

Collaborative Governance of Protected Areas: Success Factors and Prospects for Hin Nam No National Protected Area, Central Laos

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Abstract

Collaborative governance of protected areas has emerged as a response to failures of, and ethical concerns about, centralised environmental governance. This paper assesses the governance of the Hin Nam No National Protected Area in central Laos to identify the conditions that support successful collaborative governance. Our analysis is based on the argument that collaborative governance is more likely to be successful under conditions that provide incentives for community engagement, formal mechanisms for power sharing, local ownership of resources, downward accountability, mechanisms for building trust, and an adaptive approach to performance assessment and improvement. We show that collaborative governance in Hin Nam No demonstrates the potential for a more decentralised and democratic system of governance based on customary rights, but requires ongoing political will to consolidate and sustain these arrangements. The findings of this study contribute to the growing literature on collaborative governance of protected areas in Asia and elsewhere.

Keywords: Governance, protected areas, collaboration, success factors, Laos

INTRODUCTION

Governance for protected areas seeks to negotiate outcomes that conserve biodiversity while also providing for sustainable resource use. National legal and policy frameworks governing protected areas are embedded in international agreements such as the Convention on Biological Diversity, as well as the

International Union for Conservation of Nature (IUCN) policy guidelines that establish an internationally agreed framework for identifying and classifying protected areas. The IUCN definition of a protected area is ‘a clearly defined geographical space, recognised, dedicated and managed, through legal or other effective means, to achieve the long-term conservation of nature with associated ecosystem services and cultural values’ (Dudley 2008: 9).

Historically, protected areas controlled by governments have been a primary mechanism for conserving the world’s biodiversity. However, over the past two decades protected area governance has diversified, with significant growth in private and community-based management, as well as a variety of partnership-based models (Borrini-Feyerabend et al. 2013). This diversification has been driven by both ethical and pragmatic needs to take into account local community

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dependence on ecosystem goods and services, respect the rights of indigenous peoples, and address failures of top-down governance to deliver expected outcomes (Ghimire and Pimbert 1997; Stevens 1997; Anderson and James 2001; Brechin et al. 2002; Phillips 2003; Cumming 2004). Under these influences, power has been redistributed across multiple public, private and civil society organizations, and collaborative governance arrangements are now widespread (McCarthy 2007; Lockwood 2010).

Collaborative governance of protected areas has the potential to yield multiple biodiversity and socio-economic benefits through the formation of alliances and partnerships between stakeholders (governments, the private sector, local communities, and non-governmental organizations) as a means of developing consensus and efficiently deploying available skills and resources (Munthali 2007). Such arrangements can draw on various knowledge systems to foster trust and develop joint visions, promote experiential and experimental learning and function as bridging organizations that lower the costs of collaboration and conflict resolution (Folke et al. 2005; Armitage et al. 2009).

Theoretical and empirical research into collaborative governance arrangements for the management of environmental resources has identified characteristics that are likely to underpin success. Frameworks and associated guidance for designing effective collaborative governance institutions have been offered by Ansell and Gash (2008); Ostrom (2009) on conditions likely to favour successful local community governance of common-pool resources, and her institutional analysis and development (IAD) framework (Ostrom and Cox 2010); design principles for community-based natural resource management (Cox et al. 2010); and Cheng and Sturtevant's (2012) framework for assessing collaborative capacity in community-based public forest management in six arenas of collaborative action (organizing, learning, deciding, acting, evaluating, legitimizing).

Drawing on this literature, we investigate the argument that successful collaborative governance arrangements are more likely to develop under particular conditions that include incentives for community engagement, formal mechanisms for power sharing, local ownership of resources, downward accountability, mechanisms for building trust, and an adaptive approach to performance assessment and improvement.

To ensure a common understanding of 'collaborative governance', we adopted a modified version of the Ansell and Gash's (2008: 544) definition: 'a governing arrangement where multiple state- and non-state actors engage in a collective decision-making process that is formally organised, consensus-oriented, and deliberative and that aims to develop and/or implement policies, plans or management programs'. The institutionalisation of a collective decision-making process is central to this definition. The term 'consensus-oriented' is used because, although collaborative forums often do not succeed in reaching consensus, the premise of engaging in a deliberative, multilateral, and formal forum is to strive toward consensus or, at least, to identify areas of agreement. We differ

at only one point from Ansell and Gash (2008) and follow Borrini-Feyerabend et al. (2013) and Emerson et al. (2012) in not requiring the governance arrangement to be initiated and led by one or more government agencies and thereby generalising the Ansell and Gash definition.

Ansell and Gash (2008) also identified six criteria that a governance arrangements needs to possess in order to meet their definition. Given our generalisation of their definition, these criteria can be reformulated as: 1) the forum is initiated by a legitimate governance authority; 2) participants in the forum include government and non-state actors; 3) participants engage directly in decision making; 4) the forum is formally organised and meets collectively; 5) the forum aims to make decisions by consensus (even if consensus is not achieved in practice); and 6) the focus of collaboration is on developing and/or implement policies, plans or management programs.

Collaborative Governance in Laos and Vietnam

On paper, the Lao Government's conservation policy seems to fit well into the above described concept of collaborative governance as it focuses on developing a partnership approach to protected area management with the local people who live in and depend on the natural resources in these areas for their daily livelihoods. Since the early 1990s, policy has emphasised participatory action with villagers in developing sustainable livelihood and conservation strategies which strongly advocates people's involvement in natural resources management and protection (Southammakoth and Craig 2000; Robichaud et al. 2001; Poulsen and Luanglath 2005; Corbett 2008). According to these authors, the development of a successful system of participatory co-management requires that both guardian communities and government take on appropriate and clearly defined roles and responsibilities for conservation and protection. However in practice, according to Baird (2000), there remains a number of obstacles to implementing collaborative governance in protected areas in Laos. These include problems related to mutual trust and respect between villagers and protected areas staff, institutional constraints, and village to village conflict. Furthermore, a key area of concern is that corruption is deeply entrenched in Lao political culture with decisions being made top-down through a one-party closed and authoritarian political system (Stuart-Fox 2006; Hodgdon 2010). This has resulted in numerous examples of unsustainable donor driven projects due to the lack of further financing or political will (Poulsen and Luanglath 2005; Stuart-Fox 2006; Singh 2008; Hodgdon 2010; Dwyer et al. 2016).

Other relevant research in the region has also identified problems with the implementation of a collaborative governance agenda. Watts et al. (2010) used participatory action research to investigate governance of a multifunctional landscape adjacent to a protected area in Vieng Kham District, Luang Prabang Province. They found that poor access to information communication technologies inhibited local actors' levels of participation and their ability to effectively manage the landscape. Mai et al. (2013) analysed the governance systems

of Cambodia, Laos and Vietnam in relation to biodiversity conservation, with an emphasis on law enforcement and capacity. They noted that although there are instances of increased local community involvement forest governance, ongoing issues include unclear mandates, poor communication of legal requirements, suboptimal coordination, insecure tenure, and lack of an empowered citizenry.

Devolved and collaborative governance has been investigated in neighbouring Vietnam. Sikor and Trinh (2007) examined devolution of forest management in Vietnam's Central Highlands and found that due to the exclusion of key actors the reform led to conflict among local communities and contributed to further forest loss. Ingle and Halimi (2007) analysed a devolved governance project that sought to strengthen stakeholder participation, in particular local community involvement, in environmental management improvements along the Tan Hoa-Lo Gom canal in Ho Chi Minh City. KimDung et al. (2013) noted that co-management has been advocated to address continued biodiversity declines in special-use forests, a type of protected area in Vietnam, but that despite reforms, decision-making power remained primarily with provincial governments and argued that further reform is needed to decentralise authority and increase public involvement. Hübner et al. (2014) examined governance of tourism developments in Phong Nha-Ke Bang National Park in central Vietnam using Graham et al.'s (2003) good governance principles. They found that tourism governance suffered from a lack of institutional capacity, excessively centralised decision making and inadequate benefit-sharing. Ho et al. (2014) applied an analytical framework to assess the dynamics of formal institutions, organisational structures, and local community engagement, social capital and socio-economic conditions for three Vietnamese marine protected areas. Co-management networks in Vietnamese coastal governance have also been investigated, with Armitage et al. (2011) finding that although such networks contributed to trust building and learning, such advances will not necessarily halt declining ecological condition.

The literature on collaborative governance in these Southeast Asian examples raises the question as to whether genuine collaborative governance is possible in the Lao context. As state governed protected areas have not been very effective in Laos and due to the continued lack of resources allocated by the Lao Government, it is important to establish more successful collaborative governance arrangements. Most villagers living in or next to protected areas rely on the natural resources from within the protected area and its margins for their daily livelihoods. Excluding them will not lead to long term sustainability.

In the following sections we investigate 1) whether Hin Nam No NPA arrangements constitute a form of collaborative governance according to our definition; 2) identify the extent to which Hin Nam No NPA governance meets a set of conditions for success; 3) assess the prospects, potential pitfalls and areas for improvement for these arrangements to deliver joint biodiversity conservation and sustainable development.

The next section outlines the methods used to undertake an assessment of the Hin Nam No NPA governance arrangements. In Section 3 we summarise the key features of protected area governance in Laos in general, and the Hin Nam No NPA in particular. The results are presented in Section 4. We conclude with a discussion of implications for successful establishment and implementation of co-governance for the reserve, and suggest key elements of a continuous improvement agenda.

METHODS

The aims of the research were addressed using a qualitative mixed-method approach. The extent to which the emergent collaborative governance in Hin Nam No NPA, described in Section 3, meets our definition according to the six criteria given in Section 1, and whether conditions for success are in place, were assessed using document review, a questionnaire, interviews with villagers and district officials, and a concluding workshop in which participants undertook a summative review of progress and developed elements of a new strategic plan. The results from these activities were compiled and matched against conditions for success that were identified from the literature, organised according to the stages of a collaborative governance process described by Franks and Booker (2015) – preconditions, establishment and maintenance. The findings are reported in the Section 4. The prospects, potential pitfalls and areas for improvement were identified by the authors reflecting on those conditions for success that were absent or insufficiently developed, in combination with insights from the literature. These findings are reported in the discussion, Section 5.

The conditions for success and supporting sources, structured according to the Franks and Booker (2015) stages of a collaborative governance process, as well as the methods used to assess each stage, are indicated in Table 1.

The key documents included in the review were associated with the legislative framework (Section 3); and reports and monitoring data from 2014–2016 (Phommasane et al. 2014; Sengchanthavong et al. 2014; DFRM/MoNRE 2015; de Koning 2015b,c; de Koning and Dobbelsteijn 2015) on the subsequent design and establishment of the Hin Nam No collaborative governance structure. The field assessment was conducted in February 2014, and comprised three steps: 1) set up the governance assessment team and team planning process, 2) conduct the field research by gathering information and analysing information; and 3) organise a strategic planning workshop at provincial level to analyse the governance assessment as well as to develop a strategic plan. The details of the activities involved in the governance assessment are summarised as follows:

The interviews were conducted at a village cluster ('kum ban') level representing the eighteen villages situated around the Hin Nam No NPA, Boualapha district, Khammouane. This activity was led by the Provincial Office of Natural Resources and Environment (PONRE) of Khammouane Province. In February 2014, the research team collected information by

conducting village interviews using a questionnaire with guiding questions in five village clusters namely: 1) Ban Dou cluster (34 participants, 5 of whom were women), 2) Kanyou cluster plus, 3) Langkhang cluster (28 participants, 3 of whom were women), 4) NongPing cluster (17 participants, 4 of whom were women), 5) Nongma cluster (38 village representatives, 4 of whom were women). The locations of these clusters are indicated in Figure 1.

Guiding questions used to structure the interviews were adapted from guidelines given in Borrini-Feyerabend et al.

(2013). The following questions were asked to assess the preconditions for success: 1) who took the lead in establishing the Hin Nam No NPA? 2) who was not involved? 3) who decided about natural resource use before the Hin Nam No NPA existed and who decides now? 4) is there an overall strategic vision for the Hin Nam No NPA by all stakeholders?

With regard to the conditions for success for the establishment stage the following guiding questions were asked: 1) do the people who are responsible possess the necessary capacities to manage the Hin Nam No NPA? 2) how is information

Table 1
Conditions for success used to structure the analysis

Stage	Conditions for success ¹	Methods
Preconditions	<i>Village level:</i> Incentives for community engagement; Ambition to make it work; Prior history of cooperation; Power and resource balance <i>District level:</i> Institutionalisation; Financial viability <i>Both levels:</i> Local ownership	Document review Interviews with key informants from the 18 villages located in the five village clusters surrounding the Hin Nam No PA Interviews with district officials Questionnaire for the good governance assessment at district level
Establishment	<i>Village level:</i> Capacity building; Build on existing institutions; Access to information; Stakeholder analysis; Formal agreements <i>District level:</i> Role for local government; Downward accountability; Face-to-face dialogue; Trust building; Development of commitment and shared understanding <i>Both levels:</i> Capacity building	Document review Interviews with key informants from the 18 villages located in the five village clusters surrounding the Hin Nam No PA Interviews with district officials Questionnaire for the good governance assessment at district level Concluding and strategic planning workshop at provincial level
Maintenance	<i>District level:</i> Regular assessment; Affirmative action; Recognise good performance; Adaptive approach; <i>Both levels:</i> Foster strong leadership	Document review Concluding and strategic planning workshop at provincial level Questionnaire used for annual monitoring on good governance

¹Compiled from Olsson et al. (2006), Ansell and Gash (2008), Armitage et al. (2009), Kallis et al. (2009), Ostrom and Cox (2010), Emerson et al. (2012), Franks and Booker (2015)

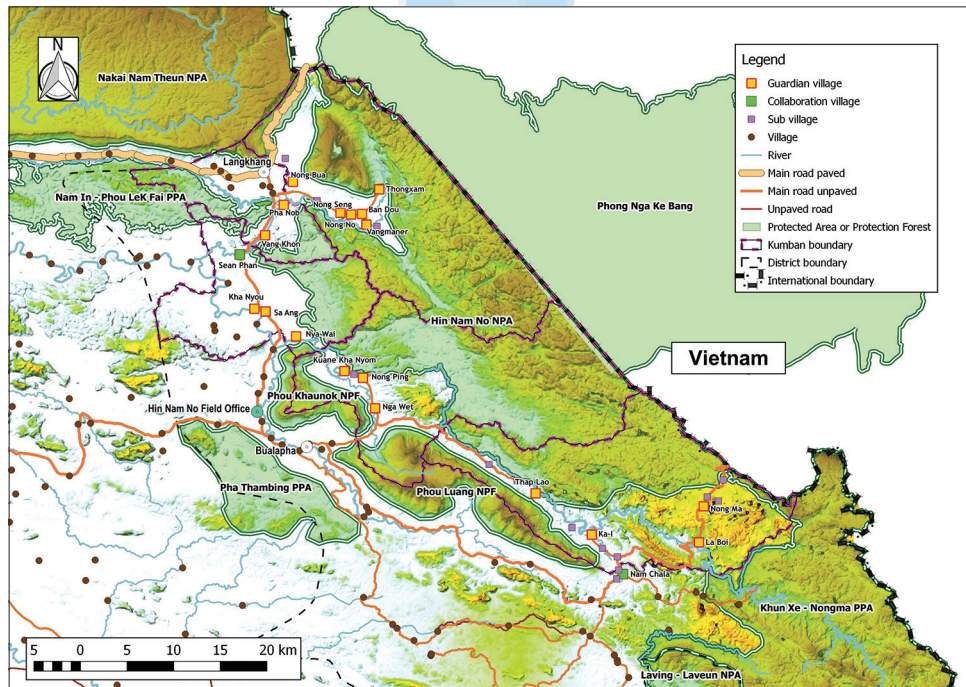


Figure 1

A map of the Hin Nam No NPA and the location of the various guardian and cooperation villages in five village clusters ('kum ban') (Source: Ronny Dobbeltsteijn)

shared with line agencies and villages and is all information available? 3) who is involved in the management of the Hin Nam No NPA? 4) are there co-management systems/meetings/structures in place representing various stakeholders? 5) is there a mechanism to enforce Hin Nam No NPA rules and to punish people who disobey the rules, if yes, is this done in a transparent way, is data collected around this?

In February 2014 a half day governance assessment workshop at district level was conducted with a total of 18 participants (2 women). The participants were representatives from the government district staff representing various line agencies. The guiding questions used in the interview of district staff and the questionnaire for the good governance assessment at district level were adapted from guidelines given in Borrini-Feyerabend et al. (2013).

The following questions were asked to assess the status of preconditions for success: 1) are there sufficient government resources allocated to manage the Hin Nam No NPA effectively? 2) is the Hin Nam No NPA integrated into the social economic development plan of the district? 3) which Hin Nam No NPA management tasks are delegated to local people?

With regard to the conditions for success for the establishment stage, the guiding questions were: 1) is there room for the development and capacity building of local institutions? 2) is the Hin Nam No NPA making efficient use of its government resources and is it financially sustainable? 4) do villagers have legal access to resources such as timber, non-timber forest products (NTFPs) and game meat for subsistence? if so, where and in how many villages? 5) when there are problems with regards to the Hin Nam No NPA, who can local people turn to for help and how are problems solved? 6) are the goal and objectives for the Hin Nam No NPA broadly agreed by all rights/stakeholders?

With regard to the conditions for success for the maintenance stage, the following guiding questions were asked in the self-assessments held in February 2014, May 2015 and March 2016 at district level: 1) is there a Hin Nam No NPA management monitoring system in place? 2) to which extents do rights/stakeholders impacted by the Hin Nam No NPA, receive fair compensation (e.g. specific resource use; quota; permits; access and land use agreements)? 3) are special activities organised to empower vulnerable groups of rights holders in Hin Nam No NPA such as ethnic minorities, youth, woman-headed households? 4) do performance-based promotion mechanisms (e.g. social and financial rewards) exist such as best ranger of the month or bonuses upon performance?

In February 2014, a strategic planning workshop at a provincial level was conducted and the workshop was divided into three presentation sessions (morning) and discussion sessions (afternoon) resulting in a one full day workshop. The presentations of the first half day focused on the knowledge, understanding and sharing of the results of the Hin Nam No NPA governance assessment at village cluster and district level as well as sharing experiences with the political institution National Academic of Political and Public Administration (NAPPA) on principles of good governance. The results of

the village and district interviews were analysed and discussed for the various conditions for success for the different stages of a collaborative governance process. This resulted in the identification of the key bottlenecks and the development of a strategic and action plan for future interventions, to promote a collaborative governance approach via community based-solutions.

PROTECTED AREAS IN LAOS AND THE HIN NAM NO NATIONAL PROTECTED AREA

Laos Protected Areas System

The protected area system of Laos is one of the youngest and ecologically representative protected area systems in the world. Currently, Laos has 24 National Protected Areas (NPAs) covering 15% of the country. There are also numerous provincial and district conservation forests and if these are included more than 20% of the land area is under conservation. Currently all protected areas in the national system of Laos are established and managed under a relatively uniform set of management regulations. They can all be classified under the IUCN system as *Category VI Protected Area with Sustainable Use of Natural Resources*, as villages and/or village areas remain inside protected area boundaries in designated controlled use zones (Moore et al. 2012).

The legal framework for the NPAs comprises: 1) Decree 164 / PM on the establishment of the Lao PDR Protected Area System (1993); 2) Regulations on the Management of NBCAs, Wildlife and Aquatic Animals No. 0360 / AF (2003); 3) Forestry Strategy 2020 (2005) and the Forestry Law (2007); 4) Decree 134 / PM on Conservation Forests (2015); 5) NPA management plans; and 6) other sectoral plans which may impact on the objectives of NPAs.

Protected areas as a category of forest land use is provided in the Forestry Law (2007) under Conservation Forests, Article 11 as one of three forest types in Laos, which is defined as: 'Conservation Forest is forest classified for the utilization purposes of conserving the nature, preserving plants and animal species, forest ecosystems and other valuable sites of natural, historical, cultural, tourism, environmental, educational and scientific importance'.

To implement the law, and as a framework for protected area management, the Ministry of Agriculture and Forestry (MAF) issued the Regulation on the Management of Protected Areas, Aquatic and Wild Animals, No. 0524/AF (2001), later superseded by a revised version No. 0360 (2003). Zoning or classification of conservation forests is provided in Article 24 of the Forestry Law (2007) where four types are distinguished: Total Protection Zone (TPZ), Controlled Use Zone (CUZ), Corridor Zone, and Buffer Zone. The TPZs and CUZs are located inside NPAs while the corridor and buffer zones are located outside the NPAs. Although not specifically stated, there is an implication that CUZs should be jointly managed by villagers with support from the government, while TPZs remain the direct responsibility of NPA authorities. Under

Article 42 of the Forestry Law (2007), customary utilisation of forests is permitted. Customary utilisation of forest and forest products in the CUZ of NPAs are required to be practiced in accordance with a designed plan, village regulations and State forest laws.

Hin Nam No National Protected Area

Hin Nam No National Protected Area (NPA) is situated in Boualapha District, Khammouane Province in central Laos. It is a portion of a discrete limestone massif situated in the Annamite mountain range. It is one of the original 18 National Biodiversity Conservation Areas (now called NPAs) of Laos established on 29th October 1993 by Prime Ministerial Decree 164. The Hin Nam No NPA is located on the Lao-Vietnamese border in central Laos. The protected area covers 88,500 hectares and forms part of one of the largest karst regions in the world, marked by unique limestone formations. About twenty villages live around this NPA (see Figure 1), with a total population of 8,000 people, many of whom are ethnic minorities. Most of these villagers are very poor and rely on the natural resources from within the protected area and its margins for their daily livelihoods. Increased hunting, logging and weak enforcement of protected area regulations put pressure on Hin Nam No's ecosystem. At the local level technical, financial and human government resources for managing and protecting the NPA remain inadequate. To address these issues, Hin Nam No NPA is seeking to establish collaborative governance arrangements with an overall goal 'to jointly with guardian¹ villages and other stakeholders protect, enhance and manage the Hin Nam No National Protected Area and its resources in a sustainable manner' (DFRM/MoNRE 2015: 14).

In Laos, villages located in/around NPAs are categorised into four types. Type I comprises enclave villages, found entirely inside NPAs. In Type II, the village lands of the villages overlap a NPA boundary; Type III are villages whose village boundary abuts the NPA boundary; while Type IV comprise villages that are situated further away from the NPA boundary. According to Provincial office of Natural Resources and Environment (PoNRE) of Khammouane Province and local villagers, eighteen Hin Nam No NPA guardian villages fall under the Type II category, meaning that some of their village lands fall within the Hin Nam No NPA. However, all land inside the Hin Nam No NPA consists of conservation forests and there is no agricultural land or production forest inside the Hin Nam No NPA.

Compared to other districts in Khammouane Province, there is little cultivation of crops other than rice. The ethnic groups around Hin Nam No NPA can be linguistically divided into three groups namely Tai-Lao group (Phoutai, Yoi and Kaleung), Mon-Khmer group (Makong, Tri), and a mixed group (Nguan and Salang). Villages with sufficient flat land such as the Tai-Lao group cultivate lowland rice in paddy fields outside of the NPA boundaries. Upland rice cultivation is practiced by the Mon-Khmer group in the south of Hin Nam No but mostly outside of the Hin Nam No NPA boundaries. The Nguan are

descendants from immigrants from Vietnam who arrived in Laos some 50 years ago. For their livelihoods they depend on paddy rice farming and doing various types of business. The Salang are a special group of people who used to live inside the forest of Hin Nam No NPA and were resettled outside the NPA boundaries quite some time before being declared as a NPA. Their livelihoods used to be based on hunting and gathering. Most guardian villages only use the Hin Nam No area for hunting, gathering and shelter and only the more accessible parts. According to the guardian villagers their traditional lands occupy 14 per cent of the Hin Nam No NPA. Consequently, the management focus is on distinguishing the Controlled Use Zones which reflect the traditional village lands of these eighteen villages as defined by themselves, and formulating management rules for these zones based on the customary rights of the villagers. The remainder of the NPA is designated Total Protected Zone and includes areas inaccessible to local communities and areas of particular biodiversity value (DFRM/MoNRE 2015).

Deutsche Gesellschaft für Internationale Zusammenarbeit GmbH (GIZ), have implemented a project 'Integrated Nature Conservation and Sustainable Resource Management in the Hin Nam No Region', which aims to conserve biodiversity while alleviating poverty among rural communities. To achieve this, GIZ works closely together with the Department of Forest Resource Management (DFRM) within the Lao Ministry of Natural Resources and Environment (MoNRE) and their provincial and district counterparts. In 2011, the mandate for protected area management shifted from MAF to MoNRE, but in May 2016, the Lao Government decided that the mandate will return to MAF. The project is based on the principles of collaborative governance, bringing together authorities and local population to deal with the protected area management tasks. GIZ contributes institutional support, policy advice and capacity development to encourage participation and dialogue towards effective and equitable protected area management among all stakeholders and provide a model which can be used for other protected areas in Laos. The project supports payments for biodiversity monitoring, law enforcement by village rangers, and develops food security and income generating activities for villagers, especially with regard to ecotourism and NTFPs (de Koning 2015a).

In total, 110 village rangers have been selected, trained and equipped to do regular monthly or bi-monthly biodiversity monitoring, patrolling and law enforcement for small infringements for which they get compensated around 12 Euro per day. The monthly household income of the guardian villages is around 90 Euro so the relatively cost-effective payment for the village rangers brings a substantial additional benefit to their families, especially in the dry season when there is no rice cultivation ongoing. The only alternative income in the dry season is via increased logging and hunting for commercial purposes which is unsustainable in the long term. Tourism products (hiking trails; story telling about the Ho Chi Minh Trail and the hiding in caves; boat trip in the Xe Bang Fai River Cave) have been developed in four guardian

villages and this has so far created an additional 9 per cent of the monthly household income for the 35 village service providers involved. In four villages, Fish Conservation Zones have been established which raise 25 per cent of the monthly income for the 58 interviewed households, contributing to food security through an improvement of the diet.

In May 2015, a Decree on Conservation Forests was endorsed by the Lao Government via the Prime Minister. The new decree does not explicitly promote collaborative governance, which is being piloted in Hin Nam No NPA. However, the new decree allows for an increase in participation by the local communities in the management of protected areas and gives villagers user rights. The Hin Nam No NPA partnership arrangement between government authorities and local communities is designed to share rights, responsibilities and benefits while protecting and managing the natural resources and enhancing the livelihoods of the rural communities. Villagers and the Hin Nam No authorities work together to conserve biodiversity, ecosystem services, tourism and historic/cultural values of Hin Nam No while being paid and recognised for their services of about an average of 12 Euro per day. As the villagers are closely connected to the area, they have local knowledge and ideas on how to cost-effectively manage tasks outlined in the Hin Nam No NPA co-management plan (DFRM/MoNRE 2015) such as regular biodiversity monitoring, patrolling, taking part in flora and fauna surveys and providing tourism services. The Hin Nam No NPA experiment can provide important lessons to guide the formal recognition and design of collaborative governance for protected areas in Laos.

RESULTS

Hin Nam No NPA Arrangements and the Definition of Collaborative Governance

The documentary evidence indicates that the collaborative governance approach for Hin Nam No NPA: 1) was initiated by government agencies as decided in the provincial governance assessment strategic planning workshop in February 2014 based on the results and recommendations derived from a governance assessment; 2) participants in the main governing body, the Hin Nam No NPA district co-management committee, include elected members of all 5 village clusters and therefore include non-state actors; 3) village cluster representatives are officially part of the Hin Nam No NPA district co-management committee responsible for strategic decision making i.e. the main governing body of the Hin Nam No NPA; 4) the composition of the Hin Nam No NPA district co-management committee has been officially endorsed by the district governor and a terms of reference is approved in which it is proposed for the forum to formally meet at least twice per year; 5) the forum aims to make strategic decisions by consensus (even if consensus is not achieved in practice e.g. there is still a difference of opinion on whether the focus should be on high volume/low income tourism development or low volume/high income tourism development); and 6) the focus of collaboration

is the effective governance and management of Hin Nam No NPA.

As the establishment of the governance arrangements for Hin Nam No NPA meets all six criteria associated with the definition given in Section 1, we can conclude that it qualifies as collaborative governance. In the following section, we investigate the extent that conditions supportive of successful collaborative governance are in place based on the stages of a collaborative governance process described by Franks and Booker (2015) – preconditions, establishment and maintenance.

Analysis of Hin Nam No NPA Governance against Success Factors – Preconditions

Table 2 summarises the results that identify whether the preconditions for success are evident for Hin Nam No NPA collaborative governance. These results were derived from the governance assessments at the village cluster and district levels, as well as subsequent interventions in 2014 and 2015 that followed the provincial strategic planning workshop.

Financial sustainability remains the major weakness, as the Lao Government has committed few human and financial resources to protected area management and most NPAs are able to function only through external donor funding. It is unlikely that government financing will increase in the coming years which limits the potential to sustain and maintain the collaborative governance set-up of Hin Nam No if no other outside funding is found. New funding opportunities through involvement of the private sector (biodiversity off-sets and corporate social responsibility) should be further explored. The lack of government financing re-emphasises the need for collaborative governance as there will be no effective management without the use of village resources.

Analysis of Hin Nam No NPA Governance against Success Factors – Establishment

The results for the establishment stage of Hin Nam No NPA derived from the governance assessments and strategic planning workshop are given in Table 3. The work of Sengchanthavong et al. (2014) provided a stakeholder analysis and facilitated participants' access to key information sources. This contributed to the initial development of joint commitment and shared understanding amongst village and district level stakeholders. Further trust building is needed as the governance assessment indicated a top-down system of decision making and unclear delegation of tasks to guardian villages. In the Lao system, almost all decisions are taken by government without downward accountability (Stuart-Fox 2006; Singh 2008; Hodgdon 2010). Empowering village cluster representatives to make decisions in the context of multi-level agreements about NPA rules and management directions would provide a basis for effective upward accountability of local-level decision makers and downwards accountability of government. Such decisions could address, for example, access and natural

Table 2
Results with regard to the preconditions for success

Conditions for success	Governance assessment	Subsequent interventions
<p><i>Village level:</i> Incentives for community engagement Ambition Prior history of conflict of cooperation Power and resource imbalances</p> <p><i>District level:</i> Institutionalisation Financial viability</p> <p><i>Both levels:</i> Local ownership</p>	<p><i>Village level:</i> - Willingness and availability of guardian villages and village rangers to be involved in Hin Nam No NPA management - Local natural resource management rules exist but are being ignored by outsiders i.e., illegal wildlife poachers and illegal loggers and traders from outside the guardian villages, including Laotians and foreigners</p> <p><i>District level:</i> - No clear delegation of decision making or implementation authority to guardian villages - Zonation Hin Nam No NPA into manageable units per guardian village unclear - Management of Hin Nam No NPA depends entirely on outsource funding</p> <p><i>Both levels:</i> - Goal and objectives of Hin Nam No NPA not clear to all stakeholders</p>	<p><i>Village level:</i> - Agreement on natural resource management rules per zone based on customary rights and broad dissemination of the information - Set-up of participatory biodiversity monitoring and patrolling system with remuneration for 110 village rangers working on a part-time basis</p> <p><i>District level:</i> - Hin Nam No management identified tasks to be delegated to guardian villages - Participatory zonation based on customary rights in all guardian villages; draft plan of management units per guardian villages available - Elaborate a sustainable financing strategy for Hin Nam No NPA and piloting of tourism ticketing entrance fee system - Improved integration of Hin Nam No NPA in the social economic development plan of the district and in the plans of other line agencies and projects to attract more government resources</p> <p><i>Both levels:</i> - Jointly agree on strategic goal and objectives in strategic co-management plan 2016-2020</p>

Table 3
Result of conditions for success in the establishment stage

Conditions for success	Governance assessment	Subsequent interventions
<p><i>Village level:</i> Capacity building Access to information Good stakeholder analysis Build on existing institutions Formal agreements</p> <p><i>District level:</i> Downward accountability Role of local government Face-to-face dialogue Trust building Development of commitment and shared understanding</p> <p><i>Both levels:</i> Capacity building</p>	<p><i>Village level:</i> - Lack of communication and awareness raising - Collaborative governance system is ad hoc and top down with lack of systematic benefit sharing</p> <p><i>District level:</i> - Unclear, slow and ineffective law enforcement system</p> <p><i>Both levels:</i> - Lack of skills and capacity; lack of involvement by women</p>	<p><i>Village level:</i> - Set-up and implement awareness raising activities and broad dissemination of information - Development of participatory planning and reporting system on village (18), village cluster (5) and NPA level; institutions and agreements including benefit sharing officially endorsed in 2015</p> <p><i>District level:</i> - Some delegation of law enforcement to guardian villages and payment of village rangers to ensure a more rapid and effective response - Capacity development plan and recruitment of 5 female government volunteers in March 2014</p>

resource use rights, including setting the level of fines to be imposed in the case of infringements.

Official local institutions have been established on three levels i.e. village co-management committees (VCMC); village cluster co-management committees (VCCMC) and the Hin Nam No NPA district co-management committee (Hin Nam No DCMC). As no suitable local institutions existed it was not possible to build on existing institutions. Incentives for community engagement have been established in the Hin Nam No NPA district co-management by-laws endorsed by the District Governor in 2015 and through the payment of village rangers. The current form of the Hin Nam No NPA collaborative governance structure is illustrated in Figure 2.

Capacity building promoted by the GIZ project has started both for government officials and for participating villagers. The interventions are based on a detailed capacity needs

assessment for effective protected area management carried out in 2013, which drew on the ASEAN competence standards for protected area jobs published in 2003 (Xayvaongsa et al. 2013).

Analysis of Hin Nam No NPA Governance against Success Factors – Maintenance

The results from the governance assessment on village cluster and district level, to investigate if Hin Nam No NPA adheres to the conditions for success of collaborative governance for the maintenance stage are indicated in Table 4. Also the results of the subsequent interventions from 2014 to 2016 that followed upon the strategic planning workshop on provincial level are indicated in Table 4.

As all 18 guardian villages expressed their wish to engage in the collaborative governance approach the

District Governor is showing increased leadership and commitment. From June-September 2015 various thematic working groups under the Hin Nam No NPA district co-management committee established a 5 year strategic Hin Nam No NPA co-management plan 2016-2020 (DFRM/MoNRE 2015). The plan was endorsed by the Hin Nam No NPA district co-management committee, which is the official body for providing oversight and strategic direction for the collaborative governance system.

Further capacity building and leadership trainings both for government staff and villagers are planned in the coming five years, as well as affirmative action to address gender imbalances at the local level. To date only five of the 87 elected co-management members are women (Phommasane et al. 2014). Management effectiveness and good governance self-assessments were conducted in 2014, 2015 and 2016, and further annual reviews are planned for the next five years. Facilitated discussions of assessment results amongst stakeholders are showing promise in terms of supporting an

adaptive approach to governance and management. Reward systems for good performance are planned under conservation agreements to be worked out in the coming five years (DFRM/MoNRE 2015).

PROSPECTS FOR EFFECTIVE HIN NAM NO NPA COLLABORATIVE GOVERNANCE

In this article an innovative collaborative governance approach, in which local villagers are a key player in partnership with the Lao Government, is analysed against a number of conditions for success. From the results in Hin Nam No NPA, we argue that successful collaborative governance arrangements are more likely to develop under particular conditions that provide incentives for community engagement, formal mechanisms for power sharing, local ownership of resources based on customary rights, downward accountability, mechanisms for building trust, and an adaptive approach to performance assessment and improvement.

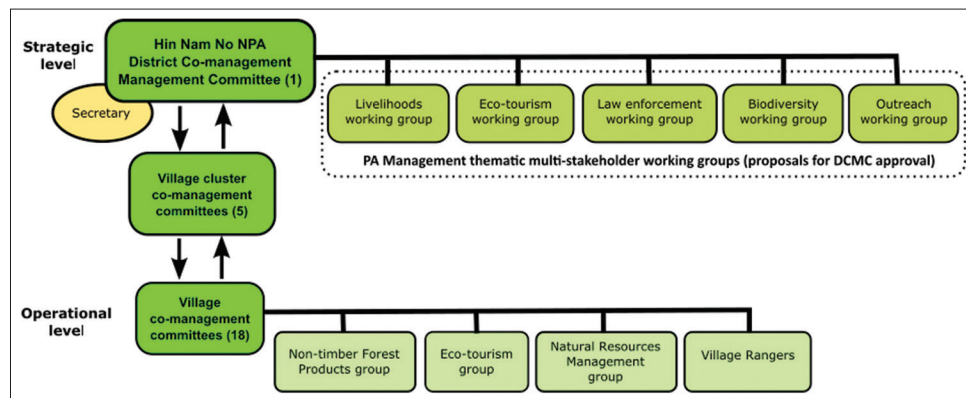


Figure 2
Current form of Hin Nam No NPA collaborative governance structure

Table 4
Result of conditions for success in the maintenance stage

Conditions for success	Governance assessment	Subsequent interventions
<p><i>District level:</i> Adaptive approach Regular assessment Affirmative action Recognise good performance</p> <p><i>Both levels:</i> Foster strong leadership</p>	<p><i>District level:</i> -Lack of backstopping and monitoring system - No special interventions for marginalised groups - No recognition of good performance - Lack of transparency and unclear decision making process</p>	<p><i>District level:</i> - Inclusion of incentives for good performance in draft conservation agreements for village eco-tourism service providers and village rangers - Set-up of thematic working groups between different line agencies and villagers to create institutional learning and come to a more adaptive approach - Formally agree on the terms of reference and mandate of the various co-management structures and appoint the chair and secretary -Set-up of a regular participatory monitoring system on biodiversity; income generation; capacity building; financial expenditures and outcomes such as management effectiveness and governance to increase learning and transparency</p> <p><i>Both levels:</i> - Capacity building on good governance and good leadership for the co-management structures on different levels (village, village cluster; NPA), including training on gender</p>

Many of the conditions for success for the three stages of collaborative governance have improved through the subsequent interventions planned by a broad group of stakeholders in 2014. These improvements are significant for the degree of success of the collaborative governance for Hin Nam No NPA, as the initial governance assessment identified challenges and weaknesses with regard to top-down decision making and lack of participation. The collaborative governance arrangements for Hin Nam No NPA are now better-placed to succeed. However, the extent and potential of collaborative governance will remain limited in the Lao context as long as there is a lack of long term government financing and political will. We envisage that the sustainability of current natural resource and land use practices in the villages in and around the Hin Nam No NPA will improve through effective decentralised governance which has now been formalised via the collaborative governance agreements, with most benefits accruing to the guardian villages through recognition of their customary rights. In the collaborative governance agreements clear delegation of management tasks and access and use rights are given to the guardian villages with local benefit sharing in the fines for infringements. In addition, environmental awareness raising among villagers and their neighbours can be expected to increasing the capacity of villagers to sustainably develop and manage their livelihoods.

Planned support and interventions over the next five years are designed to equip local communities with the necessary knowledge, skills, and organizational capacities to take responsibility of the allocated geographical areas in their own hands and safeguard forest and natural resources in their village area and the Hin Nam No NPA. Community based conservation agreements that include active community involvement in resource management will require strengthening of community-based user groups and the capacity development of those groups for managing their resources. These further interventions will take time to develop and require further external support.

The good governance reassessment conducted in 2015 and 2016, as a repetition on the baseline assessment of 2014; indicate that there are still a number of challenges. Vulnerable groups need to be better integrated in legislation and implementation, and non-government stakeholders still need to be included in technical reporting on reserve condition and trends. The newly-established collaborative governance system can address this issue by instituting a more participatory and decentralised reporting and planning system. Moreover, hunting, logging and encroachment are increasing in certain areas where there is improved road access. Certain roads along the Hin Nam No NPA have been upgraded by the Lao Government to bring services, such as electricity, closer to the people or provide easier access to mining sites. These roads are used by non-local Laotians and foreign traders (businessmen and government officials) for illegal logging. The traders often use local people to get valuable hard wood or certain animal species out of the Hin Nam No NPA for a relatively low price compared to the market price. As application of regulations

remains intermittent and inconsistent, these activities pose a serious threat to Hin Nam No NPA. Further development and implementation of the inclusive law enforcement strategy articulated in the strategic Hin Nam No NPA co-management plan (DFRM/MoNRE 2015) has the potential to partially address this concern through a more transparent stakeholder dialogue under the leadership of the District Governor's office. The village rangers have already implemented several successful law enforcement interventions in which fines were paid locally by Vietnamese trespassers and benefits shared between the stakeholders as outlined in the co-management agreements.

We found that the annual good governance assessment is a relatively easy and cost-effective method for monitoring the status and trends in social and environmental outcomes and to identify remaining challenges. So far the ethnic groups in the village clusters of Nongping, Langkhang and Dou (Tai-Lao and mixed ethnic groups) indicate an improvement in the interaction between government and villagers while the Kanyou cluster (Tai-Lao group) and Nongma cluster (Mon-Khmer) score a more modest improvement in good governance. The Kanyou cluster has only delineated a very small CUZ due to the inaccessibility to the Hin Nam No and therefore the villagers see little benefit from the Hin Nam No. The Nongma cluster is less visited by the government due to language barriers and its inaccessibility during the rainy season. However, all village cluster scored higher compared to the baseline assessment of February 2014. The emerging capacity for adaptive management enables a focus on outcomes and supports effective action planning and allocation of limited government resources.

However, participants in the collaborative governance of Hin Nam No NPA need to remain alert to potential pitfalls related to sustainable financing and nature of the political system in Laos. So far, the Lao Government has not committed substantial resources towards the effective and equitable management of NPAs. There is a risk that the collaborative governance system will not be maintained once funding from supporting development partners such as GIZ is phased out, as has been the case in many other donor funded projects (Stuart-Fox 2006; Singh 2008; Hodgdon 2010; Dwyer et al. 2016). New benefit sharing arrangements as part of the collaborative governance reforms and the establishment of a conservation trust fund are two important elements of a sustainable finance strategy (DFRM/MoNRE 2015). There may also be potential to tap other sources of income from adjacent mining, hydropower and tourism industries. However, a proposed hydropower development of the Xe Bang Fai River upstream of the Xe Bang Fai River Cave at the border of the Hin Nam No NPA has been put on hold due to its technical and economical infeasibility. A pro-active approach towards mining companies and other developers operating in the region could potentially finance the collaborative governance arrangements through biodiversity offsets or corporate social responsibility schemes.

A key area of concern is Stuart-Fox's (2006) conclusion and re-emphasised by Hodgdon (2010), that corruption is deeply

entrenched in Lao political culture. That culture, depending as it does on patronage relationships between politically powerful figures and their extended 'clans' of dependents and supporters, has deep historical roots. Efforts by multilateral lending institutions to convince the Lao Government to introduce economic reforms that would have the effect of providing greater transparency, so reducing corruption, have had only limited success because they threaten to reduce the means available for the exercise of patronage. The collaborative governance of Hin Nam No NPA can be expected to face challenges in this regard, given the valuable timber and other resources in and around the NPA. Interventions with regard to more transparency at road checkpoints remain an 'off-limits' issue for now as apparently the stakes are too high. The relative inaccessibility of the region and limited land-use alternatives may mitigate these concerns. It is also of interest to note that Hin Nam No NPA is earmarked to become the first natural World Heritage Site in Laos which might lead to more commitment and political will to keep the area intact to attract more tourists in the future.

An initial governance assessment revealed that many conditions for a successful collaborative governance arrangement were not in place. However, subsequent planning and interventions that followed upon the governance assessment had promising outcomes. The main factors underpinning improved governance were the strong leadership by PONRE, the District Governor's office and a local social enterprise. These three champions facilitated the establishment of the Hin Nam No governance structure. Villages formed elected committees which have a formal mandate to protect and manage the natural resources in and around Hin Nam No NPA in accordance with an approved management plan. At the same time, the collaborative governance approach now assists the Lao Government and local administrative authorities in terms of monitoring and managing Hin Nam No NPA based on customary rights as outlined in the collaborative governance agreements through clear access and use rights and fines for infringements. The tendency of devolution policies to exclude the claims of some local actors (Sikor and Tranh 2007) has now been addressed through the acknowledgement of customary rights.

The jointly formulated collaborative governance agreement between the guardian villages and the district administration is being seen as a pilot for similar arrangements elsewhere in Laos. In this case this has been done through the establishment of formal mechanisms for power sharing, with mixing of technical and administrative agendas, in line with relevant legislation (Law on Local Administration, 2003 and the "Sam Sang / three builds" system as stated in Prime Minister Order No.16 dated 15th June 2012). The alignment of the collaborative governance with formal decentralisation policies is new in Laos and fosters not only administrative but also democratic decentralization which has been problematic in the region (KimDung et al. 2013). The formation of horizontal and vertical linkages and networks foster trust building and social

learning (Armitage et al. 2009). The associated discussions around the scores of the governance self-assessment questionnaires assisted in establishing government recognition of the need for governance reform and support for a collaborative approach. There is potential to replicate the Hin Nam No NPA collaborative governance model, or elements thereof, in other NPAs in Laos. As demonstrated in this paper, participatory governance assessment and action planning provide a useful starting process for developing collaborative governance as they promote common understandings and visions amongst stakeholders. This finding supports Emerson et al.'s (2012) view that participants' explicit consideration of collaborative dynamics is important during initiation of a collaborative governance model because it allows shared ownership and motivation for joint action.

The approach of analysing conditions for success across three stages of developing collaborative governance – preconditions, establishment and maintenance – provided an effective means of diagnosing strengths and identifying areas for improvement. As Ostrom (2007:15181) notes, rather than trying to optimise specific variables, we need to engage with the complex dynamics of governance systems and 'develop diagnostic methods to identify combinations of variables that affect the incentives and actions of actors'. The variables in our case comprised: incentives for community engagement, formally organised mechanisms for power sharing, local ownership of resources based on customary rights, downward accountability, mechanisms for building trust, and an adaptive approach to performance assessment and improvement. The Hin Nam No participatory governance self-assessments and the mixing of technical and administrative agendas, in line with relevant legislation, are valuable mechanisms for achieving reform and support a collaborative approach to protected areas governance.

The collaborative governance concept is a new approach for NPA management in Laos. We conclude that the Hin Nam No arrangements qualify as collaborative governance. In this article we have shown that, on the back of improved conditions for success, progress has been made in further strengthening collaborative mechanisms in the Hin Nam No NPA. The findings of this study contribute to the growing literature on collaborative governance of protected areas. However, long term realisation and improvement of the collaborative governance arrangements depend on sustaining and further establishing the conditions for success.

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NOTES

1. A guardian village is actively involved in the protection of the protected area based on their customary rights.

REFERENCES

- Anderson, T.L. and A. James. 2001. *The politics and economics of park management*. Lanham: Rowman and Littlefield.
- Ansell, C. and A. Gash. 2008. Collaborative governance in theory and practice. *Journal of Public Administration Research and Theory* 18(4): 543–571.
- Armitage, D., M. Marschke, and T. van Tuyen. 2011. Early-stage transformation of coastal marine governance in Vietnam? *Marine Policy* 35: 703–711.
- Armitage, D.R., R. Plummer, F. Berkes, R.I. Arthur, A.T. Charles, I.J. Davidson-Hunt, A.P. Diduck, et al. 2009. Adaptive co-management for social ecological complexity. *Frontiers in Ecology and the Environment* 7(2): 95–102.
- Baird, I. G. 2000. Integrating community-based fisheries co-management and protected areas management in Lao PDR: opportunities for advancement and obstacles to implementation. Evaluating Eden Series, IIED Discussion Paper No. 14. Pp. 1–13206. London: IIED.
- Borrini-Feyerabend, G., N. Dudley, N. Jaeger, T. Lassen, B. Broome, A. Phillips, and T. Sandwith. 2013. *Governance of protected areas: from understanding to action*. Gland: IUCN.
- Brechin, S.R., P.R. Wilshusen, C.L. Fortwangler, and P.C. West. 2002. Beyond the square wheel: toward a more comprehensive understanding of biodiversity conservation as a social and political process. *Society and Natural Resources* 15: 41–64.
- Cheng, A.S. and V.E. Sturtevant. 2012. A framework for assessing collaborative capacity in community-based public forest management. *Environmental Management* 49: 675–689.
- Cox, M., G. Arnold, and S. V. Tomás. 2010. A review of design principles for community-based natural resource management. <http://www.ecologyandsociety.org/vol15/iss4/art38/>. *Ecology and Society* 15(4): 38.
- Corbett, J. 2008. Paper parks and paper partnerships: lessons for protected areas and biodiversity corridors in the Greater Mekong Sub-region. paper synthesising lessons learnt about livelihoods, biodiversity, collaborative management initiatives and governance through the GMS/ BCI. Safeguarding Biodiversity for Poverty Reduction Project. Pp. 1–19. Bangkok: IUCN.
- Cumming, D. 2004. Performance of parks in a century of change. In: *Parks in transition: biodiversity, rural development and the bottom line* (ed. Child, B.). Pp. 32:105–124. London: Earthscan.
- Dudley, N. 2008. *Guidelines for applying protected area management categories*. Gland: IUCN.
- Dwyer, M.B., M.L. Ingalls, and I.G. Baird. 2016. The security exception: development and militarization in Laos's protected areas. *Geoforum* 69: 207–217.
- Emerson, K., T. Nabatchi, and S. Balogh. 2012. An integrative framework for collaborative governance. *Journal of Public Administration and Research Theory* 22: 1–29.
- Folke, C., T. Hahn, P. Olsson, and J. Nordberg. 2005. Adaptive governance of social-ecological systems. *Annual Review of Environment and Resources* 30(1): 441–473.
- Franks, P., and F. Booker. 2015. *Shared governance of protected areas in Africa: case studies, lessons learnt and conditions of success*. London: IIED.
- Ghimire, K.B., and M.P. Pimbert. 1997. *Social change and conservation: environmental politics and impacts of national parks and protected areas*. London: Earthscan.
- Graham, J., B. Amos, and T. Plumtre. 2003. *Governance principles for protected areas in the 21st century*. Ottawa: Institute on Governance, Department of Forest Resource Management, and Ministry of Natural Resources and Environment. 2015. *Hin Nam No National Protected Area Co-Management Plan 2016-2020*. Thakhek: DFRM and MoNRE.
- Ho, T.V.T., S. Woodley, A. Cottrell, and P. Valentine. 2014. A multilevel analytical framework for more-effective governance in human-natural systems: a case study of marine protected areas in Vietnam. *Ocean and Coastal Management* 90(1): 11–19.
- Hodgdon, B.D. 2010. Community forestry in Laos. *Journal of Sustainable Forestry* 29(1): 50–78.
- Hübner, A., L.T. Phong, and T.S.H. Châu. 2014. Good governance and tourism development in protected areas: the case of Phong Nha-Ke Bang National Park, central Vietnam. *Koedoe* 56(2).
- Ingle, M., and S. Halimi. 2007. Community-based environmental management in Vietnam: the challenge of sharing power in a politically guided society. *Public Administration and Development* 27: 95–109.
- Kallis, G., M. Kiparsky, and R. Norgaard. 2009. Collaborative governance and adaptive management: lessons from California's CALFED Water Program. *Environmental Science & Policy* 12(6): 631–643.
- KimDung, N., S.M. Bush, and A.P.J. Mol. 2013. Administrative co-management: the case of special-use forest conservation in Vietnam. *Environmental Management* 51: 616–630.
- de Koning, M. 2015a. *Co-management of Hin Nam No National Protected Area: shared governance to conserve biodiversity and alleviate poverty*. Thakhek: GIZ.
- de Koning, M. 2015b. *Capacity development and co-management lead to more effective management of Hin Nam No*. Thakhek: GIZ.
- de Koning, M. 2015c. *Protecting Hin Nam No National Protected Area: governance assessment shows improvement of Hin Nam No's governance structure*. Thakhek: GIZ.
- de Koning, M., and R. Dobbsteijn. 2015. Participatory zonation, management and monitoring of Hin Nam No National Protected Area in Laos. In: *XIV World Forestry Congress*. Organised by Food and Agricultural Organisation (FAO). Durban, South Africa. September 7–11, 2015.
- Lockwood, M. 2010. Good governance for terrestrial protected areas: a framework, principles and performance outcomes. *Journal of Environmental Management* 91(3):754–766.
- Mai, Y.H., L.D. Preece, N.N. Lan, and C.J.P. Colfer. 2013. A review of conservation area governance in Cambodia, Laos and Vietnam. In: *Evidence-based conservation: lessons from the lower Mekong Sunderland TCH* (eds. Sayer, J. and M.H. Hoang). Bogor: CIFOR.
- McCarthy, J. 2007. States of nature: theorizing the state in environmental governance. *Review of International Political Economy* 14: 176–194.
- Moore, C., T. Hansel, and A. Johnson. 2012. REDD+ in Lao PDR: is it also a “plus” for forest-dependent communities? a case study from the Nam Et Phou Louey National Protected Area; Lao, PDD. In: *Lessons about land tenure, forest governance and REDD+. case studies from Africa, Asia and Latin America* (eds. Treves, L. and C. Day). Pp. 83–92. Madison: UW-Madison Land Tenure Center.
- Munthali, M. 2007. Trans-frontier conservation areas: integrating biodiversity and poverty alleviation in Southern Africa. *Natural Resources Forum* 31:51–60.
- Olsson, P., L.H. Gunderson, S.R. Carpenter, P. Ryan, L. Lebel, C. Folke, and C.S. Holling. 2006. Shooting the rapids: navigating transitions to adaptive governance of social-ecological systems. *Ecology and Society* 11(1): 18.
- Ostrom, E. 2007. A diagnostic approach for going beyond panaceas. *Proceedings of the National Academy of Sciences* 104(39): 15181–15187.
- Ostrom, E. 2009. A general framework for analyzing sustainability of social-ecological systems. *Science* 325 (5939): 419–422.
- Ostrom, E. and M. Cox. 2010. Moving beyond panaceas: a multi-tiered diagnostic approach for social-ecological analysis. *Environmental Conservation* 37(4): 451–463.
- Phillips, A. 2003. Turning ideas on their head: the new paradigm for protected areas. In: *Innovative governance: indigenous peoples, local communities*

- and protected areas (eds. Jaireth, H. and D. Smyth). Pp. 1-27. New Delhi: Ane Books.
- Phommasane, S., O. Veingkhram, and S. Panyasili. 2014. *Piloting establishment of co-management committee at village and village cluster level in Hin Nam No National Protected Area*. Thakhek: Agroforestry Consultant.
- Poulsen, M.K., and K. Luanglath. 2005. Projects come, projects go: lessons from participatory monitoring in southern Laos. *Biodiversity and Conservation* 14: 2591–2610.
- Robichaud, W., C.W. Marsh, S. Southammakoth, and S. Khounthikoummane. 2001. *Review of the national protected area system in Lao PDR*. Division of Forest Resource Conservation. Vientiane: Lao-Swedish Forestry Programme.
- Sengchanthavong, S., S. Phommasane, and M. de Koning. 2014. *Governance assessment in Hin Nam No National Protected Area, Boualapha District, Khammouane Province, Lao PDR*. Thakhek: GIZ.
- 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* 24: 644–653.
- Singh, S. 2008. Contesting moralities: the politics of wildlife trade in Laos. *Journal of Political Ecology* 15(10): 1–20.
- Southammakoth, S. and I. Craig 2000. *Participatory conservation co-management: a component description*. Division of Forest Resources Conservation, Department of Forestry. Lao-Swedish Forestry Programme/Department of Forestry, Ministry of Agriculture and Forestry. Vientiane: Lao PDR.
- Stevens, S. 1997. *Conservation through cultural survival: indigenous peoples and protected areas*. Washington: Island Press.
- Stuart-Fox, M. 2006. The political culture of corruption in the Lao PDR. *Asian Studies Review* 30: 59–75.
- Watts, J.D., V. Kanyasone, and V. Vongkhamsao. 2010. Pathways to participatory landscape governance in northern Laos: the role of information and communication technologies. *International Journal of Information Communication Technologies and Human Development* 3: 19–32.
- Xayvaongsa L., S. Phimmavong, and P. Wanneng. 2013. *Institutional, competency and skill analyses: a case study of Hin Nam No National Protected Area in Khammouane Province, Central Laos*. Vientiane: GIZ.

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