

Analysis of the Multi-level Collaborative Management System in Mount Kitanglad Range Natural Park, Mindanao, Philippines

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ABSTRACT

The overwhelming majority of government-designated protected areas in Asia have been thwarted with constraints to become effectively and equitably managed, and integrated into the broader landscapes. Significant constraints have included legal, governance, institutional, management capacities and financial aspects. In sharp contrast, the Philippines has over three decades of experience tackling the institutional mechanics of collaborative management. This paper analyzes the management arrangements of Mount Kitanglad Range Natural Park (MKRNP), one of the country's best collaboratively managed protected areas. The analysis reveals a multi-level collaborative management system, involving two landscape collaborative management bodies, 13 protected area management working groups and the resurrection of local indigenous institutional bodies - the Council of Elders and the tribal guards. Some protected area working groups are effective whilst a few working groups have broad, and sometimes overlapping, mandates. Of high concern, both the landscape collaborative management bodies have low representation of these working groups and the indigenous communities themselves. Protected area staffing levels and resources are inadequate for providing technical support to effective multi-level collaborative management. Overall, MKRNP represents an interesting example of multi-level collaborative management for protected areas and adjacent buffer zones – and generating positive attitudes and behavioral change. Recommendations are made regarding strengthening protected area management towards achieving Aichi Target 11.

Key words: government managed protected area, Mount Kitanglad Range Natural Park, multi-level collaborative management, protected area management tasks, protected area working groups

INTRODUCTION

In much of Asia, the enabling legislation and consequently the management capacities of the protected area staff have strongly constrained protected areas from being effectively and equitably managed, and failed to integrate these government-designated sites into the wider landscape. In many Asian countries, the main approach to engage buffer zone communities in the wider landscape has been through trialing integrated conservation and development projects (ICDs). However, a number of reviews suggest that ICDs have not reconciled conservation and development agendas; both conservationists and social scientists have criticized ICDs (Wells *et al.* 1998; Neumann 1998; Agrawal & Gibson 1999; Davies *et al.* 2013). That said, some promising ICD characteristics have emerged, including (i) benefitting from high-level political and administrative support; (ii) close communication with local governments, whether through formal or informal channels; and (iii) an appropriate

mandate and adequate resources for strong protected area management are complimented by at least some flexibility in planning and the capacity to adjust resources to changing field needs (Wells *et al.* 1998). Engagement with local communities demands a participatory and process approach, often involving a change of attitude and even cultural thinking; it is long-term intervention (Ebregt & De Greve 2000). McShane & Wells (2004) also conclude that most ICDs need sustained financial support or they collapse. Good governance has also been identified as essential for a conservation-development approach (Sandker *et al.* 2008; Shirkhorshidi 2013); ICDs should be implemented both transparently and equitably (Harrison *et al.* 2015).

Organization Arrangements for Managing Protected Area Core Zones and their Buffer Zones

As a protected area agency, or as a protected area manager of a government-designated protected area in Asia, one might simply ask – so what does an effective and equitable management system look like, which is integrated into the wider landscape? And what boosts on the ground does a manager require to

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facilitate this management system, engaging communities? Unfortunately much uncertainty exists over the best way to ensure the long-term persistence of functional protected areas themselves (Fischer 2008; Chape *et al.* 2008). There is still little agreement about how compliance with protected area policies could be better achieved (Andrade & Rhodes 2012).

Much of the literature focuses on particular aspects of protected area management. Law enforcement is critical in a protected area for ensuring the long term conservation and viability of specific conservation targets (Bruner *et al.* 2001, Locke & Dearden 2005; Hillborn *et al.* 2006; Craigie *et al.* 2010; Tranquilli *et al.* 2011; Pfeifer *et al.* 2012). At the same time, protected area-community relationships appear to be of vital importance to wildlife conservation (Ramphal 1993; Borroni-Feyerabend *et al.* 2002; Brockington 2002; Berkes 2004; Buscher & Whande 2007; Haussner *et al.* 2009; Tessema *et al.* 2010; Andrade & Rhodes 2012; Mutanga *et al.* 2015). PA-community relations can involve livelihood and poverty interventions (IMM 2008; Mutanga *et al.* 2015), including addressing sustainable utilization of natural resources (Adams 2001; Adams *et al.* 2014). It can also involve a proactive community outreach program, which seems vital for promoting positive attitudes and behavioral change (WWF 2004; Steinmetz *et al.* 2014). PA staff-community relationships can be improved through management actions which address (i) the benefits and costs associated with living closer to protected areas; (ii) socio-demographic factors, including level of income; and (iii) community involvement in conservation-related developmental projects (Mutanga *et al.* 2015).

One of the most holistic and scientifically vigorous assessments of conservation actions, which in turn, can be interpreted exceptionally well for considering the management arrangements in a government designated protected area, is provided by Salafsky *et al.* (2008). Among the field actions, they identified (i) land/water protection; (ii) land/water (habitat) management; (iii) species management; (iv) education and awareness; (v) livelihood economic and other incentives (including tourism); - research and ecological monitoring. Hutton & Leader-Williams (2003) suggest that the conservation community should introduce the wider management systems needed to deliver sustainable and, if possible, incentive-driven conservation, which should both be at the center of the conservation agenda this century.

Further guidance on the organizational arrangements for effective management of a protected area landscape can be gleaned from the literature on protected area staff training (Appleton *et al.* 2003; Appleton *et al.* 2011; Kopylova & Danilina 2011). The essential field management tasks most usually comprise: (i) ecological research and monitoring, (ii) law enforcement, (iii) species and habitat management (e.g. forest fire management and reforestation), (iv) community outreach and awareness raising, (v) community livelihoods, including indigenous communities and sustainable resource utilization, and (vi) ecotourism. However, these training needs assessments most usually focus solely on protected area agency staff, and thence promote vertical management systems where they were described. If lateral collaborative management is being promoted, then these training needs assessments need to accommodate for key partners involved in collaborative management, directly or indirectly.

Multi-level Governance of Protected Areas

In 2012, Parr *et al.* proposed a multi-level governance system for managing government designated protected areas in Asia, based upon an unconnected assortment of management examples from four protected areas in Lao P.D.R. and Vietnam. This involved a tiered management system, comprising a landscape protected area committee, a number of protected area working groups covering specialized fields of management, linking into the cultural, administrative and specialist user group institutional bodies found within communities and villages. Parr (2015) analyzed the institutional arrangements in Periyar Tiger Reserve, a Learning Centre of Excellence in southern India, as an exemplar of “good governance” within a single site. In Periyar, a multi-stakeholder collaborative management body appears to be important to engage the 72 villages, 5,584 households and 28,000 villagers, through 76 eco-development committees. This paper examines the multi-level collaborative management system in Mount Kitanglad Range Natural Park, which is deemed to be one of the best managed protected areas in the Philippines. The paper analyses the collaborative management system and its potential as an exemplar to protected areas practitioners elsewhere in the region.

A Case Study – Collaborative Management in Mount Kitanglad Range Natural Park

The National Integrated Protected Areas System Act (1992)

The Philippines has had over 20 years promoting collaborative management approaches through Republic Act No. 7586 - the National Integrated Protected Areas System (NIPAS) Act, 1992, making it a regional leader in collaborative management of protected areas. The governance structure is a mixture of central oversight of the national integrated protected areas system and decentralized site management. Protected area management at each reserve is carried out through the Protected Area Management Board (PAMB), a multi-sectoral body composed of local stakeholders chaired by the DENR Regional Director. In some protected areas, ancestral domains are found, and are managed as essentially community conservation areas. Under the 2007 DENR-NCIP joint circular, it appears that the DENR recognizes that primary responsibility for protected areas that are also recognized as ancestral domain lies with the indigenous people claimants. For the purposes of the NIPAS Act, ‘National Park’ is a broad category of public land under which all protected areas are included, rather than a separate protected area management category. A Natural Park is “a relatively large area not materially altered by human activity where extractive resource uses are not allowed and maintained to protect outstanding natural and scenic areas of national or international significance for scientific, educational and recreational use”.

Mount Kitanglad Range Natural Park

Mount Kitanglad Range Protected Area was declared a protected area through Republic Act 8978, known as the Mt. Kitanglad Range Protected Area Act of 2000, on 9th November 2000. The Natural Park covers a total area of 47,270 ha, which includes the protected area (31,236 ha) and a buffer zone (16 034 ha) in the central north of land-locked Bukidnon province. The Natural Park encompasses some of the highest peaks in the country, including Mt. Dulang-dulang (2,938 m), Mt. Kitanglad (2,899m.), Mt. Kaatuan (2,860 m.), Mt. Maagnaw (2,742 m.), Mt. Lumuluyaw (2,612m.), and Mt. Tuminungan (2,400m). It



Mount Kitanglad Range Natural Park as viewed from Imbayao

includes parts of the municipalities of Baungon, Talakag, Lantapan, Impasugong, Sumilao, Libona, and Manolo Fortich and the City of Malaybalay. It was declared as an ASEAN Heritage Park in October 2009. Mount Kitanglad Range Natural Park (MKRNP) is widely regarded as the first and perhaps most successfully managed protected area in the country (La Viña *et al.* 2010).

METHODOLOGY

The institutional bodies found within the collaborative management system of Mount Kitanglad Range Natural Park were identified from several sources. These included the national protected area legislation and the relevant Departmental administrative orders, and the Mount Kitanglad Range Natural Park Management Plan (2010 – 2015). In addition, the Minutes of Meetings of the meetings of the Protected Area Management Board (PAMB) – En banc committee for the period 2010-2014 and the Minutes of Meeting of the Protected Area Management Board for the period 2011-2014 were reviewed in order to further understand the interactions within the collaborative management system of the Natural Park. Finally, informal questioning was conducted with the Park Superintendent via e-mail to clarify outstanding collaborative management aspects, and to request relevant miscellaneous documents.

RESULTS: ANALYSIS OF INSTITUTIONAL BODIES

Indigenous Peoples or Lumads

Three indigenous tribes inhabit MKRNP, namely the Higaonon (45.64%), the Talaandig (27.84%) and the Bukidnon (14.91%). These tribes regard the mountain range as their traditional lands as manifested by the filing of one unified claim over the whole area and at least a dozen individual/territorial claims within the National Park. Initially, local government officials were wary about the real intent of ancestral domain claims, being apprehensive that it might only lead to more forest destruction owing to reports of some misguided Lumads who enticed migrants to occupy their claimed areas in exchange of

membership fees, and engaged in timber poaching and other prohibited acts. However, continuous dialogue gradually built trust and understanding between these officials and the Council of Elders whose leading members also belong to the Protected Area Management Board (PAMB). The Local Government Units (LGUs) eventually recognized that granting security of tenure may in fact contribute to conservation, a realization evidenced by their endorsement of the Daraghuyan Ancestral Domain Claim, which was approved by the National Commission on Indigenous Peoples (NCIP).

There are different overlapping claims of ancestral domains that cover the entire protected area: one unified claim by some community leaders who insist all the indigenous peoples are related, and 13 separate contiguous claims of the different local communities. The NCIP has so far approved one of the 13 smaller claims, indirectly rejecting the unified claim over the entire protected area. It is still not clear what the impact will be on the PAMB as a management institution once all 13 claims are processed, and if the entire protected area is declared as ancestral domain. Presumably, all stakeholder interests, including those of local governments, will be factored in if and when there is a change in the management framework consequent to recognition of the protected area as ancestral domain.



Indigenous tribe elders of MKRNP

Tenured Migrants and Farmers

The tenured migrants account for a minority (8.7%) of the reported occupants of the protected area, mainly Cebuanos (4.4%) and Boholanos (2.7%). The legally recognized tenured migrants are those households which have continuously occupied their cultivated/claimed areas within Mt. Kitanglad Range Protected Area since 1st July 1987, and are substantially dependent on the protected area for their livelihoods. For the purposes of official documentation of rights and extent of occupation within the protected area, the tenured migrant households were issued tenure instruments over areas which they have occupied or cultivated since 1st July 1987. Tenured migrants may occupy and use these areas specified for a term of 25 years renewable for another 25 years. Upon expiry of the instruments, the tenured migrant households may negotiate for new instruments by the PAMB.

Local Government Units

Local Government in the Philippines is divided into several levels: provincial, municipalities, and villages (*barangays*). These LGUs have inherent functions and powers as administrative and political bodies. Of strong significance to the management of the MKRNP, these Units are represented in the Protected Area Management Board (PAMB), exerting influence in decision-making in the management board; they have so far been the biggest sources of funds for park operations, although the amounts vary depending on the individual capacity of each LGU. Their support has contributed to the implementation of the previous management plan and ongoing programs. Strong and sustained support from the LGUs can only be established and maintained if they recognize the enormous benefits of conserving the MKRNP. Such support may manifest itself not only in budgetary allocations for park operations but also in ordinances.

Support from Concerned Government Agencies and Other Stakeholders

Coordination is maintained with other government agencies to deliver such services as infrastructure, health, economic and financial assistance, livelihood development and education. In one way or another, the local representatives from the various Departments can provide the services which the protected area

may need in conjunction with its protection and conservation mandate. Institutional arrangements have also been made with government and private agencies, academic and research institutions as well as NGOs whose programs relate to and contribute to the achievement of the goals of protected area management. Such an approach is envisioned to tap support from these institutions so that the management plan may be fully implemented.

General Protected Area Management

MKRNP Protected Area Management Board

A Protected Area Management Board (PAMB) – sometimes referred to as the PAMB En banc – was prescribed in Section 11, of the NIPAS (Act 1992), and mandated by the Implementing Rules and Regulations of the NIPAS Act (1992) to exercise management authority over the buffer zones on behalf of the Department of Environment and Natural Resources (DENR). This body is responsible for site specific management of MKRNP. The membership of the MKRNP PAMB is further detailed in Section 7 of the “Mount Kitanglad Range Protected Area Act of 2000”. This landscape management board meets bi-annually. The MKRNP PAMB En banc is composed of 61 members from government and non-government sectors, as well as from the local communities. The Regional Executive Director of DENR-Region 10 chairs the Board. The Provincial Planning and Development Coordinator of Bukidnon serves as an ex-officio member. The other members are the mayors of the eight LGUs its surrounding the protected area and the 28 village chieftains (*Punong Barangays*); the Provincial Vice Governor, 14 tribal leaders; three representatives from Non-Government Organizations; two from private corporations; two members representing other government agencies; and the Provincial Environment and Natural Resource Officer of Bukidnon.

The PAMB En banc has the following powers and functions:

- Issue all rules and regulations and promote the policy declaration;
- Establish criteria and set fees for the issuance of permits;
- Adopt rules for the creation of committees to whom its powers may be delegated;
- Approve the management plan and oversee the Office of the Protected Area Superintendent;
- Deputize individuals for enforcement; and



En banc meeting of the PAMB of MKRNP

- Accepts donations, approve proposals for funding and budget allocations as well as exercise accountability over all funds that may accrue to the MKRNP.

Since 2001, the management has promoted community participation through the various people's organizations, the Council of Elders and the Kitanglad Guard Volunteers.

MKRNP Protected Area Management Board – Executive Committee

The MKRNP PAMB Executive Committee (PAMB Exe Com) of the PAMB is composed of 17 members, and meets quarterly or even frequently, whenever possible. The membership is comprised of the DENR Regional Executive Director, the Provincial Environment and Natural Resource Officer of the DENR, the Provincial Planning and Development Coordinator of Bukidnon, eight mayors, two indigenous peoples' representatives, one from National Commission of Indigenous Peoples and three NGO representatives. Being the secretariat to the management board, none of the protected area staff are represented on this committee, apart from the Park Superintendent.



The MKRNP PAMB Executive Committee

Protected Area Staff

The core staff of the protected area comprise a designated Park Superintendent (PASu), as well as four staff designated to being primarily forest rangers. The PASu carries out both administrative and regulatory functions, while a Deputy PASu closely coordinates on law enforcement, while the majority of the staff undertakes multi-tasking roles in the municipalities. Thirteen contractual employees serving as administrative and technical support staff have been hired to supplement the existing National Park manpower. Since 2001, the management staffing gap of the Natural Park has been addressed through building and strengthening linkages with the local communities, concerned government agencies and other institutions. Indeed, the vision for MKRNP is that it is managed by empowered local communities and indigenous peoples enjoying security of tenure, and engaged in ecologically sound livelihoods to ensure biodiversity conservation, in partnership with government and a public which has internalized conservation values and respects cultural integrity.

Undertaking of Protected Area Management Tasks

(i) Indigenous livelihoods and community development

Four institutional bodies have been established relating to the indigenous tribal communities living inside the protected area and buffer zone communities, namely the Council of Elders, a committee handling cultural and tribal affairs and a committee handling tenured migrant issues, while a Federation of Peoples Organizations provides coordination with the buffer zone communities.

Mount Kitanglad Council of Elders

The PAMB, with support from the Kitanglad Integrated NGOs (KIN), assisted the tribal communities in establishing their Council of Elders. The Council of Elders are categorized into two groups, namely: (a) Tribal Chieftains, which is composed of 26 *Datus* and two *Baes* and (b) a second group composed of 168 cultural experts. The Council of Elders plays a major role in protected area management, particularly in planning, decision-making in resource access following their traditional practices, pass culture-sensitive policies, resolve boundary conflicts and in the recognition and respect of their customary rights and practices. The elders identify and determine genuine Indigenous Knowledge Systems (IKS) and their differences from one village to the other. A primary responsibility of the Council is to reinforce park management by applying customary laws in dealing with violators, particularly if they are local residents. The elders also bring the concerns and interests of the indigenous peoples' communities to the PAMB.

Cultural and Tribal Affairs Committee

This committee evaluates and reviews (i) ancestral domain and land claims within the Mt. Kitanglad Range Natural Park; (ii) tenurial instrument issues to the members of the ICCs and the tenured migrants; (iii) cultural and tribal conflicts settlements; and (iv) the tribal cultural values programme. The committee then makes recommendations for PAMB Executive Committee action.

Tenured Migrant Committee

This committee acts on matters relating to issues and concerns of the duly registered tenured migrants within the protected area. The committee also endorses/recommends as to whether a tenured migrant community will be issued with a tenurial instrument, depending on the validity and qualifications.

The Federation of People's Organizations

There are at least 84 People's Organizations (POs) formed within the 47 *sitios* of the park. These include women, porters and the Community-based Forest Management Agreement Associations. Each organization can be awarded a livelihood project based on proposals submitted to and approved by the PAMB. Performing organizations are awarded with additional projects on a larger scale. One of the terms and conditions under a livelihood support project is the protection and management of the remaining park resources. The POs are the main arm of the PAMB in carrying out its programs, projects and other park activities involving community participation. The Federation was the recipient of a Food and Agriculture Organization (FAO) and forthcoming World Bank project through the Department of Agriculture. Some LGUs and other institutions have also directly linked with the Federation for joint project implementation. These interventions involve livelihood, social research and soil conservation farming.

A Grievance Committee

This committee receives complaints in writing regarding all PAMB members, the Office of the PASu and Mt. Kitanglad stakeholders which in the first instance for the complainant opinion has been ignored, overridden or dropped without due consideration/reason.

(ii) Community-based law enforcement

The Kitanglad Guard Volunteers (KGV)

The KGV is the community-based park protection arm of the Council of Elders and the PAMB. They serve as the tribal guard “*Alimaong*” based on the tribal community structure which already existed before Mt. Kitanglad became a protected area. In addition to enforcing the tribal justice systems, they enforce the policies passed by the PAMB and guard against prohibited acts pursuant to the Mt. Kitanglad Act. The role of the KGVs is purely detection and monitoring of forest destruction; the KGV do not necessarily perform patrolling themselves. They are only encouraged to immediately relay confidential report through mobile phones assigned to every KGV chief. In minor forest offenses committed by a member of the indigenous peoples, the Council of Elders is allowed by the PAMB to resolve and settle the violations committed as empowerment and in recognition of their customary practices. They usually penalize erring member/s through a sanction termed a *sala* (cultural penalty). In more serious cases, the task falls to the regular enforcement personnel to conduct investigations, documentation and the filing of cases to court against the reported individuals, if the situation warrants. To date, the KGVs have minimized negative activities and assisted in monitoring biodiversity trends.

Kitanglad Guard Volunteers Federation

The guards federated their volunteer group wherein they elected representatives. The KGV Federation convenes quarterly meetings (with the presence of the protected area staff) wherein every KGV chief are required to present whatever achievements, constraints and the additional support that they need.

A Peace and Order Committee

This acts on matters involving peace and order problems within the Mount Kitanglad Range Protected Area. It also conducts investigations on special cases reported illegal activities within the park area that needs PAMB’s action.



The Kitanglad Guard Volunteers (KGV)

(iii) Species and habitat management

The Water Resources Management Committee

This body acts on matters relating to water resources access and sustainable management. This committee deliberates application/s from agribusiness corporations that intend to access water emanating from the park to impose payment for environmental services. The committee also regulates water use by the companies to ensure that the nearby local communities will not be impaired in water access.

The Resource Management and Infrastructure Committee

This committee provides management supervision for a number of park activities, comprising (i) park resource inventory; (ii) boundary delineation and demarcation; (iii) habitat rehabilitation and restoration program; (iv) management zoning and buffer zone management; (v) park resources protection and sustainable management; and, (vi) construction and establishment of the project horizontal and vertical structure programs. This committee provides recommendations for PAMB Executive Committee action.

Cinchona Development Committee

Pursuant to PAMB Resolution No. 133, series of 2000, this Committee focuses on providing continuity of management and ensure effective conservation and development of the Cinchona Forest Reserve consistent with the goals and objectives of the Mount Kitanglad Range Natural Park. The importance of this Forest Reserve, as habitat of the Philippine Eagle and *Rafflesia schadenbergiana*, a historical landmark and an area in which the seven species of quinine can be found prompted the PAMB En banc to create this committee to address specific development concerns in this area.

Research and monitoring

Research and Education Committee

This committee evaluates and reviews (i) the project information and communication programme; (ii) ecotourism activities; (iii) the biological diversity; and (iv) the livelihood projects. The Research and Education Committee evaluates various research and project proposals that would be implemented in the park. It makes recommendations to the PAMB Exe Com.

Community outreach and conservation awareness

There is no committee dedicated to community outreach and conservation awareness - referred to as information, education and communication (IEC) - despite the local stakeholders being awarded a major role in management and having a protected area extension officer.

Aldaw Ta Kitanglad Committee

Pursuant to PAMB Resolution No. 82, series of 1999, the committee shall take charge on matters relating to the administration and management of the annual *Aldaw Ta Kitanglad* Celebration. Aldaw Ta Kitanglad is an annual event celebrated by the Mt. Kitanglad Protected Area Management Board (PAMB). Said annual celebration aims to recognize the valuable contribution in the protection and preservation of Mount Kitanglad Range Natural Park undertaken by the three tribal groups. Highlights of the celebration include the Kitanglad Guard Volunteers (KGV) Congress, Competition for “Matatao ha Lumad” or IPs Got Talent, tree planting, and a medical mission.



The *Aldaw Ta Kitanglad* is an annual event celebrated by the MKRNP PAMB

Ecotourism

Ecotourism Committee

Formerly called the External Affairs and Tourism Committee per PAMB Resolution No. 47, series of 1998, this committee serves as the extension arm of the CPPAP regarding ecotourism and recreational activities. This committee promotes nature and cultural-related ecotourism at the site, including birdwatching, camping, mountain climbing and jungle trekking. Promotion of Mt. Kitanglad as an ecotourism site has been done through flyers, the internet, and the Mt. Kitanglad International Rugged Mountain Race. Protected area staff and local people have undergone training in tourism-related services. The PAMB has approved guidelines for the fee system in ecotourism.

DISCUSSION

Participatory processes have been recommended as “tools to help bridge the discontinuity between geographical and jurisdictional boundaries”—including protected area boundaries - and thus arrive at a more sustainable management of natural resources (Delli Priscoli 2004). The importance of designing suitable participatory governance processes is generally acknowledged (Newig 2015). However, precisely because participatory and collaborative decision-making is becoming more prevalent and the repertoire of participatory instruments are becoming more complex, policymakers increasingly need to learn how to design and conduct effective participatory processes (Howlett 2014). To assist us to consider an appropriate design for a protected area in a developing country, Oliver Williamson (2009), a Nobel Laureate, stated that in a complex organization, it is important that governance is promoted to *infuse order, mitigate conflicts and realize mutual gains*.

A multi-stakeholder committee – an institutional bridge between the protected area, enclave villagers and buffer zone communities

A landscape multi-stakeholder institutional body provides a bridging forum between the core zone and the buffer zone. Positioned at the apex of the multi-level collaborative management framework for on-site management, this multi-stakeholder body is arguably one of the most important decision points for landscape protected area management. MKRNP has two landscape multi-stakeholder institutional bodies. The MKRNP PAMB has rather a rigid membership, pre-prescribed in the NIPAS Act, with 61 members. Beneath it, the MKRNP Exe Com represents a core working group of the PAMB, as a tighter knit body of only 17 members to whom much management responsibility has been delegated. Both bodies have broad representation of membership, which promotes equitable management. In MKRNP, the PAMB Exe Com has been one of the most active and highly motivated decision-making bodies in the country (NORDECO-DENR 1998). To date, it has passed and approved 171 resolutions.

Periyar Tiger Reserve has been recognized as a Learning Centre of Excellence, in India. In this reserve, the landscape stakeholder body is the Periyar Foundation, which provides management supervision to both the core zone and the 28,000 villagers in the buffer zone (Parr 2015). A strength of the Foundation approach - which is prescribed in all Tiger Reserves in India - is that it is a Government-Organized Non-Government Organization (GONGO), which permits highly adaptable management responses, including relations with the local communities. However, stakeholder representation is restricted, which has upsides and downsides with regards to effectiveness and equitable management. Ultimately, these landscape collaborative management bodies will only be truly effective if they are linked

into the grassroots administrative levels. In other Asian countries, emerging landscape multi-stakeholders bodies may still be struggling to link into the grassroots communities, as the communities are receiving insufficient benefits to meaningfully participate in collaborative management.

Protected area working groups – facilitating optimal stakeholder interactions

In MKRNP, protected area working groups appear to constitute critical institutional bodies - at mid-level - in the multi-level collaborative management framework (Figure 1), which was proposed by Parr *et al.* (2012) and is evident in Periyar Tiger Reserve (Parr 2015) and are significant bodies for delivering effective conservation impacts within protected area landscapes. Thirteen protected area working groups (sub-committees) were established in 2000 to assist management of the natural park, through a MKRNP PAMB regulation. Twelve sub-committees are dedicated either to supporting traditional indigenous livelihoods or supervising different aspects of protected area management, while one sub-committee focuses on administrative matters. Some of the most notable institutional bodies strengthen the traditional cultural rights of the indigenous tribes inhabiting the reserve. For example, the establishment of the Council of Elders and the Kitanglad Guard Volunteers constitute major achievements in mobilizing the local stakeholders in co-managing the protected area.

A law enforcement working group – providing management lessons

Some key guidance for effective protected area management can be gathered by the ongoing enforcement agendas in protected areas in Asia. This field of protected area expertise has reached high levels of professionalism in selected reserves. Key contributing factors comprise (i) the creation of a distinct section of staff on enforcement; (ii) provide specialized training and equipment for staff; (iii) establish a patrolling database; (iv) specify responsible areas for undertaking of field activities; (v) field action following a plan; (vi) the organization of monthly enforcement meetings involving reporting to evaluate past patrolling performance; and (vii) adaptive management of the enforcement strategy through GIS database (www.wcsthailand.org).

In management terms, enforcement decisions are now being made by the Head of Law Enforcement and the patrolling teams (a law enforcement working group), and not by the Director of the protected area. This deferral of decision-making management responsibility is a game changer for how a reserve director might implement management in government-designated protected areas, and delegate management oversight to technically competent sub-ordinates in the different fields of management; this is particularly pertinent in landscapes involving literally thousands of stakeholders.

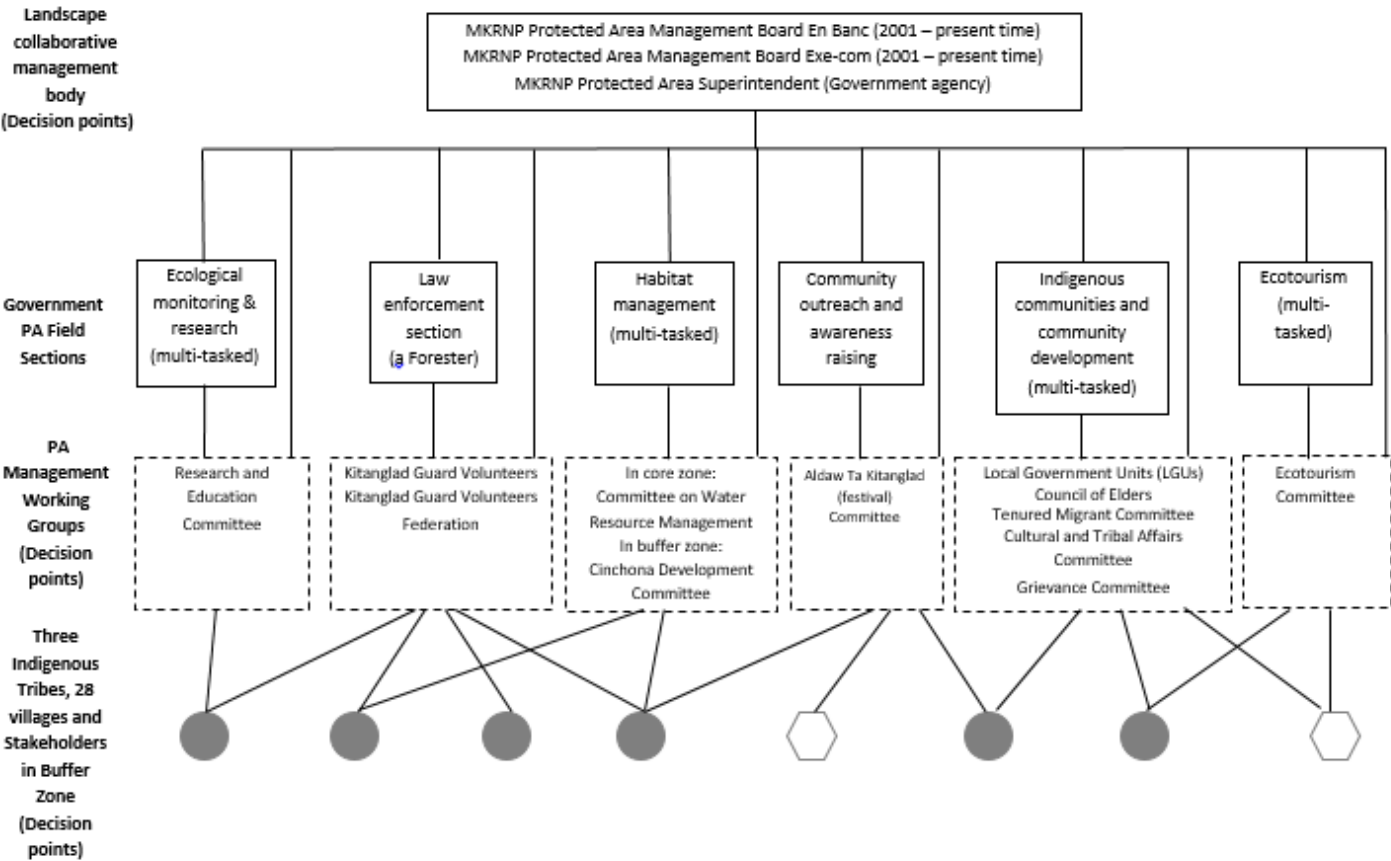


Figure 1. Multi-level collaborative management arrangements in Mount Kitanglad Range Natural Park

Community-level institutional bodies

The grassroots levels are as important decision-making points at the landscape body and the working groups. Because they are very large in numbers, they need to be well-organized. In MKRNP, a key strength involved building its governance management arrangements upon the existing indigenous cultural system, which makes them very robust. These comprise the Council of Elders and the *Alimaong* or the tribal guards to ensure the protection of the protected area. The *Alimaong* revived the traditional concept of protection and promote community empowerment. These local level institutions show some similarities to the village-level eco-development committees (EDCs) established in Periyar Tiger Reserve, southern India (Parr 2015) which comprise neighborhood, professional and user group EDCs. However, in Periyar, government guidelines were required for the process, structure and responsibilities of these committees. Different communities had different dependencies within the reserve, such as the collection of fuel-wood, cattle grazing, extraction of cinnamon bark, fishing, and running pilgrim service centers. These different dependencies necessitated different strategies/solutions to address and mitigate protection issues as well as livelihood issues. Consequently, prolonged discussions were held with various groups to help in establishing EDCs which were also based on locality, ethnicity, and professional backgrounds at the start of the project. The tribal groups on the fringes of the PTR also formed EDCs according to their ethnicity and culture.

Promoting protected area working groups which elicit attitude and behavioral change

Protected area working groups which build on indigenous knowledge of resource management seem particularly significant. Furthermore, working groups which elicit attitude and behavioral change should also be considered particularly important, as they ultimately assist to mitigate conflict and increase mutual benefits, over the long-term. Contentiously, these comprise the three working groups: – (i) law enforcement, (ii) community outreach and (iii) livelihood development. Idealistically, law enforcement patrolling should be viewed from the perspective of a buffer zone society which desires to reduce illegal activities, for long-term benefits. But a strong law enforcement agenda cannot be maintained without simultaneous, proactive community engagement. Thus a dedicated outreach program focusing on educating people, and changing behavior is vital (Steinmetz *et al.* 2014). Simultaneously, a targeted livelihood program should also focus on the poorest, resources dependent households and villages living closest to the park boundary (Harrison *et al.* 2015). This program might also target champions for conservation, or guardian households of species and protected areas. The establishment and maintenance of these working group programs need technical leadership from qualified staff. In MKRNP, the staffing levels are insufficient for providing adequate management to the watershed, with the majority of these field staff fulfilling multi-tasking community liaising roles.

Strengthening information exchange in the multi-level collaborative system

In both the multi-level collaborative management of MKRNP and Periyar Tiger Reserve, there were communication weaknesses between the different levels of the management

system, for different reasons. In MKRNP, the 13 prescribed working groups are not representative of the work programs prescribed in the MKRNP management plan (2011). It is important that the terms of reference for each sub-committee is explicit, and that each sub-committee has a defined area of work and clear mandate in relation to the activities prescribed in the MKRNP Management Plan. For example, there is no committee dedicated to supervise/ implement the information, education and communication program. At least two of the other field-oriented committees have very broad mandates, having responsibilities covering a diverse range of park activities. The Research and Education Committee deals with research, ecotourism and livelihoods, while the Resource Management and Infrastructure Committee provides management supervision for park resource inventory, boundary delineation and demarcation, habitat rehabilitation and restoration, management zoning and buffer zone management, park resources protection and sustainable management, and construction. These sub-committees overlap with the mandates of each other, and with other committees, such as the Ecotourism Committee. In summary, some of these sub-committees were formally established simultaneously in the MKRNP PAMB regulation, and perhaps too prematurely, before clarifying their respective Terms of Reference, and their effectiveness in relation to one another, and fields of management.

In Periyar Tiger Reserve, the most notable breakdown in the multi-level collaborative management system and the established decision points at the different management levels, is the absence of representatives from the working groups in the Periyar Foundation. (Shirkhorshidi 2013) noted in that local communities perceived effective communication and feedback processes were key governance issues which were lacking in ICDs in Uganda.

CONCLUSION

The management system of MKRNP provides further evidence of an effective and equitable multi-level collaborative management framework embracing the protected area landscape, which is reflective of the generally internationally advanced state of multi-level collaborative management found within the Philippines. This multi-level collaborative management system comprises: (i) 1-2 landscape multi-stakeholder committees; (ii) several protected area working groups; (iii) traditional cultural village systems or organized village management systems; and (iv) different interest groups within villages. In MKRNP, the indigenous institutional bodies provide a solid cultural management system upon which to frame the collaborative management system. A large number of protected area working groups (sub-committees) have been established, dedicated to specialized fields of protected area management. Some working groups, have broad and/or overlapping mandates, while other workings groups are non-existent. The Terms of Reference of all the Working Groups should be reviewed in relation to one another, particularly now that they have been functioning for many years. The limited staffing levels and capacity of the protected area staff, which is also linked to the multi-tasking approach utilized by successive park managers, may weaken focused technical discussions on the core themes of protected area management. These staffing levels and capacity aspects could be strengthened through a payments for environmental services program.

Protected area working groups may be critical institutional bodies in MKRNP which permit effective and equitable management into the wider landscape. Protected area working groups were also prevalent in Periyar Tiger Reserve, another model protected area in Asia. This being the case, prioritized attention needs to be directed towards catalyzing working groups in the fields of protected area management which influence attitude and behavior change in buffer zone communities and other key stakeholders, namely in law enforcement, community outreach and livelihood development. Of high conservation concern, working groups on community outreach and awareness-raising were absent in MKRNP and PTR, while the livelihood program in MKRNP did not appear to mitigate threats to the reserve.

RECOMMENDATION

Recommendations for MKRNP

The Biodiversity Management Bureau and the MKRNP PAMB should convene a workshop on the multi-level collaborative management system in Mount Kitanglad Range Natural Park. They should review the field programs prescribed in the MKRNP management plan and allocate program implementation to the existing sub-committees mandated to implement them. Once consensus has been reached on the appropriate breakdown of the protected area management activities, according to the field programs and sub-field programs, the Terms of Reference should be drawn up for each sub-committee, and/or working group, as necessary. Possible new sub-committees include a Community Outreach and Conservation Awareness Sub-committee (information, education and communication), a Law Enforcement Sub-committee, and a sub-committee dedicated entirely towards promoting research. Some of the sub-committees will require identifying experts in each respective field of expertise, who can lead implementation of the respective field programs. Greater representation of full-time protected area staff and NGO staff on some of these sub-committees should be anticipated, as well as their involvement in leading the sub-committee meetings, including the agendas. A comprehensive “payments for environmental services” assessment should be conducted for MKRNP so that full payments are secured from downstream users into the Integrated Trust Fund. The use of these funds should be prioritized for ensuring enhanced protection of the watershed, and enhanced educational awareness about watershed values to stakeholders.

International Recommendations for Protected Area Practitioners

in government-designated protected areas needs greater investigation and evaluation. At the site level, international attention should particularly focus on the establishment and maintenance of landscape bodies and protected area working groups which promote attitude and behavioral change. In some cases, these protected area working groups may counterbalance strong ongoing law enforcement agendas. The development of working groups delivering sustainable outreach programs warrants attention, including the best practice methodologies in delivering these programs. Simultaneously, we need to understand the mechanics of developing multi-stakeholder landscape bodies supervising administrative and special users working groups delivering livelihood interventions which optimally mitigate threats to protected areas. These lessons

learned may provide direction as to how we can build capacities within individual sites, as well as within protected area conservation agencies on community outreach and livelihood agendas. These two issues are arguably the most critical protected area management issues which need rapid redress in the coming decades. Without them, enhancing protected area – community relations will remain a figment of our imagination, and enhance maintenance of unsustainable investments in the fortress approach.

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A view from Mount Kitanglad Range Natural Park



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