forestry.
- Mulongoy, K. and S. Chape. 2004. *Protected areas and biodiversity. An overview of key issues.* Montreal: CBD Secretariat, UNEP-WCMC.
- Neumann, R. 1998. Imposing wilderness. Struggles over livelihood and nature preservation in Africa. Berkeley, CA: University of California Press.
- Nevins, J. and N. Peluso (eds.). 2008. *Taking Southeast Asia to market: commodities, nature, and people in the neoliberal age.* Ithaca, NY and London: Cornell University Press.
- Nguyen, H.D. 2007. Cong Dong va Van De Quan Ly Cac Khu Bao Ton Thien Nhien Vietnam (Community and management of conservation areas in Vietnam). Hanoi: Hanoi Agricultural Publishing House.
- Nguyen, Q.T. 2011. Payment for environmental services in Vietnam: an analysis of the pilot project in Lam Dong Province. Kamiyamaguchi and Bangkok: IGES and RECOFTC.
- Nguyen, D.V., M.D. To, C.C. Ha, H.D. Trinh, and K.H. Nguyen. 2001. Lam Nghiep Viet Nam 1945-2000 (Vietnam's Forestry Sector 1945-2000). Hanoi: Agricultural Publishing House.
- Nyhus, P. and R. Tilson. 2004. Agroforestry, elephants, and tigers: balancing conservation theory and practice in human-dominated landscape of Southeast Asia. Agriculture Ecosystem & Environment 104: 87–97.
- Peluso, N. 1993. Coercing conservation? The politics of state resource control. *Global Environmental Change* 3(2): 199–217.
- Pham, T.T., B.M. Campbell, and S. Garnett. 2009. Lessons for pro-poor payments for environmental services: an analysis of projects in Vietnam. *The Asia Pacific Journal of Public Administration* 31(2): 117–133.
- Poffenberger, M. 2006. People in the forest: community forestry experiences from Southeast Asia. *Environment and Sustainable Development* 5: 57–69.
- Porter, G. 1993. *Vietnam: the politics of bureaucratic socialism*. Ithaca, NY: Cornell University Press.
- Potter, L. 2008. Production of people and nature, rice and coffee: the Semenda people in south Sumatra and Lampung. In: *Taking Southeast Asia to market: commodities, nature and people in the neoliberal age* (eds. Nevins, J. and N. Peluso). Pp. 176–190. Ithaca, NY: Cornell University Press.
- Rambo, T. 2005. Searching for Vietnam: selected writing on Vietnamese culture and society. Kyoto: Kyoto University Press.
- Rambo, T. and N. Jamieson. 2003. Upland areas, ethnic minorities, and development. In: *Postwar Vietnam: dynamics of a transforming society* (ed. Hy, V.L.). Pp. 139–170. Singapore: Institute of Southeast Asian Studies.
- Ravallion, M. and D. van de Walle. 2003. Land allocation in Vietnam's agrarian transition. *Policy Research Working Paper No. 2951*. Washington, DC: World Bank.
- Redford, K. and W. Adams. 2009. Payment for ecosystem services and the challenge of saving nature. *Conservation Biology* 23(4): 785–787.
- Sato, J. 2000. People in between: conservation and conversion of forest lands in Thailand. *Development and Change* 31(1): 155–177.
- Salemink, O. 2011. A view from the mountains: a critical history of lowlanderhighlander relations in Vietnam. In: Upland transformations in Vietnam (eds. Sikor, T., P.T. Nghiem, J. Sowerwine, and J. Romm). Pp. 27–50.

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Singapore: National University of Singapore Press.

- Schmidt-Soltau, K. 2009. Is the displacement of people and parks only 'purported' or is it real? *Conservation & Society* 7(1): 46–55.
- Scott, J. 1985. Weapons of the weak: everyday forms of peasant resistance. New Haven: Yale University Press.
- Scott, S. 1999. Gendered institutions and entitlement to land: an analysis of vulnerability in Vietnamese decollectivization. In: *Globalization and the Asian economic crisis: indigenous responses, coping strategies, and governance reform in Southeast Asia* (ed. Hainsworth, G.). Pp. 459–473. Vancouver: Centre for Southeast Asia Research, Institute of Asian Research, University of British Columbia.
- Sikor, T. 2001. The allocation of forestland in Vietnam: did it cause the expansion of forests in the northwest? *Forest Policy and Economics* 2: 1–11.
- Sikor, T. 2011. Introduction: opening boundaries. In: Upland transformations in Vietnam (eds. Sikor, T., P.T. Nghiem, J. Sowerwine, and J. Romm). Pp. 1–24. Singapore: National University of Singapore Press.
- Sikor, T. and T.Q. Nguyen. 2007. Why may forest devolution not benefit the rural poor? Forest entitlements in Vietnam's Central Highland. *World Development* 35(11): 2010–2025.
- Sikor, T. and T.T.V. Pham. 2005. The dynamics of commoditization in a Vietnamese upland village, 1980-2000. *Journal of Agrarian Change* 5(3): 405–428.
- Sikor, T. and N.T. Tran. 2007. Exclusive versus inclusive devolution in forest management: insights from forest land allocation in Vietnam's Central Highlands. *Land Use Policy* (4): 644–653.
- Sowerwine, J.C. 2004. Territorialisation and the politics of highland landscapes in Vietnam: negotiating property relations in policy, meaning and practice. *Conservation & Society* 2(1): 97–136.
- Sullivan, S. 2009. Green capitalism and the cultural poverty of constructing nature as a service provider. *Radical Anthropology* 3: 18–27.

- Sunderland, T. C., H.C. Ehringhaus, and B. Campbell B. 2008. Conservation and development in tropical forests: a time to face the tradeoff? *Environment Conservation* 34: 276–279.
- Tacconi, L. 2000. *Biodiversity and ecological economics: participation, values and resource management.* London and Sterling: Earthscan.
- Terborgh, J. 1999. *Requiem for nature*. Washington, DC: Island Press and Shearwater Books.
- To, X.P. 2007. Forest property in the Vietnamese uplands: an ethnography of forest relations in three Dao villages. Berlin: Lit Verlag.
- To, X.P. 2009. Why did the forest conservation policy fail in the Vietnamese uplands? Forest conflicts in Ba Vi National Park in Northern Region. *International Journal of Environmental Studies* 66(1): 59–68.
- Torri, C.M. 2011. Conservation, relocation and the social consequences of conservation policies in protected areas: case study of the Sariska Tiger Reserve, India. *Conservation & Society* 9(1): 54–64.
- White, B. 1989. Problems in the empirical analysis of agrarian differentiation. In: *Transformations: local processes and the state in Southeast Asia* (eds. Gillian, H., A. Turton, and B. White). Pp. 15–30. Berkeley, CA: University of California Press.
- Wilshusen, P., S. Brechin, C. Fortwangler, and P. West. 2002. Reinventing a square wheel: critique of a resurgent 'protection paradigm' in international biodiversity conservation. *Society & Natural Resources* 15: 17–40.
- Wunder, S. 2005. Payments for environmental services: some nuts and bolts. CIFOR Occasional Paper No. 42. Jakarta: Center for International Forestry Research.
- Zingerli, C. 2005. Colliding understanding of biodiversity conservation in Vietnam: global claims, natural interests, and local struggles. *Society & Natural Resources* 18: 737–747.

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