

Where Does the Boundary Fall? Conservation Assemblages and Their Discontents in a Protected Area, Northern Cambodia

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Abstract

The chapter examines the ins and outs of a protected area zonation undertaken by the Ministry of Environment and a large conservation organisation in Northern Cambodia. On paper, the approach was innovative as it aimed to promote an inclusive form of forest management where customary land and resource tenure are recognised and formalised. We used an analytic of assemblage to look critically at the initiative and ask who benefits and loses out in these processes. We examine two distinct assemblages existing within the same forest landscape but which are constituted by radically different components. The first is comprised of state agencies and a conservation organisation that undertook the protected area zonation, which are the central pillars of a larger conservation assemblage. The other is forged by largely autonomous Kuy communities that assembled to protect their forests from outside interests and which have a very different perspective of what constitutes the forest, its uses and values, its more-than-human dimensions, and approaches to conservation. We examine how and why the conservation assemblage goals to conduct a more inclusive zonation process were not realised in practice, despite the good intentions of individuals involved and significant resources deployed. In particular, we draw attention to the question of people's participation and the narrow scope of what was up for discussion; processes of simplification at play that failed to grasp the complexity of people's livelihoods and use of forests; and the subsuming of political claims over forests into technical problems to be fixed, which served to reinforce the knowledge and authority of the Ministry of Environment. It resulted in a process of exclusion of the people it was supposed to benefit, caused by the combined exercise of distinct forms of power that speak to different sets of actors, agendas, and socio-political contingencies.

Keywords: customary tenure, assemblage theory, Cambodia, protected area management, Indigenous Peoples

Introduction

In July 2023, running up to the national elections, the government of Cambodia issued a series of sub-decrees formally incorporating 0.7 million hectares of land previously classified as Biodiversity Conservation Corridors into the Protected Area (PA) system (Khoun, 2023a). These biodiversity corridors were already controversial as they overlapped with the homes, farmlands and forests of Indigenous people and Khmer smallholders. The sub-decrees were also released without any consultation with local communities living, foraging, and farming in these corridors and who felt at risk of losing access rights and tenure to farmlands and ancestral territories.

This episode illustrates how conservation projects can exclude or drastically limit access and management rights of Indigenous people to their forested territories. In Cambodia, the protected area system itself is an assemblage of ideas and practices that have been fought over and contested; some of which could be categorised as fortress conservation and others which are more livelihood and community orientated.

The Cambodian government, and specifically the Ministry of Environment, have explained the latest re-writing of the country's PA boundaries as a necessary legal action taken to contain deforestation driven by large-scale and small-scale agricultural expansion (Ehrensperger et al., 2024; Pauly et al., 2022) and selective logging (Langner et al., 2020). But two tensions lie at its core. First, the government is also the main facilitator of Cambodia's forest enclosures through its promotion of land-based investments, large- and small-scale agricultural development, and its vested interests in and support for elite-driven logging and resource exploitation (Milne et al., 2023; Work et al., 2022). Second, recent legislation and policies have opened some space for seemingly more inclusive forms of forest management where customary land and resource tenure are recognised and formalised through mechanisms such as forest co-management, Indigenous collective land titling, and the zonation of protected areas that set aside areas for community use. While these mechanisms are mainly imposed on communities (Diepart et al., 2023), they have gained traction amongst international conservation organisations working on protected area reform. Many smaller nongovernmental organisations (NGOs) also support communities to engage with these mechanisms because they see them as the main channels that can potentially offer some level of state recognition and thus security over their farmlands and forest resources (Diepart et al., 2023).

With these tensions in mind, we raise two questions. The first concerns the practical and policy dimensions. To what extent can state-led processes to designate communities' rights over forest areas be more inclusive and people-centred? In other words, can state-led interventions and programs be assembled so that the full range of land and resources communities use, access, and manage under

customary arrangements be codified in new protected area reform? The second question pertains to politics; who benefits and loses out in these processes; whose claims to forest management and access are sidelined and whose are legitimised; and what processes, power relations and tensions shape these outcomes? These two questions are not necessarily in harmony; they speak to different agendas, audiences, perspectives, and even ontologies. Yet both are important to illuminate how and why state-led efforts to improve the governance of PAs – even seemingly progressive interventions that try to include communities – often fail to deliver on their promises and give rise to critiques and challenges.

We use an analytic of assemblages to look into these difficult questions. We trace the actors, relations and material resources that were assembled around an initiative that uses participatory resource mapping to inform the zonation of the Chhaeb-Preah Roka Wildlife Sanctuary in Northern Cambodia. By working with local communities to document their customary use of resources and livelihood practices, the proponents of the intervention – Wildlife Conservation Society (WCS) staff and Ministry of Environment (MoE) officials – sought to improve PA management through greater inclusivity (Diepart & Oeur, 2023). We argue that the protected area zonation process opened up some formal space for participation that did not exist before. This resulted in the production of a map where zoning boundaries take into account people's customary use of resources for their livelihoods. However, this attempt at spatial reorganisation of the protected area ultimately failed to deliver on its promises as it never materialised beyond the production of a map. Moreover, the process undermined the conservation and livelihood work of a pre-existing community-based network. This is due to various exclusion mechanisms before, during, and after the zonation process that limited the space for legitimate debate needed to challenge the status quo. Instead of moving towards greater inclusivity, the zonation process has brought land and resources under the state's sovereign control in ways that limit people's autonomy and agency in managing the forest.

Framing the argument

Our assemblage approach places emphasis on the complex relations that are formed between heterogeneous entities trying to retain control and autonomy over this forest area, and examines why and how spatial orderings often result in disappointing or contradictory outcomes as they come into contact with the messiness of the world. As noted by Müller (2015: 27), assemblages are useful to understand “why orders emerge in particular ways, how they hold together, how they reach across or mould space, and how they fall apart.” Inevitably, then, an assemblage approach draws attention to the interlinkages between power, politics and space.

There are several aspects to assemblages which we summarise here (DeLanda, 2016; Deleuze & Guattari, 1987; Müller, 2015). First, assemblages are relational as they are arrangements of different entities linked together to form a new whole. In DeLanda's terms, assemblages are greater than the sum of their parts. Assemblages are hence also productive; they shape discourses, policy, behaviour, and produce new territorial and institutional arrangements in ways that go beyond the stated intentions of any one single actor within the assemblage.

Second, assemblages establish territories as they emerge and hold together but they also constantly transform and break up. Deleuze and Guattari (1987) refer to this dynamic as territorialisation and de-territorialisation. A highly territorialised assemblage is one in which the relations between component parts are determined within certain bounds and reproduced according to a certain model or "code." A de-territorialising assemblage is one in which the component parts are in relations that are being stretched, broken and morphed to such a degree that the assemblage is being transformed or even destroyed. Finally, re-territorialisation occurs when a new assemblage is reconstituted by bringing together components from one assemblage into new codified relations that form a new assemblage. The protected area zonation process can be an example of re-territorialisation as it builds on pre-existing forest tenure arrangements and past experiences or failed efforts to territorialise the forest landscape. It tries to segment forests and the people that use them into highly codified abstract categories managed strictly by the state.

Third, assemblages are anything but smooth or linear processes. They are subject to exclusion mechanisms, particularly those Hall et al. (2011) call ambient exclusions as they relate to the expansion and intensification of nature conservation efforts. To elicit how power dynamics shape assemblages, we draw on the framework developed by Tania M. Li (2007a, 2007b). We look at how alignments are forged between a polymorphic body of actors who have distinct interests in protected area zonation and management. We also examine the technical design of the process and the simplifications that are introduced to manage the complexities of documenting customary uses of land and forest resources with the purpose of integrating conservation and livelihood objectives. We discuss how particular forms of knowledge are authorised and integrated into the process (or not) to manage contestations.

This overall framing leads us to envisage two very different assemblages that operate within the same Chhaeb-Preah Roka forest landscape. One is comprised of state agencies and conservation organisations which are the central pillars of a much larger conservation assemblage. Also included are forest-dependent people and community forest management groups who are the main targets of conservation-driven interventions, as well as the maps and mapping technologies, plans, documents, environmental discourses and rationalities that give order and

conviction to their projects. They are brought together in a specific conjuncture, namely the inventory and mapping of customary uses of resources to inform the delineation of management zones within the protected area. The other assemblage is the Prey Preah Roka Community Forestry Network (PPRCFN). It is comprised of various active members of the network and their families and friends who make use of forestlands; forest spirits who are central to conservation initiatives for local villagers; and the forest itself. The two assemblages are constituted by radically different components – one governmental in nature, the other forged by the largely autonomous Kuy communities. Each has different perspective of what constitutes the forest, its uses and values, its more-than-human dimensions, and approaches to conservation.

Method and research process

The conservation assemblage discussed in this chapter is part of a larger study conducted by the first author for the Mekong Region Land Governance project (MRLG) (Diepart & Oeur, 2023). In Cambodia, MRLG supports an alliance of organisations that have explored how the documentation of customary tenure can contribute to the recognition of land rights of forest-dependent smallholders and PA management. This chapter draws on material relevant to an intervention supported by MRLG to document customary tenure to inform PA zonation in Chhaeb-Preah Roka Wildlife Sanctuary, Preah Vihear province, Northern Cambodia. Fieldwork was conducted in June 2022 and consisted of short site visits, focus group discussions, and in-depth interviews with key stakeholders in three villages (Dong Phlet, Narong and Kham Keut, see Figure 3.1). This was complemented by a review of legal and project documents and a spatial data analysis to compare the results of the resources mapping with the draft zonation. A total of 11 interviews were conducted involving 35 respondents: project proponents (n=3), resource user groups (n=20), MoE officials (n=3), territorial authorities (n=7) and local NGOs (n=2).

This study was then discussed with the second author who has a long-term engagement with communities located in the area southwest of the Chhaeb-Preah Roka Wildlife Sanctuary, and particularly with members of the Prey Preah Roka Community Forest Network. This shed light on deeper stories that shape the lives of people in the Preah Roka-Chhaeb forest, and importantly, revealed that PPRCFN members had been purposefully marginalised from the MoE/WCS-led protected area zonation process. Subsequently, we conducted a follow-up visit to the area and exchanged with WCS staff to get updates on the status of the PA zonation process. The chapter is an outcome of these intertwined fieldwork experiences and dialogues.

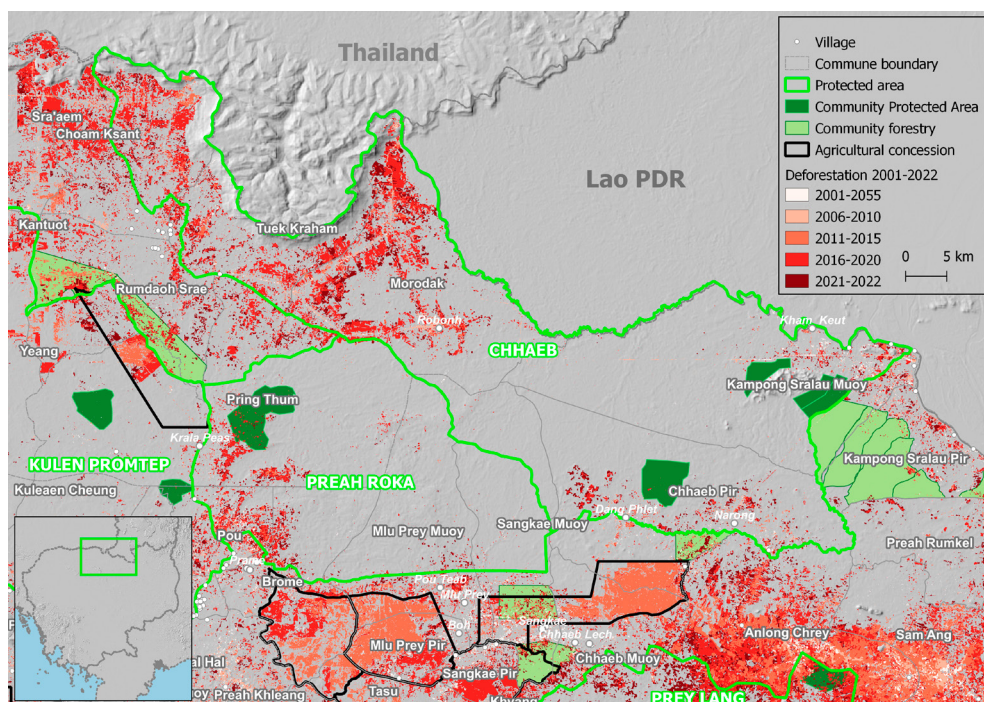


Figure 3.1: The Chhaeb-Preah Roka Wildlife Sanctuary in Northern Cambodia. Note: The conservation assemblage covers both Chhaeb and Preah Roka wildlife sanctuaries, while the second assemblage includes forest resources that are part of the Preah Roka wildlife sanctuary

The Chhaeb-Preah Roka Wildlife Sanctuary was previously two distinct wildlife sanctuaries (Chhaeb and Preah Roka) but were merged into a single wildlife sanctuary in 2023. It is located at the border with Laos and Thailand and is home to Indigenous Kuy, Khmer smallholder farmers and migrants from other parts of the country (all living inside, near, or outside the protected area), as well as important wildlife species (elephants, deer, gaur, sarus crane, vultures, and the giant ibis). The forest provides non-timber forest products that are significant to local livelihoods (particularly resin trees) and also offers opportunities for ecotourism development. Deforestation occurs within and outside the protected area (see Figure 3.1). The Northwestern part was designated as a Social Land Concession area for families of demobilised soldiers. The western part is notorious for illegal logging as reported by community patrols and Global Forest Watch deforestation alerts (Flynn et al., 2023). In the south, Economic Land Concessions were granted in 2011 to Chinese companies for the production of sugarcane covering a total area of 42,422 hectares.

An institutional background to the zonation of protected areas in Cambodia

Since its creation in 1993, the protected area system of Cambodia has territorially expanded and with it the jurisdictional power of the MoE. Originally, responsibility for managing forests with a protection status was shared between MoE and the Forestry Administration. But in 2016, a sub-decree abolished this dual responsibility and more forestland was placed into PAs under an MoE mandate (RGC, 2016). In 2017, in an attempt to enhance connectivity between protected areas, so-called biodiversity conservation corridors covering a total of 1.4 million ha were established (RGC, 2017). As noted at the start of the chapter, the government went one step further in 2023 and reclassified many of these corridors, formally incorporating them into protected areas (Khuon, 2023b). As a result, the terrestrial PA system now includes 6.9 million ha equivalent to 38% of the national landmass. This expansion is best understood in the context of the country's commitment to carbon neutrality by 2050 (RGC, 2021), which supposes the expansion of forest cover to 60% of national territory (RGC, 2023). This pledge is highly ambitious considering the country's rate of deforestation, which has been steadily high for the last two decades despite the rapid expansion of the PA system in the country (Ehrensperger et al., 2024; Pauly et al., 2022).

To regulate the multifunctionality of protected areas, the Law on Protected Areas (RGC, 2008) stipulates that each PA be structured into four spatial zones, each with specific regulations attached.

The core zone is an area containing biodiversity, natural resources, ecosystems, and genetic resources of high value for scientific research and for sustaining the environment. Access to the core zone is prohibited except for officials and researchers with prior permission from MoE. The conservation zone is adjacent to the core zone to which limited access is allowed for local communities to use resources following the appropriate circular issued by MoE. The sustainable use zone is an area where some livelihood activities are permitted and it is possible to build infrastructure, under restrictions and authorisations from MoE. The law stipulates the possibility of an agreement to be signed between MoE and local communities to give them rights to manage so-called Community Protected Areas for 15 years (renewable) for non-timber forest product collection and non-commercial timber exploitation. The community zone is the area for the socio-economic development of local communities. It may contain residential land, rice fields, and other crop fields (*chamcar*). The issuing of land titles is possible for these areas but requires authorisation from MoE following the Land Law. While the Protected Area Law specifically mentions that Indigenous Peoples' rights should be protected, reference to Indigenous People was subsequently removed from the Environment and Natural Resources Code adopted in 2023.

Technical guidelines on how the zonation should be conducted in PAs in Cambodia were only released in 2017 (GDANCP, 2017). The main criteria specified

in the document are ecological as they concern issues of size, ecotone, connectivity, or habitat suitability. It also includes consideration for local communities legally settled within PAs whose traditional rights to use resources “shall be taken into account during the zonation process.” There is no prescription, however, as to how consultation should take place nor is any mechanism provided to ensure local livelihoods and customary claims to land and resources are “taken into account.” Local communities are merely considered as a social group to be managed rather than allies for nature conservation.

The prominence of the state in PA management is also reflected in the tenure arrangements being recognised and promoted. Under support from large conservation organisations, the MoE has tended to block communal titling within PAs preferring the much more limited Community Protected Areas (CPA) which the ministry retains jurisdiction over. Collective tenure of forest resources is currently limited to CPA agreements covering 0.3 million ha (MoE, 2021). More recent legislation has earmarked nearly a million hectares for community zones (RGC, 2022) where individual land rights for houses and agriculture are in theory eligible for titling. Altogether, we see a polarisation of tenure arrangements promoted for PA management: strict state control on the one hand and individual private land ownership on the other. The space given for collective arrangements is small and disputed; collective tenure security is weak as a result.

Governing the Chhaeb-Preah Roka Forest: a tale of two assemblages

This section examines the genealogy of the two assemblages introduced earlier. We start with the PPRCFN because it emerged well before MoE and WCS partnered to zone the protected area. As such, it helps contextualise the history of forest management in the area and the conservation assemblage alike, and highlights the overarching power dynamics at play in this forest landscape. We examine the relations forged to comprise the PPRCFN assemblage, how territorialisation is mediated by sacred geographies, and how the network has faced mounting pressures due to their exclusion from the forest area on the part of MoE.

The Prey Preah Roka Community Forest Network: the significance of resin trees and spirits

The PPRCFN is a network of predominantly resin collectors who have resin trees located within the Prey Preah Roka forest (referred to hereafter as PPR). It is centred around the commune of Brome but also includes long-term active participants from the more remote villages of Krala Peas (Pring Thum commune, on the western

edge of PPR) and Robonh (on the northern edge of PPR). Several other Kuy villages extending into Chhaep within Mlu Prey Muoy commune are also long-term participants of the network (See Figure 3.1).

Locally, the name Preah Roka forest refers to a specific area of dense evergreen forest surrounded by dry dipterocarp forest interspersed with small patches of grasslands. Historic Kuy villages such as Mlu Prey, Bou Teap, Sangae, Chhaep and Brome (which all pre-date the French colonial period) were founded on the well-irrigated flatter lands ideal for paddy rice cultivation just south of the evergreen forest. Elders in Brome, Boh Thom and Krala Peas speak of PPR being an important area for wild pigs, elephants, mushrooms, rattan and a wide range of forest fruits and vegetables. The dense forests of PPR are also home to a variety of spirits and sacred areas. These range from malevolent spirits such as Breay, to the ancestral guardian spirits Niak Ta (venerated across Cambodia). In distinction to most lowland Khmer communities, Kuy have largely maintained practices and relations to both the village guardian Niak Ta as well as the forest guardian Niak Ta who mediate hunting and NTFP collection practices. There are also sacred sites associated with unique natural sites (such as a limestone outcrop) and less location-specific entities such as mystics (*sajanh*) and ogres (*yeak*).

Historically, the dense forest has been an important site of refuge: to avoid raids from Thai and Khmer bandits in the late nineteenth and twentieth century, to escape the bubonic plague that ripped through northern Cambodia around the 1930s, and to flee from US bombs dropped in close proximity during the 1960s. The period of French colonial rule saw migration, village relocation and new forms of sickness and death. These de-territorialisations which took Kuy from ancestral sites were followed by re-territorialisations: new settlements, infrastructure such as roads and new forms of taxation. So too the second Indochina war and the Khmer Rouge regime violently destroyed relations to land through resettlement, prohibition on spirit veneration, and restriction on movement and livelihood activities.

From the 1980s onwards, there was a renaissance of spirit practices across Kuy villages of the northeast that not only reflected the end of the repressive Khmer Rouge regime which prohibited spirit veneration, but also a Kuy cultural renaissance that sought to re-assert the distinctiveness of Kuy villages that had been forcibly assimilated to Khmer cultural norms. The re-introduction of forest-spirit practices was also associated with the resin forest trade in the 1980s, due to rising demand for liquid resin in Thailand and Laos for boat making and as a sealant in various applications. The proximity to the trading village of Kampong Sralau on the Cambodia-Lao border (part of an ancient trading route that connected Kuy forest products to markets along the Mekong), meant that even this isolated region was well connected to the regional forest commodity trade. The resurrection of the resin market had two very important impacts on the PPRCFN. Firstly, it connected

surrounding villagers to PPR in new ways. As agriculture was largely subsistence-oriented right up until the mid-2000s, and other sources of income (cattle and timber) were limited until the early 2000s, resin collection became an important income source. Most households adjacent to PPR started resin collection as there were essentially no barriers to entry (high forest-to-labour ratios and no start-up costs). The second important impact of the resin market is that it led to the re-emergence of forest spirit veneration by bringing resin collectors in close relation to the forest. Spirit veneration revolves around the dynamic relations between people and specific places. People must actively be within sacred sites to know they are sacred sites and form relations with particular spirits. It was due to the practices of resin collectors, who would travel far and wide across the forests of PPR on a repeated basis starting from the 1980s, that many new spirits were discovered and new customs forged.

Early emergence of the network

Right up until the end of the twentieth century, the large tract of evergreen forest known locally as PPR existed as a local forest rather than a space governed by the state. The protected area system was formally re-established in Cambodia in 1993, but few were actually managed consistently and systematically. Most remained “paper parks” until donors and international NGOs provided budgets for management programs.

In the 1990s the Forestry Administration took over public state forested areas (all the forested areas that were not formally zoned as national parks). The most notable change people in the PPRCFN recall from this era is the creation of forestry concessions. Malaysian company Cherndar Plywood was given a 103,000-ha logging concession granted by the Ministry of Agriculture in 1996 that covered a significant portion of Prey Vihear province. One of the major logging sites was within PPR and by 1999 the company had established checkpoints along access roads that prohibited local resin collectors from accessing forested areas. As resin trees were felled by the company across PPR, outraged villagers forged alliances and directly confronted the company trying to prevent logging equipment from entering the forest.

Elders from Brome explained that very quickly, resin collectors from across PPR were meeting together at access roads to try to stop resin tree felling. This was successful for several weeks but had to be abandoned once armed soldiers began accompanying logging personnel. By 2001 Global Witness reported that 340 resin trees had been felled (Global Witness, 2001). At this point, tactics changed as villagers began to focus on administrators rather than the logging company and conducted several protests at district and provincial halls. This saw much wider participation from local villagers (extending beyond just resin collectors) with

logging becoming a central concern for people within Brome and nearby villages. A Brome elder explained that at that time “we had no understanding of forestry laws; we had just been using the forests for resin collection without having to worry about laws.” Brome resin collectors and activists (including several older female activists) emerged as central to the emerging resistance activities. Using their limited prior experience as low level state administrators, they helped write statements, document resin tree loss and conduct interviews with the media. Eventually, they led a contingent of resin collectors who ended up meeting directly with King Sihanouk, who then requested Prime Minister Hun Sen cancel the concession (which subsequently happened in 2002). This period was integral to the formation of the PPRCFN: it brought people together from several disparate villages, raised awareness of the vulnerability of their resin trees (and the forest more generally), and gave them crucial experience in advocating for their continual autonomy over the area.

Over the 2000s new threats to the forest emerged as roads connecting Prey Vihear to the rest of Cambodia improved. Migrants increasingly came to the forested and remote Kuy villages in search of valuable timber. As the price for quality hardwoods skyrocketed in the 2000s, following the expansion of the Chinese furniture market, logging outfits that were becoming established in other parts of Prey Vihear began roving PPR for hardwoods. The first major challenge of the early 2000s was a local boat-building enterprise based on the Stung Sen River just a few kilometres west of Brome. In response, the same activists and resin collectors who had been involved in the Cherndar Plywood case began actively patrolling the forests around Brome. When loggers began moving northwards, resin collectors from further north were consulted and patrolling groups were started up in these villages as well. The network at this time also had to contend with the Forestry Administration that had formal control of the area. Elders from Brome explain that the Forestry Administration oscillated between actively encouraging resin collectors to protect PPR through forestry patrols, and actively facilitating logging in the area by ignoring or discouraging the patrolling activities of the emerging network members. For the most part, however, villagers had the freedom to conduct patrols, although they were not legally allowed to apprehend loggers. People active in patrolling during this time explained that “we would chase loggers out of the forest” and “destroy their logs and equipment.”

Increasing pressures

From 2011 onwards new pressures on the forest emerged. Firstly, a series of skirmishes occurred between Thailand and Cambodia between 2009 and 2011 that saw major mobilisations of soldiers along the border area. This resulted in new

military battalions and social land concessions being established along the borders of PPR as lands were cleared for farming and given to the families of soldiers. This quickly resulted in a rise in logging across the entire forested northern border area. Simultaneously, a 40,000 Economic Land Concession (ELC) granted to the Chinese sugar company Heng Fu substantially overlapped with farming land of Kuy villages along the Prey Vihear-Chhaep highway, which also brought new threats to the forest. For the villages along the Chhaep highway, including Brome, the ELC was the largest threat to livelihoods ever experienced, with 70% of villagers' active rice fields or swidden fields claimed by the company.

Once again, a network of villagers across three districts emerged to organise against the ELC. Much like the PPRCFN, this network was centred on Brome and many of the same resin collectors who had been active in PPRCFN also became active in resisting the company. Out of the struggles against Heng Fu came a renewed urgency to protect PPR which reactivated Kuy farmers across surrounding villages. Heng Fu contracted out the right to collect logs felled within the concession boundaries to a local Prey Vihear company (composed of individuals with experience in illicit logging). It wasn't long before this company began offering piece rates to local loggers for hardwoods collected outside ELC boundaries which resulted in increasing logging within PPR.

Simultaneously, the upgrading of Prey Vihear-Chhaep dirt road to a sealed highway attracted settlers, migrant workers, speculators and loggers who rapidly purchased land and settled along this road starting from 2011. As adjacent areas such as Bung Per Wildlife Sanctuary had already been largely logged of all valuable hardwoods, loggers now turned to the dense evergreen forests of PPR.

This resulted in renewed re-territorialising efforts by the PPRCFN to protect the area, especially since the Forestry Administration, which was in the same ministry that granted the Heng Fu concession, had demonstrated it was entirely ineffective and unwilling to stop logging in the area. People in Brome refer to the period between 2012–2018 as “the double front” where they were forced to go between protecting their farms from the company clearing their land and protecting the forests from loggers. During this time PPRCFN organised several large “camp outs” at PPR that sometimes went on for weeks to directly stop loggers.

By 2016, the efforts of PPRCFN were becoming increasingly recognised outside of Prey Vihear and several NGOs were providing support to both PPRCFN and the network of villagers protecting their lands against the company. The local NGO Ponlok Khmer (which directed funds from other donors such as DanMission), the Cambodia Youth Network, and several Phnom Penh-based activists began providing support to PPRCFN to conduct basic activities such as patrols and media outreach. During this period, the PPRCFN began organised elections for the positions of coordinator, secretary and accountant, and began aiming for monthly

patrols and regular planning meetings. The network also began organising yearly tree ordination ceremonies that would attract several hundred patrons.

The creation of the Preah Roka Wildlife Sanctuary and new headaches

As outlined in the previous section, 2016 saw the expansion of the protected area system under the jurisdiction of the Ministry of Environment. This resulted in the creation of the Preah Roka Wildlife Sanctuary and the adjacent Chhaep Wildlife Sanctuary (which were amalgamated in 2023). Although the formal designation of PPR as a wildlife sanctuary was not done in consultation with the PPRCFN and nor were the boundaries drawn up based on local level consultation or study, people in the network were optimistic that authorities would start taking logging seriously.

During 2016 and 2017, MoE rangers began actively patrolling forests alongside PPRCFN members. By 2018, however, relations between PPRCFN and MoE had largely broken down. Local officials stopped participating in patrols by the end of 2017 and became largely inactive on cases of logging that were brought to them. PPRCFN members began collecting evidence (photos, names, locations) of logging and began working with partners to systematically document cases. This included using a phone app to record evidence of logging that could then be displayed with an online map. As logging intensified, PPRCFN members feared that MoE officials based in Phnom Penh were unaware that local MoE officials were embedding themselves in logging networks. Therefore, PPRCFN members travelled to Phnom Penh in 2018 to directly meet with MoE officials and present evidence of mass logging in PPR since the MoE took over. These higher-level MoE officials obstinately accepted the documents. Rather than acting on the information, the response was to try to prevent the PPRCFN from gathering and disseminating logging information. The work and knowledge of the network became unauthorised and inaudible. Within a month, local MoE officials had de facto excluded all PPRCFN members from entering the forest, stating that PPRCFN was not formally registered as an NGO and therefore had no rights under forestry law to enter into the protected area's core zone, even though no zonation had been conducted at this stage.

Key PPRCFN members all agree that logging intensified between 2018 and 2022. By this time, it had also become indisputable that local MoE rangers were facilitating logging – taking money from loggers and tightly controlling access to PPR. Simultaneously, MoE officials began to monitor key PPRCFN members to ensure they ceased all patrolling activities. Between 2018 and 2024, MoE apprehended and prevented PPRCFN members (accompanied by students, researchers, or journalists) from entering the forest on five occasions. Even the annual PPR ceremony to commemorate the forest was disallowed by MoE by 2020. This annual ceremony involving the ordination of trees by monks, and an offering ceremony to Niak Ta

forest spirits, was started in 2017 and became an important event to strengthen ties between both local PPRCFN members and the broader public. In response to these pressures, PPRCFN was forced to conduct its activities clandestinely. Following the more well-known Prey Lang Community Forest Network, which PPRCFN was becoming increasingly close to, patrols and research were conducted secretly (Flynn et al., 2023).

Starting in 2022, key members of PPRCFN were called to meet with local MoE officials and offered a Community Protected Area (CPA). Despite pressure to accept, PPRCFN members collectively decided that they would refuse, understanding that it would dramatically limit the scope of PPRCFN activities and confine them to a small 1000ha patch of forest rather than the larger PPR forest. It also became clear to PPRCFN members that CPAs were an attempt to delegitimise the network. In nearby Boh village, where several logging outfits have been based, the former village chief became the head of a new CPA. The new CPA head is closely tied to the commune chief and local MoE officials – none of whom have previously been supportive of PPRCFN. Over in Mlu Prey commune, a former PPRCFN member who had a falling out with the network due to his opaque spending of network funds, later became the head of the CPA.

The participatory process implemented by MoE and WCS for zoning of the Chhaeb-Preah Roka Wildlife Sanctuary, examined in the next section, was organised through these emerging CPA networks and through local village heads. The PPRCFN felt they were deliberately excluded from the process and described meetings where selected villagers were asked to participate, yet known PPRCFN members were carefully avoided.

The conservation assemblage: the significance of state rules and hierarchical relations

In this section, we examine the making and unmaking of a conservation assemblage that brought together a diverse set of actors to work together to improve the governance of the Chhaeb-Preah Roka Wildlife Sanctuary. The intervention, led by the MoE and WCS, centred on zoning and spatial planning of the PA. The purported aim was to reconcile the protection of forests with the livelihood needs of the local population by implementing a novel participatory approach to documenting the land claims and resource use of local communities so as to inform the boundaries of the PA zones.

'There is space for everyone': building an alliance of actors to manage trade-offs

The different actors of the assemblage have different understandings of what forest conservation means and what protected area management or even 'communities' with legitimate claims to the forest should look like. Notwithstanding these ever-present tensions, the zonation of the Chhaeb-Preah Roka Wildlife Sanctuary represents a moment when interests converge to create the condition of 'working together'. For the different parties involved, the point of convergence is the idea that the PA can offer a space for everyone with the corollary that well-defined and delineated zones with specific uses and rules attached should be the vehicle to address trade-offs between development and conservation that has been the source of various conflicts.

For MoE line agencies, motivation to join the assemblage is driven by past lessons and failures to enforce their claim to jurisdiction over forests in the face of contestation by Indigenous groups and farmers who reject the label of 'encroachers' and insist on their entitlement to the forest as a source of land, livelihoods and cultural identity. Since control purely by coercive means is not possible, a switch to governing is needed that instils an ethos of improvement that brings parties in line with conservation goals through compromise, backed by coercive conditionalities (Li, 2007b). Following this rationale, giving access and recognition of rights to land and forest resources to communities in specific places – particularly valuable non-timber forest products and resin trees – will incentivise smallholder farmers to comply with forest rules and limit deforestation elsewhere. Supporting an inclusive zonation process can help MoE absorb the critique that state forest management is failing and reinstate their commitment to redress key issues that have broken the trust of local communities. This, in turn, strengthens MoE's claim to govern. It legitimises their authority over the entire protected area allowing them to move ahead with the design of a specific management plan for each zone in a way they hope will contain challenges. Key to holding this narrative together was an official from the provincial Department of Environment who coordinated the initiative. He positioned himself (and was seen by others in the assemblage) as a reformer within the forest bureaucracy, willing to engage in dialogue with communities. His involvement was critical to WCS's willingness to fund the pilot with a view to potentially scaling up the approach.

As a prominent international conservation organisation, WCS has been at the centre of fierce debates over the rights of nature versus the rights of local communities, both in public discourse and internally within the organisation. While some individuals show little sympathy with the idea of spatial coexistence between people and nature, many within the organisation challenge the basis for excluding people from PAs on both conservation and social grounds. Overall, WCS

positions itself as working towards both conservation and livelihood goals, and this is reflected in the diverse portfolio of activities taking place in the Northern Plains where Chhaeb-Preah Rokha Wildlife Sanctuary is located: biodiversity monitoring, support for CPAs and the Preah Vihear CPA network, law enforcement, ecotourism development, and a wildlife-friendly organic rice business. For WCS, the PA zonation initiative aims to strengthen these different activities and give them spatial coherence. WCS is also well positioned in the carbon credit landscape of Cambodia and the intervention is strategic as it helps generate information necessary to design an upcoming REDD+ project. In the Northern Plains WCS works very closely with the Provincial Department of Environment, acting both as an advisor and also hosting some staff of the department. WCS sees itself as a bridge between government and communities. While recognising the interest and competence of local groups in forest management, it steps in to help them navigate the complex state-backed conservation apparatus. At the same time, WCS is well aware of the political economic-context in which it operates and the risks of working with government to implement programs that may not end up working out in the best interest of local communities.

For people living in and around the protected forests in question – the main targets of the intervention – there is a large heterogeneity of interest and willingness to engage in a process of PA zonation. Local groups have a long history of navigating through the state regulatory apparatus: land use zonation conducted in 2010 by the Forestry Administration, unsuccessful community forestry or CPA management, and patrol groups to combat illegal logging. These past experiences have left communities with mixed feelings concerning state-backed governance. As illustrated in the case of the PPRCN, many groups are deeply suspicious of efforts to integrate territorialised conservation with smallholder interests (as seen in their rejection of the MoE-facilitated CPA); while others participate in conservation-inspired initiatives for a range of reasons. Another factor explaining diversity of positions is the level of dependency on forest resources which varies widely according to the advance of agricultural development and commercialisation in the area. There is also an ethnic dimension as the Kuy population is culturally and economically more attached to the forest than the in-migrant population. Indeed, the promise that zonation can ‘create a space for everyone’ may appeal more to recent migrants with no claim to ancestral land, than to people who lived in the park prior to demarcation. Beyond this heterogeneity, there is a general understanding that zoning can potentially help clarify and even secure people’s rights to land and forest resources, or at least protect them from further enclosures.

Most local authorities at village and commune levels envisage the intervention from a slightly different perspective. The delineation of the community zone would provide them with a legally binding reference to issue land certificates and for

land conflict resolution. Remaining on good terms with the MoE administration is important but the key is to preserve their authority over their jurisdiction as a whole.

Rendering technical

An intervention of this nature requires framing problems and prescribing solutions in ways that are compatible with specific programming outcomes. This translation requires engaging in simplifications of narratives and real-world complexities, to keep the intervention to a bounded and technical domain that is easier to seize (Li, 2007a). This way, the problem to be resolved (making space for everyone) matches with the solution (PA zonation). In this section, we briefly describe the programmatic aspects of the intervention before turning to these simplifications.

The ‘technical’ PA zonation process

The WCS team, along with their counterparts from the Provincial Department of Environment (PDoE) in Preah Vihear province, were the main driving force behind the design and implementation of the participatory zoning intervention. The institutional set-up comprised national and provincial working groups on PA zonation established in May 2020. The provincial level working group consists of provincial and district governors, all directors of relevant technical line departments, commune chiefs, and representatives from the CPA network.

While the team used the Zoning Guidelines for Protected Areas in Cambodia (GDANCP, 2017) to design the intervention, the limited scope and guidance concerning local participation in the zonation of PAs became an added motivation for WCS to fill this gap by proposing a meaningful way to put local people centre stage in the zonation process.

The majority of the work consisted of a series of workshops in resource mapping conducted at the village level. A workshop typically gathered 20–30 villagers but the team usually organised several meetings per village to cover the entire resource system. The facilitation team prepared updated land cover maps and used them as background for people to identify a diversity of resources that are relevant and important to them. Data and information concerning four main resource units were collected: (1) settlement, farmland, and grazing areas; (2) non-timber forest products; (3) important cultural and sacred forest areas; and (4) wildlife. After the village-based mapping exercises, the team and local villagers conducted field surveys with GPS to obtain reliable locations and descriptions of any resources that local people could not identify accurately on the map. The resource maps were then presented to all participants for validation.

The time dedicated to the entire consultation was substantial – approximately one week per village, including resource mapping, GPS fieldwork, and resource map verification. This required significant mobilisation of human and financial resources. After going systematically through all villages, the team digitised all data and information into spreadsheets and a geographic information system (GIS), which were used as direct inputs to draft the boundaries of PA zones (community, sustainable use, conservation, and the core zone). On paper, this procedure can be considered innovative as it places consultation with local users at the centre of the zonation process.

Simplifications

Proponents of the intervention had hoped that 80% of the population living inside or at the edge of the PA would be consulted during the process. Broad-based consultation was seen as a necessary condition for large endorsement of the zonation and smooth implementation. In total, 84 meetings were organised in 48 villages, involving 3,064 people (53% men and 47% women). It was important for the team to aim for a gender balance because women play a key role in collecting non-timber forest products (except for resin, which is still mainly collected by men). However, this represents only 25% of households living in the 48 villages, a figure well below the stated objective.

This participation gap not only limits the representativity of data and information collected, but it also raises questions as to why the process did not mobilise the local population as expected. We were told that villagers were busy and prioritised their livelihood activities over PA zonation activities. Important questions have remained unanswered, however. If the low level of participation signals contestation or a lack of interest, why are these manifested? And what are the possible implications of a fragmented and heterogeneous community on future PA management?

Moreover, resource mapping focused exclusively on resources inside the protected area. Yet most of the concerned villages are not located directly inside the PA and land resources that are important to people's livelihoods are not entirely located inside but also outside the protected area. Unlike the situation only a decade ago, the majority of families living in and around the PA area no longer have any resin trees. Most families have embraced boom crops such as cassava and are actively looking for agricultural land. Grazing areas are also in high demand for livestock, which provides an important source of income for families. In short, the degree of livelihood dependency on PA resources and thus the engagement and interest of families in PA management vary considerably. Some families deploy their livelihood portfolio in and out of the PA and are attentive to PA management

rules while others derive few resources from within the PA and do not feel much concerned by PA management. On the other hand, some families directly compete for land and forest resources against conservation. Illegal logging inside the protected area is rampant and the complicity of local MoE rangers – as consistently reported by local informants – affects the accountability relations between PA rangers and the local population. All these contradictions have critical implications for conservation. Yet they are difficult to address in a protected area zonation so they do not figure in the process design.

The Chhaeb-Preah Roka Wildlife Sanctuary is not an island but part of a dynamic landscape. In its Northwestern corner, a social land concession granted to military families has been instrumental in turning the entire area into an agricultural landscape. At the same time, the PA can be seen as a last forest frontier. There is very little forest left outside of the PAs, which limits the territorial expansion of agricultural land for migrant smallholders looking for farmland. The operation of multiple ELCs in the south has displaced people to the upper north at the edge of the protected area. These movements have exacerbated the pressure on smallholders to engage in deforestation within the PAs. These factors definitively complicate the conservation and sustainability issues at stake. Yet, these political-economic questions are glossed over and treated as ‘external’ to the zonation process, reducing it to a technical exercise.

Authorising knowledge

Knowledge (and the trust people put in it) is necessary to make institutions work; it underpins practices of assemblage. Knowledge is therefore subject to politics of legitimisation and exclusion that authorise or invalidate it. Along with rendering technical the process of establishing what ‘communities’ want and presenting simplified narratives of problems and solutions, PA zonation establishes a hierarchy of knowledge authorised to inform the process.

The agenda of each consultation meeting was prepared by WCS and MoE and it was also very clear from the outset that the discussion would not open room to debate the authority of MoE in managing the protected area nor discuss the rationale for zoning and the distributive effects of these arrangements.

A key element of the knowledge production process here was the identification by villagers of the location of different types of resources they customarily use and manage inside the protected area. This was done through a resource mapping exercise focusing on the spatial dimension of the resources that can be translated into a Geographic Information System. The documentation process did not allow revisiting local management rules and practices within communities in light of past changes and new circumstances, thus omitting information that would be useful

to devise management plans for the different zones. The data produced was also subject to a review by the biodiversity team of WCS active in the same protected area. The team checked whether the zonation drafted after consultation made sense from a biodiversity conservation standpoint. The WCS team was therefore in a position to make final adjustments to the zonation, which suggests that the biodiversity imperative can override the livelihood imperative in the design of the PA zonation.

Moreover, due to restrictions brought by the COVID-19 pandemic, no meetings were organised at the local level (commune and village) to present the map with draft boundaries of the PA zones WCS-MoE had produced based on the participatory resource mapping. The final part of the consultation was conducted at the district and provincial level only with the participation of commune authorities, leaving local groups with unanswered questions as to where the boundaries of each zone fall.

What does the assemblage produce?

The map in Figure 3.2 overlays the results of the resource mapping and the zonation of the Chhaeb-Preah Roka Wildlife Sanctuary approved at the provincial level. The resource map includes community land (agriculture, settlement and other culturally significant places), non-timber forest products, and wildlife. The map shows that there is a reasonably good match between the area with highest and most important use of resources by communities and the area allocated for the community zone, indicating that people's input in the zonation process was taken into account. The map reveals there are only very small areas inside the wildlife sanctuary that are not utilised in some way or another by people. The area dedicated to full protection (core zone with no access allowed) accounts for 4% of the total area of both sanctuaries as a result. This is in sharp contrast to other protected areas in Cambodia where zonation was driven primarily by nature conservation concerns (e.g., Keo Seima and Sre Pok in Mondul Kiri province), resulting in much larger areas classified as core zones (28% and 50%, respectively) and placing many more limitations on access for forest-dependent smallholders (Diepart & Oeur 2023).

The zonation process initially raised hope among some local communities as the map appears to give greater recognition to the diversity of resources local communities use across the protected area. However, the promised benefits of zonation never came to fruition and the exercise did not transpire beyond the production of a map. After endorsement by district and provincial authorities (Feb–Apr 2022), the draft zonation and all supporting documents were sent to the central ministry for review and approval, where it continues to sit.

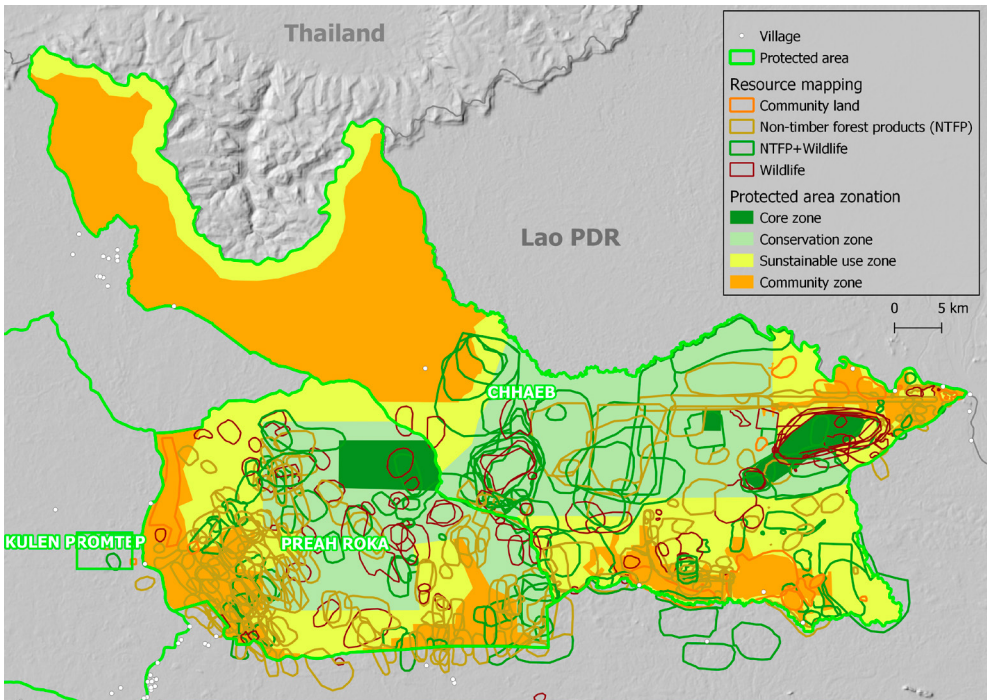


Figure 3.2: Results of the resources mapping and draft zonation

In the meantime, the Provincial Department of Environment who facilitated the entire process allocated land inside the protected area for families of the officials in their own department to establish a stable and pasture to breed cows (Seoung, 2023). In July and August 2023, local community members mobilised to remove wooden beams that PDoE placed in the area to build the stable, arguing that the project overlaps with around 20 hectares of land customarily used by community members. One of our informants later confirmed that the land targeted by PDoE for this project is located within the proposed community zone. The move by PDoE thus completely disregards the zonation process they facilitated and breaks the moral contract agreed with communities to ‘make space for everyone’.

Following the betrayal, community members held a curse ceremony, evoking ancestral spirits to hex PDoE officials and other powerful people whom they said are violating their land rights (Seoung, 2023). A few months later, in December 2023, the same people had to gather again to prevent an excavator from razing part of their traditional land, though the identity of those behind the attempted land clearing was never disclosed (Runn & Eung, 2023). Within a few months only, any hope raised by the zonation turned into disillusionment for local Kuy people and Khmer

smallholders whose continued use of and claims over land and forest resources remain uncertain and even threatened. Meanwhile, local communities living in and adjacent to the Chhaeb-Preah Roka Wildlife Sanctuary still do not know where the zone boundaries fall.

Discussion and conclusion

Through the highly stratified conservation assemblage, we explored how the state (Ministry of Environment) and a prominent conservation organisation (WCS) form alliances and coordinate action to try to optimise outcomes and trade-offs between conservation and development in the Chhaeb-Preah Roka Wildlife Sanctuary. Their objective is to make the Protected Area a territory more governable by ‘making space for everyone’ and creating conditions to incentivise communities to adopt values, practices, and corrective behaviours that conform to PA management and conservation goals. They do so by drawing zones within the protected area, a re-territorialising initiative that seeks to address the question of community land rights through a supposedly more inclusive process. However, the conservation assemblage in practice sets out to carefully manage disruptive social forces embodied by the PPRCFN and reinforce the territorial control of the MoE. Unable to contain its internal contradictions, the zonation process was largely reduced to a technical domain that left underlying power structures and political-economic contexts unchallenged, centred on community stewardship and concerns.

Between 2020 and 2022, project proponents enrolled a relatively large number of people in communities living in or close to the protected area. Meetings and fieldwork activities to identify and map natural resources were organised extensively, following a systematic and detailed methodology. On paper, the proposed protected area zonation map – the zones delineated for different uses and users – seems to account for people’s uses of resources.

All the efforts notwithstanding, the re-territorialising effect of the assemblage was short-lived. As of May 2024, the draft zonation is still pending approval by national authorities. Locally, people do not know where the boundary of each zone falls and can’t make land use and resource management decisions accordingly. Their tenure and livelihoods remain unprotected and vulnerable as a result. While they were supposed to be central in the intervention, communities are disillusioned and we see critiques and acts of resistance emerge against encroachment into the community zone designed for them.

In the chapter, we show why and how the conservation assemblage goals were not realised in practice, particularly concerning the question of people’s participation and the narrow scope of what was up for discussion. What is more, it resulted

in a process of exclusion of the people it was supposed to benefit. This failure is caused by the combined exercise of distinct forms of power that speak to different sets of actors, agendas, and socio-political contingencies (Hall et al., 2011).

The first form of power mobilised is the power of regulation that sidelined the PPFCFN, a very different assemblage formed around resin collectors, spirits, forest, and activism, organised along more fluid and horizontal lines of accountability. The network enjoys broad-based support locally, has ambitious aspirations for managing the Preah Roka forest landscape (west of the wildlife sanctuary), and actively mobilises a large network of patrol groups across the forest. Because the network was also active in pointing out the MoE rangers' involvement in illegal logging, it became marginalised and banned by the MoE, thus removing an undesirable political element in the conservation assemblage. The process resembles what Kramer (2017) calls 'constitutive exclusion' insofar as the PPRCFN had become an unintelligible political claimant and actor in the conservation assemblage (Kramer, 2017).

The second form of power at play – the power of legitimisation – is more subtle and works through the zonation process itself. It provides a justification for how and why PA zonation should be conducted. It implies different practices of assemblages such as diagnosing the problem and prescribing the solution in technical terms and not in terms of entitlements, giving superiority to scientific notions of conservation over local norms, limiting people's inputs to identifying the location of resources and not their actual tenure (or lack thereof), and simplifying or overlooking political-economic factors that threaten to dissolve the logic of the assemblage (e.g., land dispossession due to economic land concessions). Altogether, the process has not addressed the demand for agricultural land and grazing, which are increasingly in need.

The third form of power is the use of force by provincial authorities involved in the zonation process to approve investment projects inside the protected area and facilitate logging syndicates that disregard the whole participatory zonation process and run against communities' interests. What we see at play through these exclusions is the visible hand of the state. The zonation process creates abstract land categories (the zones) to discipline people's actions and conform them to specific rules and regulations defined by the MoE. It allows certain land uses and practices compatible with their narrative and excludes others that do not fit this conservation assemblage. As such, behind the discourse of participation and community interest, the protected area zonation effectively enables territorial control and the spatial extension of state power. Historically, the imposition of a state territorial regime in peripheral landscapes has been consistent throughout colonial and post-colonial Cambodia (Baird, 2009). The zonation of protected areas offers a new practical and discursive tool to renew state control and limit people's autonomy and agency in managing forest resources.

References

- Baird, I. G. (2009). Controlling the margins: Nature conservation and state power in northeastern Cambodia. In F. Bourdier (Ed.), *Development and dominion: Indigenous peoples of Cambodia, Vietnam and Laos* (pp. 215–248). White Lotus Press.
- DeLanda, M. (2016). *Assemblage theory and social complexity*. Edinburgh University Press.
- Deleuze, G., & Guattari, F. (1987). *A thousand plateaus*. University of Minnesota Press.
- Diepart, J. C., & Oeur, I. (2023). *Communities at the core of protected area management: Learning from customary tenure documentation experiences in Cambodia* (MRLG Case Study Series #8). MRLG, WCS, HA.
- Diepart, J.-C., Scurrah, N., Beban, A., Gironde, C., & Campbell, N. Y. (2023). The recognition and formalization of customary tenure in the forest landscapes of the Mekong region: A Polanyian perspective. *Journal of Land Use Science*, 18(1), 211–226.
- Ehrensperger, A., Nanthavong, V., Beban, A., Gironde, C., Diepart, J.-C., Scurrah, N., Nguyen, A.-T., Cole, R., Hett, C., & Ingalls, M. (2024). The agrarian transition in the Mekong Region: Pathways towards sustainable land systems. *Journal of Land Use Science*, 19(1), 1–23.
- Flynn, Gerald, Ball, A., & Meng, K. (2023). Communities track a path of destruction through a Cambodian wildlife sanctuary. *Mongabay*. <https://news.mongabay.com/2023/10/communities-track-a-path-of-destruction-through-a-cambodian-wildlife-sanctuary>
- GDANCP. (2017). *Zoning guidelines for the protected areas in Cambodia* (p. 34). General Directorate of Administration for Nature Conservation and Protection (GDANCP), Ministry of Environment.
- Global Witness. (2001). *The credibility gap – and the need to bridge it increasing the pace of forestry reform*. Global Witness.
- Hall, D., Hirsch, P., & Li, T. M. (2011). *Powers of exclusion. Land dilemmas in Southeast Asia*. University of Hawai'i Press.
- Khuon, N. (2023a). Government expands protected areas by more than 550,000 hectares. *CamboJA News*. <https://cambojanews.com/government-expands-protected-areas-by-more-than-550000-hectares/>
- Khuon, N. (2023b). Government reclassifying biodiversity corridors into protected areas. *CamboJA News*. <https://cambojanews.com/government-reclassifying-biodiversity-corridors-into-protected-areas/>
- Kramer, S. (2017). Constitutive exclusion. In *Excluded within: The (un)intelligibility of radical political actors*. Oxford University Press. <https://doi.org/10.1093/oso/9780190625986.003.0001>
- Langner, A., Desclée, B., Carboni, S., Vancutsem, C., Stibig, H.-J., Achard, F., & Theilade, I. (2020). *Forest encroachments and logging activities within the Prey Lang Wildlife Sanctuary, Cambodia – Assessment of a new monitoring approach: Radar-based Forest Canopy Disturbance Monitoring (FCDM-radar)* (JRC122187). European Commission.
- Li, T. M. (2007a). Practices of assemblage and community forest management. *Economy and Society*, 36(2), 263–293. <https://doi.org/10.1080/03085140701254308>
- Li, T. M. (2007b). *The will to improve: Governmentality, development, and the practice of politics*. Duke University Press.
- Milne, S., Frewer, T., & Mahanty, S. (2023). Green territoriality and resource extraction in Cambodia. In *Routledge handbook of global land and resource grabbing* (pp. 159–172). Routledge.
- MoE. (2021). *List of Communities in Protected Areas (CPA): Update 2021* [Dataset].
- Müller, M. (2015). Assemblages and actor-networks: Rethinking socio-material power, politics and space. *Geography Compass*, 9(1), 27–41.

- Pauly, M., Crosse, W., & Tosteson, J. (2022). High deforestation trajectories in Cambodia slowly transformed through economic land concession restrictions and strategic execution of REDD+ protected areas. *Scientific Reports*, 12(1), 17102.
- RGC. (2008). *Law on Protected Areas (NS/RKM/0208/007)*. Royal Government of Cambodia.
- RGC. (2016). *Sub-decree 69 on the transfer of protected forest, protected areas, production forest and economic land concessions between the Ministry of Agriculture, Forestry and Fisheries and the Ministry of Environment*. Royal Government of Cambodia.
- RGC. (2017). *Sub-Decree 07 on the creation of biodiversity conservation corridor as part of the protected areas system*. Royal Government of Cambodia.
- RGC. (2021). *Long-term strategy for carbon neutrality*. Ministry of Environment.
- RGC. (2022). *Sub-decree 245 on the Delineation of Community Zone in Protected Areas of Cambodia*. Royal Government of Cambodia.
- RGC. (2023). *Circular strategy on environment 2023–2028*. Ministry of Environment.
- Runn, S., & Eung, S. (2023). Kuy community protest against outsiders, encroachment on customary land. *CamboJA News*.
- Seoung, N. (2023). Ethnic Kuy put curse on environment officials building cow stable in wildlife sanctuary. *CamboJA News*. <https://cambojanews.com/ethnic-kuy-put-curse-on-environment-officials-building-cow-stable-in-wildlife-sanctuary/>
- Work, C., Theilade, I., & Thuon, T. (2022). Under the canopy of development aid: Illegal logging and the shadow state under the canopy of development aid: Illegal logging and the shadow state. *The Journal of Peasant Studies*, October, 1–32. <https://doi.org/10.1080/03066150.2022.2103794>