LOCAL COMMUNITY PARTICIPATION IN MANAGING NATURAL RESOURCE CONSERVATION IN LOAGAN BUNUT NATIONAL PARK

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MASTER OF ENVIRONMENTAL MANAGEMENT IN DEVELOPMENT PLANNING 2005
LOCAL COMMUNITY PARTICIPATION IN
MANAGING NATURAL RESOURCE CONSERVATION IN
LOAGAN BUNUT NATIONAL PARK

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ABSTRACT

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By

Jack Liam

The purpose of this field study was to investigate the status of state-community alliance as an instrument for managing biodiversity conservation and how this semi-official arrangement of managing natural resources utilization in the Loagan Bunut National Park (LBNP) has an impact on the livelihoods of indigenous communities residing in the area.

A one-shot cross-sectional survey design was employed in this study. At total of 81 respondents were selected from three main ethnic groups living in six long houses in LBNP. These key informants were chosen based on a purposive or non-probability sampling technique. The sample consisted of 14 Berawan, 11 Penan, 1 Kenyah and 55 Iban respondents.

The data was collected mainly through face-to-face interviews with the respondents using structured interview schedule, group discussions and personal observations by the researcher during the fieldwork. Additional information pertaining to the formation and administration of the park were obtained from the Sarawak Forestry Department.

Based on the analysis of the empirical data the findings are stated as follows. The natural resource utilization (NRU) index was inversely related to educational achievement of respondents, but has no relationship with age, number of occupations, and number of family members. Remittance, sale of fish and salaried wages were significantly correlated with household cash income. The results of the present study show that the local communities, regardless of their ethnic groupings, were not solely dependent on the available natural resources in the park for cash income, but NRU, as the data indicate probably contributed mainly for fulfilling their subsistence needs. Most respondents have positive future expectation toward co-partnership with the park authority in managing natural resources in the area although their perception of the current co-operation somewhat lukewarm in nature, especially among the Penan. The Iban were indifference to the formation of the national park because they have been considered new comers to the area. This does not come as a surprise because of the fact that exclusive rights to fishing and utilization of natural resources in LBNP were given to the Berawan community. Nonetheless, despite all this, through coopting the Than and Penan community leaders into the Special Park Committee (SPC) in LBNP has won over their cooperation as co-partners with the Berawan and the state in managing natural resources in the area.

The following conclusions are drawn from the research findings. The inclusion and exclusion policies are implicit in the gazettement of the Loagan National Park. The inclusion policy favors the Berawan by given exclusive rights of access to natural resources in the park. In so doing it pushed the Penan and the Iban to the margins. Due to the institutional failure on the part of the park authority to monitor human activities there, the unwritten rule and/or regulations here was that the former still could fish, farm, gather and hunt in the park in the absence of official enforcement within the borders of LBNP. This also implies that particularly the Iban and Penan communities, choices of livelihoods are limited because the forests surrounding their longhouses had logged, and now what they hope for in the future is the prospect to benefit from spillover effect of eco-tourism in the LNBP and potential
development in the periphery of the national park. As it is for now, they seem to be willing to participate actively in managing the natural resources in LBNP through SPC. Co-opting the local leadership into the committee would dispel suspicion on the government's role in conservation. When local leadership was involved it helps establish mutual trust between local communities and the park authority. Such arrangement has legitimised and used as a form of social control instead of using bureaucratic exercise for eliciting local initiatives to monitor and prevent encroachment into the park.

Although the data shows an unequal access to natural resources in the area, this was no indication to suggest that this could jeopardize the existing social relations between the three ethnic groups. The main reason for this is that livelihoods of the Penan, Berawan and Iban are not exclusively dependent on the natural resources in the park. Also, the Berawan, although they have exclusive rights of access to natural resources in the area they seem to be not interest to engage in hunting and gathering of forest resources other than fishing and farming. As such, competition for resources among these stakeholders is minimal at the moment. The Iban community has a special place in the history of the Berawan in Loagan Bunut because of the covenant between Penghulu Lawai, a Berawan leader and Medan, the leader of migrant Iban from Skrang in the 1800s, in which the former gave permission of rights to the latter to establish their territorial domain in the area, which the Berawan community still recognizes and honors until the present day. Perhaps, this is the only reason why the Iban still can farm, hunt and gather in the area. Whether the park authority recognizes this longstanding agreement between the Berawan and Iban poses another question.
ABSTRAK

‘Penglibatan Masyarakat Setempat Dalam Mengurus Pemeliharaan Sumber Semulajadi di Taman Negara Loagan Bunut’

Oleh

Jack Liam

Tujuan utama kerja lapangan ini diadakan adalah bagi mengenalpasti status kerjasama di antara pihak kerajaan dan masyarakat tempatan untuk mengurus pemeliharaan biodiversiti dan mengukur bagaimana kerjasama separa rasmi ini boleh membantu mengurus penggunaan sumber semulajadi di Taman Negara Loagan Bunut (TNLB) dan memberi kesan kepada mata pencarian masyarakat luar bandar yang menetap di pinggir kawasan tersebut.


Data diperolehi melalui kaedah temuduga secara seremana menggunakan borang kaji selidik perbincangan kumpulan serta pemerhatian peribadi oleh penyelidik semasa kerja lapangan. Maklumat tambahan berkaitan pembentukan serta pentadbiran taman diperolehi dari Jabatan Hutan Sarawak.


Kesimpulan berikut digariskan melalui hasil kajian ini. Polisi pengolongan dan pengecualian termaktub di dalam pewartaan TNLB. Polisi pengolongan lebih memihak kepada kaum Berawan dengan memberi hak istimewa untuk memperolehi sumber semulajadi di kawasan taman. Kaedah ini telah menolak kaum Iban dan Penan ke pinggir itu tersebut. Kegagalan institusi dari pihak pengurusan taman bagi memantau aktiviti menyebabkan masyarakat setempat masih menangkap...

ACKNOWLEDGEMENT

When I began to do this thesis, I had fortunately little idea of what practical implication were, or else I might not have started (which goes to show that careful planning may actually be detrimental to some enterprises). One crucial element of success that is easily underestimated is the encouragement and support that may be required. In this respect, I was very lucky to have support including moral support from the loved ones and to meet the right people at the right time, all of whom provided valuable or vital contributions, and to whom I deeply indebted.

They are, first of all, the Almighty God and my saviour Jesus Christ for his blessing and answering my prayer, my loving wife, Beatris Ajan and my parent, the late Mr. Liam Basi and Mrs. Yuti Buntong for their support, encouragement, prayers and patience. Also, thanks to all my kids, Jareth, Benilda, Jarmin and Joel, for being patience.

Special thanks to my supervisor, Professor Dr. Dimbab Ngidang for his guidance, comments and patience while supervising my thesis. My thanks extend to Dr. Efransjah and Dr. Alexander Sayok (UNDP/GEF Project) for their support, comment, ideas and guidance in my thesis.

Finally, I come to the people without whom this thesis may never been done. The people of Loagan Bunut and my relatives, friends whom assisting me to do the data collections, Mr. Adenan Munjong, Mr. Muller Asen, Mr. Rejab Dooh and Mr. Nadzar Dahlan and those involved directly or indirectly in my thesis, for their support, tolerance and friendship.

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CHAPTER 1
INTRODUCTION

1.1 Background

Sarawak's Totally Protected Areas (TPAs) are divided into three categories: (1) the National Park (NP), (2) Nature Reserve (NR) and (3) the Wildlife Sanctuary (WS), all of which are managed under the jurisdiction of the Sarawak Forestry Department. The term TPA refers to designated areas which are totally protected from extraction of forest products, clearing, hunting and other forms of disturbance, unless certain communities are granted gazetted rights to do so for non-commercial purposes. The National Parks and Nature Reserves are gazetted under the provision of Section 10 of the National Parks and Nature Reserves Ordinance, 1998, whereas, Wildlife Sanctuaries are gazetted under the provision of Wild Life Protection Ordinance, 1998. The main difference among these categories is that WS is strictly for conservation and research, whereas NP and NR are gazetted for tourism and public recreation. NR and NP carry similar functions except NR is smaller in size than NP (less than 1000 hectares in size).

Internationally, The World Conservation Union (IUCN) defines a protected area as:

An area of land and/or sea especially dedicated to the protection and maintenance of biological diversity, and of natural and associated cultural resources, and managed through legal or other effective means (IUCN, 1994).
Similarly, the Biological Diversity Convention (UNEP, 1992) to which Malaysia is a signatory, defines protected area as:

'Geographically defined area, which is designated or regulated and managed to achieve specific conservation objectives'.

The IUCN categorized protected area management into seven (7) categories and national park falls under category II as shown in Table 1 below:

<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Category Ia</td>
<td>Strict Nature Reserve: managed mainly for science</td>
</tr>
<tr>
<td>Category Ib</td>
<td>Wilderness Area: managed mainly for wilderness protection</td>
</tr>
<tr>
<td>Category II</td>
<td>National Park: managed mainly for ecosystem protection and recreation</td>
</tr>
<tr>
<td>Category III</td>
<td>Natural Monument: managed mainly for conservation of specific natural features</td>
</tr>
<tr>
<td>Category IV</td>
<td>Habitat/Species Management Area: managed mainly for conservation through management intervention</td>
</tr>
<tr>
<td>Category V</td>
<td>Protected Landscape/Seascape: managed mainly for landscape/seascape conservation and recreation</td>
</tr>
<tr>
<td>Category VI</td>
<td>Managed Resource Protected Area: managed mainly for the sustainable use of natural ecosystems</td>
</tr>
</tbody>
</table>

Source: Borrini-Feyerabend et al. (2004)

According to Ngui (1991), Gumal and Ahmad (1995), and Kassim and Gumal (1995) the roles of TPA in Sarawak are for the conservation of habitats and biodiversity; protecting areas of natural beauty; environmental protection such as regulation of water flow, soil protection and local climate stabilization, provision of socio-economic benefits through extraction of renewable resources, recreation and tourism; provision of locations for environmental education and scientific research; and, protection of areas of local cultural and spiritual significance.
Activities that cause disturbance and damage to the habitat, plants and animals are strongly restricted within NP and NR. A list of the banned activities including all forms of hunting; removal of or damage to plants and animals; carrying of firearms or other weapons; introduction of animals or plants; making fires; and damaging structure (natural or otherwise) are stated in the relevant ordinances. Only those with gazetted rights and privileges are exempted from the restriction of activities within NP or NR, which are specified in the gazette notification, and other activities specified in writing by the Controller.

Sarawak currently has established twenty-five (25) TPAs of which four (4) are WS, five (5) NR and the remaining are NP as show in Figure 1 (and also Appendix B).

Under the Seventh Malaysia Plan (1996 – 2000), the specified management objectives of National Parks & Wildlife Office in national parks and nature reserves are (National Park and Wildlife Office, 1995): (1) expanding the current system of national parks, and creating additional TPAs under the new category of nature reserve; (2) infrastructure development, giving special attention to visitor facilities; (3) conservation education and interpretation, aimed at both urban and rural groups; (4) management plans, preparing these for every national park and nature reserve; and, (5) building of more ranger stations to ensure effective protection of the parks.
In order to achieve these aims and ensure the improvement in managing national parks and nature reserves in Sarawak, the preparation of a management plan, implementation and updating of each of the national parks and nature reserves are to be emphasized and the plan shall include the following (Wildlife Conservation Society & Sarawak Forest Department, 1996): (1) zoning recommendations, some areas designated for strict protection where no tourism or other human use is allowed, and other areas designated for different intensities of use; (2) outline a monitoring programme so that the effectiveness of the management measures can be assessed at least once every two years; (3) to plan and work out the patrolling activities both inside and along the boundaries of the parks; (4) to mark and clear the boundaries and signs along the border at least once every two years, as it leaves no
ambiguity about where the boundary is and increase the ease with which the law can be enforced; (5) to conduct training needs analysis; and (6) to carry out conservation education, extension and interpretation programs.

Although all protected areas carry the responsibility as “especially dedicated to the protection and maintenance of biological diversity, and of natural and associated cultural resources”, the Guidelines for Protected Area Management Categories recognise that the categories imply “a gradation of human intervention”. Thus, the detailed guidance for each category accepts that different levels of human use and presence will occur, though in all these cases it must be consistent with conservation and sustainability objectives. Hence, Category II is to “take into account the needs of indigenous people”.

In Sarawak, human activities are always seen as the cause of wildlife extinction particularly through hunting activities which is the greatest threat to wildlife. Sapuan et al., (2001) recognized that National Parks and Wildlife Division (NPWD) of Sarawak’s Forests Department must firstly manage the people in order to manage the wildlife in Sarawak. As such, it is recommended that this problem can be resolved in a way that is not detrimental to the NPWD core aim of conservation if the human-wildlife conflicts cease to exist. Conservation of wildlife and their habitats are fully dependant on public participation and support (Gumal, 1995; Pimbert and Pretty, 1995). This is due to the fact that the majority of the TPAs in Sarawak are surrounded by local communities’ settlements.

One of the strategies to get public participation in natural resources management is by introducing conservation education programmes throughout the State. The aim of this programme is not only to promote conservation of biological diversity at genetic, species and ecosystem levels, but also, to promote individual and collective responsibility for the sustainable use of natural resources.
However, creating awareness among the local people on natural resources is not sufficient without integrating the needs of people and TPAs if TPAs are to work successfully in protecting natural resources (Well et al., 1992).

1.2 Statement of the Problem

With the establishment of National Parks and Wildlife Division within the Sarawak Forestry Department, protected areas serve a mandated role in biodiversity conservation and habitat protection. For instance, protected areas are crucial for watershed protection in order to secure fresh water supply for local inhabitants living within the periphery of those areas. Conventional approaches to protected area tend to believe that people and nature as separate entities and the dominant view blames the local people as the cause of natural resource depletion. In certain cases, human communities are excluded from the area of interest, prohibited from the usage of natural resources and viewing their consent are as incompatible with conservation. However more and more protected area professionals (policy markers and practitioners) are recognizing the fundamental interrelation among natural resources, people and cultures. More attention is now given to cultural values and involvement of the indigenous and local communities in biodiversity conservation, particularly in management decisions affecting their livelihoods. In order to ensure the sustainability of the protected area, management should incorporate various stakeholders’ interest especially the participation of the local community in managing natural resources.

Series of discussions to propose Loagan Bunut as the national park started since 1976. The important reason as to why Loagan Bunut needed to be constituted as national park was to protect the lake and river ecosystem and to preserve the few example of ‘phasic communities’ unique to the peat swamp area. However, no intention to protect wildlife was incorporated. The Miri National Park Officer
during that particular time also emphasized that Loagan Bunut needed to be gazetted urgently to protect any further damage done by logging activities in the surrounding areas which could lead to habitat destruction and affect the hydrological regime of the area. In addition, these problems could cause disturbance to wildlife habitat.

The park authority was also aware that without the local communities’ active participation and cooperation, the proposed park would not succeed and be well protected. Therefore another main objective for protecting Loagan Bunut was to enable the Berawan to benefit by collecting large amounts of quality fish sustainably and their rights on fish to be protected. One of the actions taken by the authority in 1977 was to include Bunut River in the proposed area.

A briefing on the importance of the area to be constituted as a national park to the nearby longhouses had been carried out in April 1980. The Berawan of Rumah Kajan Sigeh indicated that they were not too keen to accept the proposal unless their rights on the area for farming and fishing were well protected.

The first Loagan Bunut National Park notification was published in the Sarawak Government Gazette, Part V Vol. XXXVIII No. 18, on the 5th of May 1983, article No. 1468 ‘The National Parks Ordinance’, page 771. However, this proclamation was not distributed to the public due to some errors occur in the Iban version. Then, the new edited proclamation was signed on 20 January 1987. The public were allowed to submit their claims until 20 May 1987. On 12 February 1987, TR Kajan Sigeh sent a letter to the authority to state their stand and requested the relevant authorities to brief them in detail concerning the proposal. A copy of the letter was passed to YAB Chief Minister and to the relevant ministry and government department.
In June 1987, it is reported that The Friends of the Earth (Sahabat Alam Malaysia-SAM) sent a memorandum to the Director of Forests stating their support on the Berawan opposition of the LBNP. They outlined a few important reasons which including the possibility that the national park status could deprive the Berawan of their historical and traditional rights over the lake. Another memorandum was sent by SAM to the Chief Minister of Sarawak on 28 June 1987.

The Sarawak Berawan Association (SBA) sent another memorandum regarding the LBNP to the Honourable Chief Minister on 13 May 1987. They stated that the government's effort was excellent but indicated that maybe the Berawan of Loagan Bunut had not briefed and the issue was not discussed openly with them. They proposed that a Special Task Force be established to contain the issue.

Following the request by TR Kajan Sigeh, SAM and the SBA, a dialogue on the proposed LBNP was organized on 5th May 1990, at the Government House in Marudi. It was attended by various department heads from Miri and Marudi and also headmen including Temenggongs, Penghulus of the community and Tuai Rumahs of various relevant longhouses. During the dialogue the chairman announced that LBNP would be formally gazetted as national park on 1st July 1990. The status of native customary right lands and the rights and privileges of those affected was explained. Only inhabitants of Rumah Kajan Sigeh were given the rights for natural resource utilization in the park. A few issues such as collection of timber within LBNP and the rights of the Penan on their rubber estates (garden) were also raised and explained during the discussion.

Finally, the LBNP was gazetted as a national park on 1 July 1990 and its final proclamation was published in the Sarawak Government Gazette on 29th August 1991, No.2790, page 2417 – 2418. The National Parks Office in Miri was responsible to administer and manage LBNP until the site office was completed in 2001.
Efforts to encourage the participation of local communities in park management were formally initiated with the gazettelement of the new National Park and Nature Reserve Ordinance, 1998. Section 8 (1) of the Ordinance, 1998, which empowers the Parks' Controller to establish a Special Park Committee (SPC) comprising of NGOs, representatives of local communities, government agencies and park officials to assist the Controller in the protection and management of the area.

Three ethnic groups, namely the Iban, Berawan and the Penan residing in seven longhouses, populate the park. Of these, two longhouses belong to the Berawan (Rumah Kajan Sigeh and Rumah Meran Surang), one to the Penan (Rumah Paking Idoi) and the remaining four longhouses belong to the Iban community (Rumah Linggi Medan, Rumah Hillary Jungang, Rumah Umping Awing and Rumah Ramba Uchup).

<table>
<thead>
<tr>
<th>No</th>
<th>Long Houses/Villages</th>
<th>Ethnic Group</th>
<th>No. of doors</th>
<th>Estimated Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Rumah Kajan Sigeh</td>
<td>Berawan</td>
<td>57</td>
<td>358</td>
</tr>
<tr>
<td>2</td>
<td>Rumah Meran Surang</td>
<td>Berawan</td>
<td>25</td>
<td>130</td>
</tr>
<tr>
<td>3</td>
<td>Rumah Paking Idoi</td>
<td>Penan</td>
<td>28</td>
<td>148</td>
</tr>
<tr>
<td>4</td>
<td>Rumah Linggi Medan</td>
<td>Iban</td>
<td>32</td>
<td>165</td>
</tr>
<tr>
<td>5</td>
<td>Rumah Hillary Jungang</td>
<td>Iban</td>
<td>22</td>
<td>158</td>
</tr>
<tr>
<td>6</td>
<td>Rumah Umping Awing</td>
<td>Iban</td>
<td>23</td>
<td>184</td>
</tr>
<tr>
<td>7</td>
<td>Rumah Ramba Uchup</td>
<td>Iban</td>
<td>24</td>
<td>190</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td></td>
<td><strong>211</strong></td>
<td><strong>1333</strong></td>
</tr>
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</table>


The total population of these longhouse communities in Loagan Bunut consist of 211 households with a total of 1333 inhabitants (Table 2). Unlike most other national parks in Sarawak, LBNP is unique in the sense that it is inhabited by three different ethnic groups who are the Berawan, Iban and Penan. Because of the multicultural nature of population, their historical background with the park, and differences in livelihood of these ethnic groups, some considerable problems in organizing local communities to participate in the conservation efforts have emerged.
The scenario is quite complicated in LBNP. The inhabitants of Rumah Kajan Sigeh are given special rights and privileges to use natural resources in LBNP. The reason why the Berawan were given such rights could be the long established relationship between them and the resources in Loagan Bunut which was recognized by the Forestry Department. Other reasons could be that the Berawan are better educated, well informed, more exposed on how to approach the higher authority, receive support from local non-government organizations (NGOs) like SAM and further backing by SBA.

The rights and privileges granted to the inhabitants of Rumah Kajan Sigeh are as following (Sarawak Government Gazette: No. 2790, 1991):

(a) Fishing in the Loagan Bunut, Sg. Bunut and Sg. Tru (Teru) providing that the activities:
   (i) do not involve the use of any chemicals, explosives, electricity generating equipment, spear guns or diving equipment;
   (ii) are not in contravention of any additional regulations created under the National Parks Ordinance (Sarawak Cap. 127); and
   (iii) are not in contravention of any provisions of the Wildlife Protection Ordinance (Sarawak Cap. 128), or any rules created hereunder.

(b) Hunting unprotected wildlife in the National Park for consumption but not for sale, barter or profit and it shall be an offence to hunt the protected wildlife species as listed in the First Schedule of the Wildlife Protection Ordinance (Sarawak Cap. 128).

(c) Taking timber and poles for firewood and construction of their longhouses and boats but not for sale, barter or profit; and

(d) Collecting from the National Park the forest produce such as damar, rattan, rubber including jelutong, getah rian and malau, pandan leaves and leaves of other plants for basket making and weaving and edible plants or parts thereof, including fruits, leaves and roots.