ECOTOURISM, LOCAL COMMUNITY AND "PARTNERS FOR WETLANDS" IN THE LOWER KINABATANGAN AREA OF SABAH: MANAGING CONSERVATION OR CONFLICTS?*

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Abstract

Scientific research on biodiversity conducted by WWF Malaysia during the 1980s claimed that the Lower Kinabatangan Floodplain (Wetlands) including Sukau had the very good potential for ecotourism because it is home to many rare and endangered species such as orangutan, and the proboscis monkey, Borneo elephants, birds and reptiles. In the 1990s, an ecotourism project was introduced to SukauVillage where several private tour operators built tourist lodges along the Kinabatangan riverbank. Since then, some local people (Orang Sungai) have begun to participate in tourism activities and services. Many forest areas in this wetland area (Lower Kinabatangan area) however, were converted into palm oil plantations. Thus, the main questions in this scenario are to what extent has the Partners for Wetlands program have impacted the socio-cultural life of the local community, and what has been the effect on the stakeholder's activities in this area? To what extent can ecotourism be considered as a potential instrument for community development and/or environmental conservation in this wetlands area? Does the Partner for Wetlands program manage conservation, or does it manage conflict of interests among the stakeholders in this area?

Keywords: Ecotourism, wetlands, Kinabatangan in Sabah, local community and economic development

Introduction

The Lower Kinabatangan area became a "protected area" for wildlife when a new Wildlife Conservation Enactment established in December 1997¹ and, the sanctuary is protected under the State Land Ordinance (1930). In the early 1990s, WWF Malaysia in collaboration with the Ministry of Tourism, Environment, Science and Technology, produced the National Ecotourism Plan. In, this plan, the Lower Kinabatangan area was highlighted as 'an ecotourism hotspot' in Malaysia. In mid 1998, the *Partners for Wetlands Program* was set up by WWF Malaysia and the Sabah Wildlife Department to actively seize opportunities for wetland management, conservation and restoration.² In principle, the stakeholders, from the local

community, oil palm plantations, the tourism industry, NGOs and relevant government agencies work together as partners to identify the wise use of the wetland towards a common purpose for economic development and conservation. Among the Partners for Wetland's activities, tree-planting, the development of community-based ecotourism models and elephant research are being implemented.

Furthermore, a vision, "Kinabatangan, A Corridor of Life" formulated by WWF in the year 2002 is intended to provide a guideline to stakeholders and industries in order to maintain the sustainable development of Kinabatangan, especially through ecotourism development. Subsequently, on January 15, 2002, the Chief Minister of Sabah, Datuk Chong Kah Kiat, officially announced that Kinabatangan Wildlife Sanctuary had been gazette.³ From this background series of events, Sukau village has emerged as one of the best-known ecotourism destinations in the lower Kinabatangan area alongside Abai, Bilit and BatuPutehVillage.

What are the "Wetlands" and "the Vision of Partners for Wetlands" in Lower Kinabatangan Area?

The Ramsar⁴Convention on Wetlands 1971 defines wetlands as "areas of marsh, fen, peatland or water whether natural or artificial, permanent or temporary, with water that is static, fresh, brackish or salt, including areas of marine water, the depth of which at low tide does not exceed six meters." To many people, wetlands are seen as wastelands, a sometimes dangerous and strangely hostile environment. As a result, millions of hectares of wetlands had been destroyed worldwide. To some extent, however, wetlands are among the richest and most productive ecosystems on earth and nature's gift to the mankind. Besides performing as "flood control" due to the heavy rainfall, wetlands in the Lower Kinabatangan area can be exploited for human use in the form of products such as fruit, fish, shellfish, deer, crocodile and etc. The natural beauty as well as the diversity of animal and plant life in many wetlands makes them ideal location for ecotourism.

In the Lower Kinabatangan area of Sabah, the main role played by WWF staff is to work together with various government agencies for forest and wildlife conservation, to ensure that the vision of "Partners for Wetland" is achieved. The visions include⁷:

- creating a forest corridor along the Kinabatangan, connecting the coastal mangrove swamps with the upland forests, where people, wildlife, naturebased tourism or ecotourism and local forest industries thrive and support each other;
- supporting a thriving and diverse economy that offers opportunity and choice to local people and businesses.
- ensuring good environmental management of the natural capital on which all partners depend.
- monitoring a landscape in which agriculture, people and nature conservation are united by their common source of vitality water.

The Concept of Ecotourism and Local Community Participation

The Malaysia' Ecotourism Master Plan (1996) adopted the official definition of ecotourism produced by the International Union for the Conservation of Nature (IUCN) of which Malaysia is a member. Ecotourism is:

Environmentally responsible travel and visits to relatively undisturbed natural areas, in order to enjoy and appreciate nature (and any accompanying cultural features, both past and present), that promote conservation, has low visitor impact, and provides for beneficially active socio-economic involvement of local population.⁸

There are two types of ecotourism. The first is a deep form of ecotourism, commonly represented by small, specialist-guided groups with highly responsible behaviour towards the natural environment. The second is a shallow form of ecotourism, those who visit a destination area for a few days, unlikely ever to return to the same place because they may be more interested in their travel experience and behave less responsibly towards the natural environment. This second group of ecotourism can possibly create adverse effects on the environment and the socio-cultural life of local communities in the destination areas if their presence is not controlled or managed carefully.

In general however, the term "local participation" can be defined as "the ability of local communities to influence the outcome of development projects, such as ecotourism, that have an impact on them. ¹¹ The concept of "local community" here means "a group of people who share a common identity such as geographical locations, class and/or ethnic background. ¹² The local community may also share a special interest or dependence, for their livelihoods, on natural resources such as hunting, fishing, wood collection, timber harvesting, trees, land and soil to sustain their increasing population. The concept of "local community" in this research however, is to mean a group of people who are living in the specific boundaries of the (eco)tourism destination area, together with natural and cultural elements, where the tourist experience take place, and tourist product is produced, and who are potentially affected, both positively and negatively, by the impacts of (eco)tourism development.

Who are the Ecotourists in Sukau Village?

There are two types of visitors or tourists that the majority of the respondents or villagers most deal or interact with in Sukau village: international tourists (93.0%) and domestic tourists (7.0%). According to the respondents, most of the international tourists, with whom they commonly interacted, came from the United Kingdom (26.0%), Japan (11.0%), France (10.5%), Australia (7.5%), USA (7.0%), Germany (6.0%) and Sweden (5.5%) (Hussin, 2006: 279). As for the domestic tourists, most of them came from Sandakan (2.0%), Kota Kinabalu (4.0%) and Peninsular Malaysia (1.0%). This meant that local people were exposed to various categories of people and cultures in their everyday life in ecotourism-related-activity.

Partners for Wetlands Programs and Ecotourism: Managing Conservation or Conflict?

The Non-Governmental Organisations (NGOs) are widely known as important players in supporting local community participation in tourism or ecotourism development in much of the less developed world. This is because they have the resources, networks and technical expertise to facilitate the empowerment of communities to be involved or not in tourism or ecotourism development. However in practice a conflict of interest occurred, particularly regarding the dispute over environmental conservation and the traditional use of the forest sources or wildlife, the dispute over the land lease issue, and the struggle for political power at the village level, all of which could increase the tension in the relationship between the NGOs and the local community. This is actually what was going on in the case of Sukau village as demonstrated in the following discussion.

The Dispute over the Environmental Conservation Program and the Traditional Use of the Forest and/or Wildlife Resources

Two main NGOs operate in Sukau. The first is the World Wide Fund for Nature, Malaysia (WWF). This is a well-established NGO, not only in Malaysia but also all over the world. In the Lower Kinabatangan area of Sabah, the main role played by WWF staff is to work together with various government agencies for forest and wildlife conservation to ensure that the vision of "Partners for Wetland" is achieved. The visions include:¹⁴

- creating a forest corridor along the Kinabatangan, connecting the coastal
 mangrove swamps with the upland forests, where people, wildlife,
 natured-based tourism or ecotourism and local forest industries thrive and
 support each other;
- supporting a thriving and diverse economy that offers opportunity and choice to local people and businesses.
- ensuring good environmental management of the natural capital on which all partners depend.
- monitoring a landscape in which agriculture, people and nature conservation are united by their common source of vitality water.

In other words, the WWF's role was most likely as a monitoring agency for a long-term strategy for forest and wildlife conservation in lower Kinabatangan. This is because, as Caroline Pang¹⁵ elaborates,

"If there is no common vision among those stakeholders in Lower Kinabatangan, further loss of forest and fragmentation into smaller patches could result. This is likely to increase the vulnerability of the forest to outside disturbances such as drought and fire [because much of the forest area was cleared for oil palm plantation], and to increase conflicts between humans and wildlife".¹⁶

That is why, from the WWF perspective, loss of forest areas could lead to loss of wildlife and tourism opportunities, and increased monoculture cropping such as oil palm plantations could decrease economic diversity in this area. Therefore local residents are advised not to concentrate in commercial agriculture but to change and diversify land use or restrict their employment to other sectors such as ecotourism.

Therefore, the vision of WWF's Partners for Wetland is a vision for rainforest and wildlife conservation in the Lower Kinabatangan area including the Sukau area. In some circumstances, this vision is not parallel with the vision or life struggle of the local community. Although Sukau community saw that the WWF vision is a good thing for future development of Sukau and Lower Kinabatangan, currently it cannot overcome the major problem faced by this remote community, that is, povertyand/or underdevelopment. To ensure they become developed and progressive they have to clear the forest on their land to plant the oil palm trees for better income in the near future. This is the main conflict of interests between the WWF and the local community of Sukau. It is a conflict between the land used for oil palm plantation and the conservation programme in the area. As the Project Manager of Partners for Wetland has argued,

"There were so many people wanting to develop the land around Lower Kinabatangan area [for agricultural activities] but less of them were interested in the conservation programme, particularly the older generations. The WWF would approach the young generation in this area because they have more sympathy with the conservation issue".¹⁷

As a result, WWF representatives have concluded that the villagers in Sukau find it very hard to fully support and cooperate with them towards a vision of conservation through Partners for Wetland in Lower Kinabatangan. On the other side were the villagers of Sukau. They perceived that the WWF had made too many promises but they never did what they promised. A few village committee members claimed, for example, the WWF never took serious initiatives towards the involvement of the local community in ecotourism development, and they never showed how to overcome the problem created by wild elephants¹⁸. Thus this conflict of interest between them continued.

The second NGO involved actively in the community conservation programme in Sukau village is *HUTAN* or Kinabatangan Orang-utan Conservation Project (KOCP). The KOCP was set up in 1998 by two French primatologists¹⁹. The project objectives and activities are²⁰:

- to study orangutan ethno-ecology in disturbed habitat or secondary forest.
 The main research activity is observation of habituated wild orangutan at
 an intensive study site in secondary forest. These observations include diet
 composition, daily activity, ranging patterns and social behaviour.
 Detailed vegetation studies are also conducted with the project botany
 team;
- to achieve long-term conservation of the orangutan population in the Lower Kinabatangan area. This will include a survey onthe number of orangutan and distribution (nest counts by helicopter and from the ground), the

assessment and mitigation of orangutan or human conflicts and a plant nursery for those fruit tree species most eaten by orangutan;

- to develop public awareness of orangutan preservation needs. This
 includes the production of education materials and development of
 awareness activities, such as village participatory workshops and nature
 education programmes for school children, within the Kinabatangan area;
- to initiate a process of technical assistance to build up and reinforce the capabilities of Sabahan conservation professionals: for instance, the development of a training platform at the KOCP Headquarters to train local research assistants, the personnel of relevant government agencies and Malaysian university students in wildlife research and conservation techniques;
- to involve the local community in the management of the Lower Kinabatangan Wildlife sanctuary: the development of a model programme where members of the local community are entrusted with the status of "Honorary Wildlife Warden" under the Sabah Wildlife Department;
- to initiate local community development activities compatible with habitat
 and wildlife preservation: encourage alternative and sustainable ways for
 local communities to use local natural resources, for instance to develop a
 community-based "Orangutan Tourism Model Project" in collaboration
 with the Sabah Wildlife Department and Danish Cooperation for
 Environment and Development (DANCED);
- to assist Malaysian research institutions, government agencies and NGOs in projects related to habitat and wildlife preservation: participate in the design and implementation phases of conservation-oriented projects by other agencies or institutions in Sabah (such as WWF, University Malaysia Sabah, Sabah Forestry Department etc).

In other words, KOCP has collaborated with many related government agencies, NGOs, education institutions, and the local community to achieve their objectives. During this research, KOCP employed 30 staff, the majority of whom are from Sukau village, with a small number from Bilit and Abai villages. Most of them are the village youth, mostly between 20 and 30 years old. In terms of the daily research operation, KOCP was separated from the WWF Partners for Wetland project. KOCP, however, hasreceived sponsorship from the United Kingdom and Holland WWFs. The WWF United Kingdom for example, sends its funding through WWF Malaysia, so KOCP cooperate with WWF Malaysia to put this funding to use in carrying out their projects²¹. The Director of KOCP elaborates,

"For all our projects roughly we need around RM800,000.00 per year. Of this the majority goes to paying the salaries of our staff here and the other 20% goes to Sukau... we are paying the salaries of 30 people, so our budget is of course much higher. Staff salaries including for management take up RM300,000.00 per year... So, most of the money goes to staff salaries, also boats, transport, the rest...the fuel for boats is expensive."²²

The disputes, however, occurred between the KOCP and the villagers because of a few issues. For instance, the first was the dispute on the land leasing agreement; the second that Security and Development Village Committee (JKKK) misunderstood or mistrust KOCP roles in the village. The following discussion will elaborate these issues.

Disputes over the Land Leasing Agreement

In the early stage, KOCP set up their headquarters building on a piece of land belonging to one of the villagers in the lower Sukau area. The agreement was made with the family who owned the land but then a few problems arose because the conditions of the agreement were claimed by the family owner to be blurred. For instance, the Director of KOCP explained how the rent agreement was made with the landowner as follows:

"We didn't lease it by the month, but in total I believed we paid more than RM45,000.00 for ten years, but with 3 conditions attached. The first one was the amount of money. The second was that we had to rebuild their house, pay the carpenters, and paint it and beautify it. Thirdly, we had to employ their family members, so at one time we had 8 of them working for us. Now it's a bit less because some of them went to West Malaysia."²³

After the head of the family passed away, one of the sons led his family members to force KOCP to review the previous land rental agreement because they felt the payment that they had received was only RM20,000.00. In the early negotiations, KOCP agreed to make a new agreement every five years to occupy the land, but when written agreement was produced, it stated that the KOCP was allowed to stay on this land for 30 years. Thus, the member of this family felt they had been cheated by the KOCP. Finally, the relationship between the members of this family and the KOCP reached a maximum point of conflict where the Director of KOCP and her family were forced to leave the place, and the police had to intervene in the disputes for security reasons.²⁴

As a result KOCP daily operation and activities have been stopped for nearly three months, and the Director of KOCP and her family have moved to a new office where the site and the building belong to Sabah Wildlife Department in Sukau. During this research, KOCP activities operated as usual, but at this time there were only two landowner family members still working with the KOCP. The disputes regarding the land rental agreement between these two parties were still unsolved.

The Struggle for Political Power at the Village Level: JKKK Mistrust the role of KOCP in the Village

In general, most of the villagers were satisfied with the role of the NGOs such as WWF and KOCP in Sukau village. Some of the JKKK members, however, were suspicious of the role of KOCP in the village for a few reasons. One of the JKKK members claimed:

"We can't deny that in many ways having them here has really helped us a lot. However there are still some issues that the villagers are not particularly happy about. For instance, the KOCP came here originally as researchers on the orangutans, but we know that every researcher has a time frame in which to do his research. We see that KOCP has already been here a long time [six years]. When we ask them how much longer they are going to be here, they find it difficult to answer the question.

The real reason, however, why some of the JKKK members are suspicious of the KOCP activities in the village is to do with the political power struggle at village level between them. One of the members of JKKK argued that the KOCP was sincerely doing work for the good of the community. However, day-by-day it has demolished the traditional role of JKKK in the village. This effect, however, has been not realised by the Director of KOCP. As she mentioned, "the situation is always changing. It is sometimes difficult to see what the effects are".

For KOCP, however, the main reason why this conflict of interests occurred is because in the early years the KOCP held a workshop among the kampong leaders because one or two of them felt that their positions were a bit threatened. To overcome this problem KOCP called a special workshop between the village leaders and KOCP. The main topic of this workshop was how to settle any conflicts or communication problems²⁵. Dr Isabelle commented,

"There was one case when UMS sent an expedition of 60 people, all arranged by UMS. The press and Datuk Karim Bujang, the Deputy Minister for Sabah Ministry of Tourism, Culture and Environment accompanied them. They went straight away to the place where the UMS project was organised. A couple of the kampong residents saw Datuk Karim Bujang go to that place, and felt a bit unhappy about it because they weren't involved at all in the programme...in the village it can a bit difficult to explain this. So, from these situations, problems can sometimes arise, but not major ones"²⁶.

Although for KOCP the above incident was not a major issue, some educated local community members such as a group of school teachers and the JKKK, still believed that the KOCP management had denied the role of the JKKK of Sukau. In many circumstances, they have argued thatthe government agency officers andeducation institutions much prefer to make contact directly with the KOCP and not with the JKKK.²⁷ Thus, many JKKK members are not really satisfied with the roles and the ethics of the KOCP management since they have been operating in the village because they are less respectful of the traditional role of the JKKK.

At one time, many researchers stayed at the KOCP headquarters. The private lodge managements in Sukau viewed this situation as a new competitor in ecotourism businesses. Some of the villagers were also suspicious about the role of KOCP. They started asking whether the KOCP's main objective in the orangutan research had been diverted to the ecotourism businesses. This issue was really heated at that time.²⁸ The KOCP management, however, has argued that this new

project, called community–based ecotourism, was launched because it was initiated by the kampong people themselves (particularly run by a group of KOCP staff under the Committee for Tourism and Development). According to Dr Isabelle,

"There are actually a lot of people involved in this project. For instance, there has already been a group of 10 people from Denmark; in 4 days they spent a total of RM10,000.00. With that RM10,000.00 we have done studies on how the money went into the village. Nearly 50 families got some share of it. For instance the tourist guides, the boatmen and food and accommodation providers. That is the purpose of this project. There are benefits for the village people.²⁹

As a result, the conflict of interests between the JKKK committee members and KOCP is continuing. According to one of the main respondents, the KOCP management should cooperate seriously with the Sukau residents to develop ecotourism in the village, to avoid any misunderstanding between them, and to benefit both parties. This, however, has not been done by the KOCP³⁰. At the same time, however, the majority of the villagers have realised that at the beginning of the conservation project in Lower Kinabatangan, WWF and KOCP had ceased cooperating with them. Finally, these NGOs were also arguing with each other, particularly on the issues of who should lead a certain project or programme, and who should receive the funding from the international donors³¹. The conflict of interests between these two NGOs tacitly increased day by day.

One of the JKKK committee members expressed his views regarding the role of the WWF in Sukau village thus:

"I am fairly satisfied. I especially appreciate the workshops they have conducted to raise the awareness of the village residents. Even though they have not been continued, at least it helped a bit to make them understand the situation. I feel that recently [however] a lot of their work has been suspended or left incomplete. [This is because] I would guess it has something to do with the officer that has been appointed... but I don't know why their project has become this way [suspended or left incomplete]."³²

The Struggle for a Living between the Villagers and the Wildlife

The struggle for a living between the villagers and the wildlife in the Lower Kinabatangan area including Sukau village has a long history because this area was a natural treasure of many plants and wildlife species such as the fascinating proboscis monkeys, elephants and orangutans for centuries. During this research, the conflict between human and wildlife occurring in this area was a result of man's encroachment into the habitat space of wildlife animals. There are six main species of animals which have always been in conflict with the villagers and the oil palm estate management around Sukau village:the elephants, orangutans, wild boars, porcupines, pig-tailed macaques and long-tailed macaques.³³ All six of these species eat and damage oil palms, fruit and crop trees, causing loss to plantations, and also threatening the everyday life of local residents.

The data from the face-to-face interview survey has revealed a similar pattern, to that claimed by the WWF. 37.9% of the respondents believed that the wild animal which affects most of the villagers' crops is the elephants, followed by wild boars, 27.9%, monkeys, 23.8%, orangutans, 5.4%, bats, 3.0% and civets, 2.0% (see Table 1). 38.3% of the respondents also felt that the wild animals affecting the villagers reared animals most are civets, followed by snakes, 29.9%, and monitor lizards, 18.5%. 25.5% of the respondents felt that crocodiles are the wild animals that affect the villagers' daily life activities most, particularly related to the river of Kinabatangan. They were followed by elephants, 21.5%, monkeys, 9.8%, and others, 3.7%. This means that the conservation effort in the wildlife sanctuary area has increased the numbers of certain types of wild animals such as crocodiles in this area. This situation was not really pleasant for the villagers because crocodiles have recently bitten fishermen coming from the nearby oil palm estate at Tenagang ox-bow lake on a few occasions. According to the villagers, these dangerous events had previously not happened for a long time.

The conflict of interests between the local people and the elephants (conservation efforts), however, has become a major issue in Lower Kinabatangan area. The question is why and how did this situation happen? Many forest areas and riverside forests in Lower Kinabatangan were rapidly being developed into oil palm plantations, a major public road (for instance at Batu Puteh) and human settlement areas. As a result many forest areas have became fragmented, and cut off from the remaining extensive forest blocks such as forests of Pin-Supu, Gomantong-Pangi and Keruak Forest Reserves and the Kinabatangan Wildlife Sanctuary area. There are currently about 95-115 elephants ranging in the Lower Kinabatangan river area. These fragmented patches of forest have restricted the elephants' movement from one location to another because the routes are too small for them. Having no other choice, these elephants have to bulldoze their way through oil palm plantations and village areas to get to the next patch of forest to look for food. Consequently they consume anything suitable for eating along the way.

These elephant activities have damaged a lot of oil palms trees particularly belonging to local people and the oil palm estate companies surrounding Sukau village. For instance, the Sukau Village Chief comments that, at one time, a group of elephants entered his oil palm plantation and damaged 80 oil palm trees in a night. After that, the elephants frequently entered his 20 acre oil palm plantation. To overcome this problem, he has built electric fences around his farm. This action was not very effective, however, because on April 2003, for instance, they entered his farm again and damaged 8 of his oil palm trees³⁵. What makes him feel so much regret is that his oil palm plantation was no longer productive because of thedamage. He has to plant new oil palm trees to replace the damaged one. New oil palm trees are only available to cultivate in three years time. He funded all theselosses. The government agencies and NGOs did nothing in terms of compensation for the losses, and they have not really taken any effective action to overcome elephant-related problems to date. For that reason, many villagers make their own effort to overcome these problems including the last option such as shooting them if they put the villagers' lives and property in real danger.

The Sabah Wildlife Department Officer has commented on this compensation issue as follows:

"Frankly speaking, there was no compensation act under the state government [Sabah Wildlife Department]...what is the priority at this moment is to monitor and control the movement of these elephants...there was a plan to relocate these elephants to another area, however we have to consider the cost... one more thing about these animals...if we send them to another place, for instance 500 km from here, they are able to return here, which it happened at the National Park in Pahang... I think what the villagers can do is ask for compensation through other channels; for instance the JKKK can forward the damage reports to the Sabah Agriculture Department and/ or FELCRA and ask for the replacement of the seed trees of the oil palms." 36

Table 1: The respondent's opinions regarding wild animals in the Kinabatangan Sanctuary area that most affect their crops, domestic animals, and daily life activities (N=200) (Respondents can choose more than one option)

Wildlife Animals	Effect most the villagers agricultures crops (n=499) (%)	Effect most the villagers domestic animals (n=308) (%)	Effect most the villagers daily life activities (n=265) (%)
Primates such as monkeys	23.8	2.0	9.8
Elephants	37.9		21.5
Civet-cats	2.0	38.3	0.8
• Bats	3.0		0.4
Wild boars	27.9		
Orang-utans	5.4		
Crocodiles		36.0	25.3
Jungle cats		0.9	0.8
• Snakes		29.9	
Monitor lizards		18.5	
Other			3.7
No effect at all			37.7
Total	100.0	100.0	100.0

Source: Data from fieldwork, 2003.

According to the villagers, however, the above suggestion was never practiced by those government agencies. The burden of all losses had to be borne by the villagers themselves. The elephants, moreover, also damaged the oil palm trees belonging to the oil palm company plantations or estates. One of the estate managers expressed his views regarding this problem:

"The elephants are the main enemy for the oil palm seeds and trees of our oil palm plantation because a group of elephants can damage hundreds of trees a day. Other animals such as wild boars and orangutans would not be able to damage the oil palm trees on a huge scale as the elephants did. At one time, there were 60 elephants in our estate. They damaged 300 oil palm trees within two hours where the age of these trees was mostly below one year So to prevent these elephants from entering our estate we built electric fences around our plantation...our workers will make 24 hour patrols to watch these elephants"³⁷.

The orangutans, on the other hand, also have the capability of damaging the oil palm trees. The estate manager describes this situation,

"In the early period of our oil palm plantation work in the year 1997 we had a big problem with orangutan, particularly in the area of nearby Menanggol River and Tenagang Kecil. These orangutan, for instance, have the capability of damaging around 50 to 100 of the young oil palms trees, aged below six months old, in a day. Therefore, our workers patrolled 12 hours a day because the orangutans never look for food at night. When all these oil palms trees were more than one year old, then the orangutan became less of a threat for these crops"38.

What became a conflict between estate managers and the NGOs regarding these wildlife related problems was the resulting illegal killing of the elephant population or the orangutans by some of the estate workers³⁹. There was no concrete solution to overcome this problem between all the stakeholders in the Lower Kinabatangan area. This situation puts the survival of the wildlife frequently in danger. Because most of the oil palm plantations are privately owned, the owners (whether they are the villagers or oil palm private companies) have theauthority to protect their property or their lives from the threat of this wildlife⁴⁰. NGOs, however, want to see that the local community members kill all these protected animals such as elephants when there is "really no other alternative" to protect themselves from danger, and not to take for granted that they can kill, because killing these animals is a tragedy for the wildlife conservation effort in the area. This is the dilemma faced by all the stakeholders in Lower Kinabatangan, and it remains unresolved.

The Disputes over Conservation Programme between the Villagers and the Government Agencies

The role of a few government agencies in ecotourism development and conservation projects in the Lower Kinabatangan area including Sukau village is significantly important. They are Sabah Wildlife Department, Sabah Forestry Department, Kinabatangan District Office, Ministry of Tourism, Culture and Environment of Sabah. All these government agencies have further collaborated with the NGOs such as WWF and KOCP, particularly to maintain the forest and wildlife conservation project around the village. The disputes, however, which occurred between the villagers and these government agencies commonly related to specific issues such as elephant related-problems, illegal hunting, illegal logging, the homestay program and the social, economic and political development issue at the village level in general.

i. Collecting Forest Resources and Hunting Wildlife Animal Activities

Although 51.0% of the respondents in the face-to-face interview survey strongly agree, and 40.0% agree, with the declaration of Lower Kinabatangan area as a protected area, 89.5% believe that wildlife hunting and gathering activities are still carried out by the villagers. Furthermore, 86.5% of the respondents agree that the government should allow them to continue these activities but in a controlled way (see Table 2).

The main reason why the villagers still carry out hunting activities was expressed by one of the village committee members as follows:

"Actually, we can't deny that this kind of thing [hunting activity] does occur. This because hunting was always been the tradition of the Orang Sungai. If there is to be any kind of large social gathering or feast, they will go hunting for their own use; if there is a wedding it's the same. One of the earliest points of discussion was to allow the hunting to continue as long as there was approval from the wildlife department"⁴¹

Table 2: The Respondents Opinion Regarding Protected Area And Hunting Activity (N=200)

Opinion Category	Frequency	%
The declaration of Lower Kinabatangan as		
a protected area:		
Strongly disagree	3	1.5
 Disagree 	9	4.5
In the middle	5	2.5
Agree	80	40.0
Strongly Agree	103	51.5
Hunting and gathering activities are still		
carried out by the villagers:		
• Yes	179	89.5
• No	21	10.5
Hunting activities should be allowed in a		
controlled way:		
• Yes	173	86.5
• No	27	13.5

Source: Data from fieldwork, 2003.

The Wildlife Conservation Enactment, Number 6 of 1997 Section 29 has categorised hunting licences into the following categories⁴²:

- sporting licence;
- commercial hunting licence;
- animal kampong licence; and
- such other licences as may be prescribed

The types of wild animals, which these licences entitle the holder to hunt, are listed in Part 1 of Schedule 2 and Schedule 3 of the Enactment. Commonly, the villagers are entitled to hunting licences under the special category of animal kampong (village) licence. Section 32 (1) states;

"an animal kampong licence may be granted to a suitable person to hold on behalf of and for the benefit of the kampong to which that person belongs." ⁴³

Moreover, in the section 32(3) the enactment states:

"the Director shall also specify in the licence the weapons and methods of hunting that may be used for hunting under the licence and the maximum number of animals of each species that may be hunted and he may at any time reduce such number if he is satisfied that an animal or animals of any species specified in the licence or of any other species have been illegally captured, wounded or killed in the area to which the licence applies."⁴⁴

Besides hunting activity, the majority of the local community of Sukau still depends on the forest resources for their everyday life-related activities. The figure from the face-to-face interview survey shows that 19.5% of the respondents believed that majority of the villagers were still collecting herbs from the forest in the protected area for traditional medicinal purposes. Hunting for wildlife meat is 16.9%, collecting rattans/bamboo/resins, 14.3%, collecting firewood, 14.5%, collecting leaves or seeds for food, 12.6%, logging activity, 10.7%, collecting jungle fruits 8.3%, and only 2.9% of the respondents believed that they were not dependent at all on forest resources in the protected area (see Table 3).

Table 3: The Respondents opinion regarding types of activities, which still depend on forest resources in protected area (N=200) (The respondent can choose more than one option)

Type of activity	Frequency	Percent
Hunting for wildlife meats	118	16.9
Collecting rattans/bamboo/resins	100	14.3
Collecting firewood	101	14.5
Collecting herbs for traditional medicine	136	19.5
Collecting jungle fruit	58	8.3
Collecting leaves or seeds for food	88	12.6
Logging	75	10.7
Other	2	0.3
Not dependent at all on the forest resources	20	2.9
Total	698	100.0

Source: Data from fieldwork, 2003

This means that the relationship between forest resources and the everyday life of the local community is significantly important. The local people, however, frequently argued that the way some government agency officers enforce the Sabah Conservation Enactment 1997 on them was "unfair" in comparison to the private companies. One of the village committee members argued this as follows:

"[About the role of Sabah Wildlife Department]... I think they give more priority to those things that can bring them some benefits... like Gomantong⁴⁵ that is profitable. Areas of the sanctuary which have timber trees, they control. It has been like that since I have lived here. For instance, if elephants have destroyed 15 acres of oil palm and we call them for help, they never come. But if the sound of chainsaw cutting timber is heard, they're guaranteed to be here quickly (laughs)."⁴⁶

He continues about the role of Sabah Forestry Department in conservation enforcement as follows:

"They're the same. If the local people go into the forest and just take one piece of wood to make a small boat, they will complain. When the timber companies go in, they don't do anything."⁴⁷

The Sabah Forestry Department officer in Kinabatangan, however, has claimed that their role is to ensure that the ecotourism areas such as the reserved forest and the wildlife animal habitats are sustained [monitoring and control], and not damaged by illegal loggers or illegal hunters, which in the end could destroy the wild animal habitat. He stated that:

"Our department never totally prohibited the villagers from using forest resources, but they must not overuse all these resources to ensure that there are still forest areas whenever they wake up the next morning. If we do not visit a certain area at two or three-month intervals, intruders will take advantage and cut down the trees in the sanctuary area. They were also logging illegally, and collecting the other forest resources such as rattans and woods for their houses without a permit. This type of action is prohibited because they will damage the forest habitat." ⁴⁸

The villagers, however, are never concerned about whether to apply for a permit or not because the forest area surrounding the village is traditionally their habitat. It is common practice among the villagers to get verbal approval from the Sabah Wildlife Department to hunt. For instance, they just meet the officer in charge and inform him they are going into the forest to hunt. ⁴⁹ This type of practice, however, confused the NGOs and the tourist industry whichcategorised this hunting activity as illegal. Thus, the conflicts of interest between all these stakeholders continue.

Although 52.0% of the respondents in the survey claimed that there was no conflict of interest between the villagers and the conservation programme managers/workers (see Table 4), 19.5% of the respondents were not satisfied with how these government agencies and/or NGOs tackled the elephant issues; 3.5% were not

satisfied with how these agencies overcame the problem of oil palm agriculture damage by the elephants; 5.5% were not satisfied with the style of decision making of these agencies regarding illegal logging by the villagers and outsiders; 7.5% were not satisfied with the hunting issues between the villagers and the outsiders; and 12.0% were not satisfied with other issues such as the lack of improvement in clean water supply, electricity, local handicraft training centre, roads and so on.

Table 4: The conflicts of interest between the respondents and the conservation programme managers/officers (N=200)

Issue of Conflicts	Frequency	Percent (%)
No conflict of interests occurred	104	52.0
Conflict of interests occurred regarding:	96	48.0
 not satisfied about how government agencies and/or NGOs tackle the elephant issue 	39	19.5
 oil palm agriculture damaged by elephants 	7	3.5
 logging issue by the villagers or outsiders 	11	5.5
 hunting issue between the villagers and outsiders 	15	7.5
Other	24	12.0

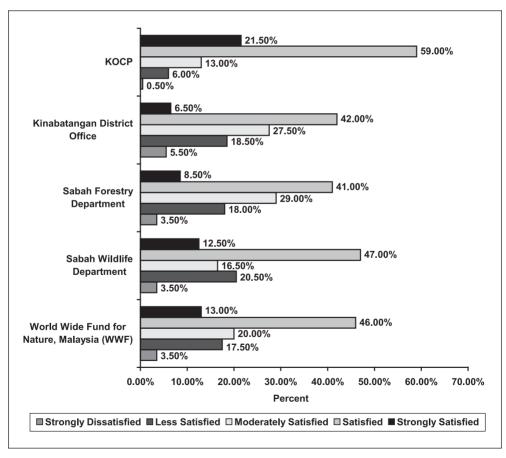
Source: Data from fieldwork, 2003.

ii. The Role of Government Agencies & NGOs in Managing Wildlife and Rainforest Moreover, the villagers have given their views regarding the role of the government related agencies and the NGOs in managing wildlife or rainforest conservation policy in the Lower Kinabatangan area including Sukau village, as shown in (Figure 1). The organisation that satisfiedmost the respondents in terms of managing wildlife or rainforest conservation effort was HUTAN or KOCP, where 59.0% of the respondents felt that they were satisfied with the KOCP. This was followed by Sabah Wildlife Department 47.0%, WWF, 46.0%, Kinabatangan District Office, 42%, and Sabah Forestry Department 41.0%. The organisation that least satisfied the respondents was Sabah Wildlife Department, 20.5%, followed by the Kinabatangan District office, 18.5%, Sabah Forestry Department, 18.0%, WWF, 17.5%, and KOCP only 6.0%. The reason for this trend was because the majority of the respondents felt that government agency workers and/or managers were not performing their job effectively in managing the wild-animal-related problem, and ecotourism-related issues compared to the NGOs like KOCP and WWF. Although there was also a conflict of interests between the villagers and NGO representatives regarding certain issues as mentioned above, in the eyes of the villagers, these two NGOs' officers and workers are more friendly, closer to the local people, and more understanding of what is actually going on and/or what the problems are at the ground level faced by the local people of Sukau. As mentioned by one of the villagers:

"The villagers "trust" the Director of KOCP because she is able to sit together and listen to different views expressed by the local people...it was not for money reasons all the time that the villagers seek from her because without the Director of KOCP I think the villagers still can get some money in various ways...at this moment, moreover, the Director of KOCP is the homestay coordinator of Sukau village." ⁵⁰

The NGOs also claimed to have limited resources to overcome most of the problems faced by the villagers. Thus, the lack of coordination between all the government agencies has put their effectiveness in question, particularly to solve the problem of the local community versus wildlife in the Lower Kinabatangan area⁵¹. Moreover, the lack of coordination between these government agencies has left the question of social infrastructure and facilities in SukauVillage unsolved to date.⁵²

Figure 1: The respondent's perceptions on the role of the government agencies and NGOs in managing wildlife and rainforest (N=200)



Source: Data from fieldwork, 2003

The Villagers and the Environmental Pollution Issue

The conflicts of interest also occurred between the villagers and the oil palm company management regarding river pollution. In general, the decline of natural resources in the Lower Kinabatangan was closely related to logging activities in the 1950s, and later the oil palm estate development. The conversion of large forest areas to oil palm plantation has seen a dramatic rise since the early 1970s and represents the major land use change in recent times. There are 102 oil palm estates in Lower Kinabatangan. About 27 oil palm factories operated in this area the oil palm plantations and their development pose large scale and direct threats to natural ecosystems, in particular loss of biological diversity, elimination of rare species and pollution of the freshwater ecosystem. Noticeable environmental pollution can be traced through both aspects, organic and inorganic chemical pollutants. This process occurs at the three stages during the development of oil palm estates such as land clearing (increased surface erosion); growth period (fertiliser and pesticide runoffs); and processing of oil palm (organic and solid effluents, largely into rivers).

Traditionally, fishing is an important village activity for food and a source of income. The main freshwater products that would fetch relatively high market prices are freshwater prawns, *ikan ubi* and *kaloi*. In the Sukau area however, the activities upstream from an oil-palm processing factory, which releases its effluent into the river, have affected freshwater prawns and fish. There was a thin film of chemical or oil residue over the water surface during the waste release period by the factory. Its toxicity not only affects fish and other animals but may also be a potential threat to the health of local people. This is because many of the villagers and wild animals still use and drink water from the river in their everyday life activities.

The face-to-face interview survey results show that 63.9% of the respondents believed that private company and semi-government agency-owned oil-palm estates were the major cause of environmental pollution, particularly the pollution of the river and the lake of Sukau village (see Table 5). In comparison, 21.4% of the respondents believed that logging activity can cause river and lake pollution, and only 5.7% believed the ecotourism project and daily ecotourism activities cause it.

For the destruction to rainforest, flora and fauna, 49.5% of the respondents believed that this was done by private company and government agency oil palm estates activity. 39.5% believed logging activity did it, and 8.9% believed the villagers who owned small oil palm plantations did it. For the extermination of wild animals, 55.8% of the respondents believed it was done by the oil palm estates belonging to private companies and government agencies, 27.2% believed it was done by logging activity, 8.1% believed it was done by other activities such as illegal hunting, and commercial and sports hunting, and 6.4% believed it was done by the villagers who own oil palm plantations. In contrast with the other activities mentioned above, the villagers believed that the ecotourism project and daily ecotourism activities were not the main cause of most types of pollution in Lower Kinabatangan area.

Table 5: Major Causes of Pollution in the Kinabatangan Area and Sukau Village (N=200) (Respondents can choose more than one option)

	Type of Activity					
Type of Pollution	Private Company & Government Agency Owned Palm-Oil Estates	Logging	Villager- Owned Small Oil Palm Plantations	Eco-tourism Project & Daily Eco-tourists Activities	Other	Total
River / Lake Pollution	191 (63.9 %)	64 (21.4%)	6 (2.0%)	17 (5.7%)	21 (7.0%)	299 (100.0%)
Destruction to Rainforest, Flora & Fauna	151 (49.5%)	121 (39.7%)	27 (8.9%)	5 (1.6%)	1 (0.3%)	305 (100.0%)
Extermination of Wild Animals	158 (55.8%)	77 (27.2%)	18 (6.4%)	7 (2.5%)	23 (8.1%)	283 (100.0%)

Source: Data from fieldwork, 2003.

SukauVillage Security and Development Committee stressed its view about the main causes of pollution as follows:

"[For the river pollution] I feel it's because of the plantation people. Because they make factories and their factories discharge their waste into the rivers. Yes [the JKKK hasdiscussed this matter with the estate owners]. But they couldn't care less. Sometimes the District Officers calls them but they don't even show up." ⁵⁸

In other words, river pollution caused by oil palm factory waste is a very serious problem for the lives of the majority of Sukau population but the government cannot do much about it. What the local people can do is just complain about the matter to the media but the problem is still unresolved. One informant stressed his view about this situation as,

"I don't know for sure [about what the government has done on the river's pollution issue). Previously we cooperated with one of the NGOs, we called TV3, and there was some response but only up to a point. We can see in the *Rasang River*, many of the fish seem to have died..."⁵⁹

On the other hand, one of the oil palm estate managers has argued that some of the factories were set up legally because the government approved them. In the past, the mistake might have been related to weaknesses in the implementation of environmental procedures, for instance, in finding a suitable location for the factories. He continued his comments on this issue:

"I think because they wanted to reduce the operational cost some of the factories used short-cut ways to filter the waste. Some of the factory's machines sometime did not function and the waste could no longer be filtered... thus they just discharge the waste into the river. This is the moral dilemma of the estate. There are very strong procedures and enactments regarding environmental pollution, but serious environmental enforcement is usually very weak..."

Conclusion

The evidence, from the findings of this research, demonstrates that there was a negative impact of ecotourism development on the socio-cultural life of the local community in Sukau village. A few factors indicate why this negative impact occurred. This includes the existence of conflicts of interest between the local community and the other stakeholders in this area. Therefore, if every stakeholder in Sukau village does not properly manage this negative impact, the prospect of achieving sustainable ecotourism development in this area is blurred. Although the majority of the respondents of Sukau favour ecotourism and gaining some economic benefits from it, in day-to-day practice, their participation is still limited to the role of tokenist or manipulated participants.⁶¹

Thus, active participation by the majority of local people in ecotourism development is fundamental for future sustainable development.

Endnotes

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¹ J Vaz and J Payne, *The Kinabatangan Floodplain: An Introduction*, (Kota Kinabalu: WWF Malaysia, 1997), p. 8.

² C. Prudente, and G. Balamurugan, "Sungai Kinabatangan – Partners For Wetlands," Project: A Partnership for Sustainable Development and Conservation," *Sabah Society Journal*, 16, 4 (1999), p. 41.

³ T.P. Malim, "Kinabatangan Wildlife Management Plan: Mechanisms of the Plan and Its Benefits," Forum on Sustainable Management of Ecotourism in Wetlands: The Case of Lower Kinabatangan Floodplain. Kota Kinabalu: Jointly Organized by Institute For Development Studies (Sabah), World Wide Fun For Nature, Malaysia (WWFM) and Sabah Wildlife Department in 2002, p. 5.

- ⁴ The Convention on Wetlands, signed in Ramsar, Iran, in 1971, is an intergovernmental treaty which provides the framework for national action and international cooperation for the conservation and wise use of wetlands and their resources. There are presently 158 Contracting Parties to the Convention, with 1755 wetland sites, totaling 161 million hectares, designated for inclusion in the Ramsar List of Wetlands of International Importance. The Convention's mission is the conservation and wise use of all wetlands through local, regional and national actions and international cooperation, as a contribution towards achieving sustainable development throughout the world," (Ramsar COP8, 2002). See http://www.ramsar.org/
- ⁵ M.T. Loganathan, "Wetlands Their Significance and Economical Benefits," Forum on Sustainable Management of Ecotourism in Wetlands: The Case of Lower Kinabatangan Floodplain'. Organized by Institute for Development Studies (Sabah), Partners for Wetlands Program, World Wide Fund for Nature Malaysia & Sabah Wildlife Department sponsored by Konrad Adenauer Foundation, Federal Republic of Germany. Shangri-La's Tanjung Aru Resort, Kota Kinabalu, 31 January 2002, p. 1.
- 6 Ibid.
- ⁷ New Sabah Times, December 3rd, 2001, p. 8.
- ⁸ H. Ceballos-Luscarain, *Tourism, Ecotourism and Protected Areas*. Gland, (Switzerland: IUCN (International Union for Conservation for Nature and Natural Resources), 1996).
- ⁹ E. Cater, "Ecotourism or Ecocide?," *People and the Planet*, 6, 4, (1997), pp. 9-11.
- 10 Ibid.
- ¹¹ P.S. Drake, "Local Participation in Ecotourism Projects," in, W. Tensie (ed.). *Nature Tourism: Managing For the Environment*, (Washington, DC: Island Press, 1991), p. 132.
- ¹² S. Wearing, "Exploring Socio-cultural Impacts on Local Communities," in D.B. Weaver (ed.), *The Encyclopedia of Ecotourism.* (Oxon, UK: CABI Publishing, 2001), p. 395.
- ¹³ R. Scheyvens, *Tourism for Development: Empowering Communities*, (Harlow, England: Prentice Hall, 2002), p. 211.
- ¹⁴ New Sabah Times, December 3rd, 2001, p. 8.
- ¹⁵ Caroline Pang is Senior Communications Officer of WWF Partner for Wetland, Kota Kinabalu, Sabah.
- ¹⁶ New Sabah Times, December 10th, 2001, p. 8.
- 17 Informal interview with Datuk Rajah Indran, Project Manager for Partners for Wetland, Kota Kinabalau on June 10, 2003.
- ¹⁸ Interview with a few of the village committee members, April 20, 2003.
- ¹⁹ They are Dr Isabelle Lackman-Acrenaz and her husband, Dr Marc Ancrenaz.
- ²⁰ The information gained from HUTAN executive report, undated.
- ²¹ Interview with Dr Isabelle, Director of KOCP, April 19, 2003.
- ²² Interview with Dr Isabelle, April 19, 2003.
- ²³ Interview with Dr Isabelle, April 19, 2003.
- ²⁴ Informal interview with one of the land owner family members, April 28, 2003.
- ²⁵ Interview with Dr Isabelle, April 19, 2003.

- ²⁶ Interview with Dr Isabelle, April 19, 2003.
- ²⁷ Interview with Cikgu Mohd Noor, April 18, 2003.
- ²⁸ Interview with Cikgu Mohd Noor, April 18, 2003.
- ²⁹ Interview with Dr Isabelle, April 19, 2003.
- ³⁰ Interview with Pak Karim, April 17, 2003.
- ³¹ Interview with a few of the village committee members (JKKK), April 20, 2003.
- ³² Interview with Mr Pastor, April 18, 2003.
- ³³ WWF Newsletter, Kitabatangan, June-August, 2002.
- 34 Thid
- ³⁵ Interview with Sukau Village Head, Pak Sharon Ahmad, May 3, 2003.
- ³⁶ Interview with Mr Titol Peter Malim, Sabah Wildlife Officer of Kinabatangan, May 21, 2003.
- ³⁷ Interview with the Manager of Sri Kuang Estate Development, Mr Awang Ismail, May 5, 2003.
- ³⁸ Interview with Mr Awang Ismail, May 5, 2003.
- ³⁹ There have been reports where this indiscriminate killing of animals (i.e., not for meat, such as orang-utans) were done by illegal hunters. These illegal hunters are not actually villagers but workers of the oil palm estate companies. They were responsible for many cases of this illegal killing. See R. Azmi, "Protected Areas and Rural Communities in the Lower Kinabatangan Region of Sabah: Natural Resource Use by Local Communities and Its Implications for Managing Protected Areas," *Sabah Society Journal*, 13, (1996), p. 15.
- ⁴⁰ See Sabah Wildlife Conservation Enactment, 1997. Number 6, Section 39 (3), p. 237 stated, "the use of a firearm for defending persons or property in accordance with subsection (2) [from a direct or immediate attack by any protected animal] shall only be resorted to where no other alternative is possible".
- ⁴¹ Interview with Mr Pastor, April 18, 2003.
- 42 See details in Sabah Wildlife Conservation Enactment, 1997. Number 6 section 29-31 p, 230-231.
- ⁴³ Sabah Wildlife Conservation Enactment, 1997, p. 231.
- 44 Ibid.
- ⁴⁵ Gomantong cave is of the Sabah government properties in which the main activity is collecting edible birds' nests for export to Taiwan and China. It also as one of the tourist attraction sites in Sukau area.
- ⁴⁶ Interview with one of the Village Development and Security Committee members (JKKK), April 18, 2003.
- ⁴⁷ Interview with the same informant, April 18, 2003.
- 48 Interview with the Sabah Forestry Department Officer of Kinabatangan, Mr Patin, May 21, 2003.
- ⁴⁹ Interview with Mr Pastor, April 18, 2003.
- ⁵⁰ Informal interview with Pak Karim and Cikgu Mohd Noor, April 17, 2003.

- 51 Interview with Mr Awang Ismail, the Estates' Manager of Sri Kuang Development, May 5, 2003.
- ⁵² Researcher observation during the fieldwork in Sukau Village, April June 2003.
- ⁵³ J. McMorrow, H. Lawes, and M.A. Talip, "Monitoring Tropical Rainforest Conservation to Estate Agriculture in Sabah, Malaysia: Using Lansat I,ages and GIS," AIFM International Conference on Multiple Resources Inventory and Monitoring of Tropical Rain Forest, Malaysia, 1994; see also R. Azmi, "Protected Areas," p. 16.
- ⁵⁴ Interview with Kinabatangan District Officer, Mr Abdul Latif Kandok, May 21, 2003.
- ⁵⁵ R. Azmi, "Protected Areas," p. 17.
- 56 Ibid.
- ⁵⁷ Ibid., p. 13.
- ⁵⁸ Interview with Mr Pastor, April 18, 2003.
- ⁵⁹ Interview with Mr Pastor, April 18, 2003.
- ⁶⁰ Interview with Mr Awang Ismail Pengeran Ibrahim, the Manager of Sri Kuang Estate Development, May 5, 2003.
- ⁶¹ R.S. Arnstein, "Eight Rungs on the Ladder of Citizen Participation," in, E.S. Cahn and B.A. Passet (eds.), *Citizen Participation: Effecting Community Change*, (New York: Praeger Publishers, 1971), pp. 66-91; J. Pretty, "The many Interpretations of Participation," *Tourism in Focus*, 16, (1995), pp. 4-5.