



PROJECT COMPLETION REPORT OF THE ITTO PROJECT

**PD 451/07 Rev. 1 (F): Transboundary Biodiversity Conservation Area:
The Pulong Tau National Park, Phase II**

Host Government : Malaysia
Name of the Executing Agency : Forest Department Sarawak

Project number : PD 451/07 Rev. 1 (F)
Starting Date : 1 April 2008
Project Duration : 36 months
Project Cost : ITTO : US\$874,800 (original); US\$218,160 (extension)
Malaysian : US\$615,365 (original); US\$753,000 (additional)
Govt.
Total : US\$1,490,165 (original total); US\$ 2,461,325 (new total)

Project Completion Report

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Disclaimer: I, Paul P. K. Chai, am solely responsible for preparing the report and for any error that may contain therein.

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Executive Summary

The Pulong Tau National Park transboundary project is located in northern Sarawak state of Malaysia. The park is surrounded by three minor ethnic communities that have close association with it, having lived in the area for many generations. The Kelabit and Lun Bawang communities are engaged in paddy and fruit farming and buffalo rearing, and are well educated. The Penan communities still live below poverty level and depend heavily on the forest for survival. The project's development objective was to contribute to conservation of natural ecosystems in the northern highland of Sarawak and to the sustainable development of local communities, through the implementation of activities of biodiversity and support to local socio-economic development initiatives. The two specific objectives were (1) to promote the ecosystem values of the Pulong Tau National Park (PTNP) through integrated conservation management; and (2) to strengthen transboundary conservation management emphasizing cross-border participatory approach involving the local communities. The problems associated with the park's management and protection and the socio-economic well being of the local people were addressed in Specific Objective 1; while Specific Objective 2 considered the issue concerning transboundary cooperation and management with Kayan Mentarang National Park in East Kalimantan.

An important aspect of the implementation strategy was to encourage active local stakeholder participation in Project implementation and conservation management. The most critical difference between planned and realized Project implementation was (i) better understanding of PTNP's ecosystems and biodiversity, and management problems, (ii) increased awareness of local stakeholders in conservation, and (iii) opportunities for local ethnic to improve their livelihood through community-based activities. The Project also gained the support and cooperation of local timber operators that became co-partners in community development and restoration of degraded sites affected by logging.

The situation after project completion was (a) a better appreciation of the ecosystem and biodiversity values of the PTNP, (b) a better understanding of the park's management problems, (c) sharing experience and knowledge with Kayan Mentarang N.P. through joint research training and information exchange, (d) local communities became more aware of the importance of conservation; (e) lives of local communities especially the Penan improved, (f) recognition of the Project by the state government and agencies, and boosting government image in social forestry work, and (g) creation of a new unit by Forest Department Sarawak to sustain the project work.

The most relevant outcome of the project implementation was uplifting community livelihood and raising awareness, and promoting biodiversity conservation and totally protected area management with local support. The project was able to harness local stakeholder resources to implement project activities, and gain positive state government support by its efforts and performance. The project's achievements were reported in many local and overseas meetings on social forestry, community service and conservation including the Heart of Borneo project. Activities like the *tagang* system to

restore fish resource and development of economic plant products had been replicated and applied by other government agencies in several areas in Sarawak.

Among the many useful lessons learned were (a) project identification requires a good knowledge of the local environment and socio-economic background of the people, (b) project design must consider the different expectations and needs of ethnic communities for maximum benefits, (c) project management must be sensitive to local needs, be action oriented and solve problems through team work and consultation, (d) transboundary cooperation requires concerted effort from both sides with necessary human and financial resources, (e) the government and EA would continue to gain by replicating and up scaling the project work as a strategy to engage local community participation in conservation management, forestry activities and sustainable development of forest resources.

Section 1. Project Identification

1.1 Context

The Pulong Tau National Park (PTNP) is located in the northern highlands of Sarawak between the Miri and Limbang Administrative Divisions. Covering an area of some 60,000 ha it was constituted in 2005 to protect the highlands' natural habitats and biodiversity, to provide environmental services to the local populations and to promote ecotourism. The highlands are home to three minor ethnic communities. The Kelabit community lives around the eastern region of the park, with Bario as the main centre of settlement. The Lun Bawang group occupies several villages in Ba' Kelalan in the north-east, while the Penan live in small scattered villages outside the western park boundary. These communities are still in various ways dependent on the surrounding forests for timber for house construction, firewood, food and medicine. The main economic activities of the Kelabit and Lun Bawang are wet paddy farming, buffalo rearing and fruit farming. Their early contact with Christianity provided them with opportunities for education. Nearly all the educated people have left their homes to live and seek employment in the towns and cities and even overseas. The Penan, on the other hand are poor and live below poverty level, obtaining much of their daily needs from the forest. Many children have begun to attend primary school but further education in the towns is normally difficult due to financial constraints.

To better serve the people, the government has set up schools, clinics, immigration, police and agricultural offices in Bario and Ba' Kelalan. Although the two main settlements are served by rural air services from Miri, road infrastructure is inadequate as only logging roads exist. Further improving local infrastructures and facilities remain a great challenge for the government as the rural populations are small and the settlements are widely scattered.

On the PTNP the government's priority is to ensure its total protection, while sustainably developing it ecotourism with active participation of the highland communities. The theme of ecotourism is culture, adventure and nature or CAN. Another strategy is agricultural development and maintaining cross-border trade with the communities living on the Kalimantan side. PTNP will continue to play a vital role in the development of the Heart of Borneo initiative that involves Indonesia, Sabah and Brunei.

1.2. Origin and Problems

The PTNP is not only an important and unique ecosystem for highland biodiversity but is also vitally linked to the socio-economic well being of the local communities. As the highland people were isolated from urban development with lack of proper road access, limited rural flights, and high cost of daily essential items, they have had to depend on the forest for construction timber, fuel wood and food supplement. On the other hand, the people's forest resource base had been reduced due to the existence of several timber

licenses in the vicinities and establishment of PTNP in 2005. Traditional hunting-gathering activities of the people became restricted as a result. Besides farming, the Kelabit and Lun Bawang could benefit from ecotourism but the industry could only be developed with outside help. The perceived problem among the Penan was that since they lived below poverty level, they could only hope to improve their livelihood provided outside assistance was available. Extending the size of PTNP and strengthening park management were other important issues that had to be addressed by the EA. Phase II of the project was designed to address the problems identified above.

Section 2. Project Objectives and Implementing Strategy

2.1 Project Rationale, Development and Specific Objectives

As stated in the project document the vital importance of the PTNP for conservation, sustaining local livelihood and ecotourism made it necessary to safeguard the park's resources that included the highland's unique cultural heritage, including the rare stone megaliths. The Project rationale was to enable integrated management of PTNP for biodiversity conservation and ecotourism, offer alternative sources of livelihood in order to reduce local community dependence on the forest, and strengthen transboundary cooperation.

The project's development objective was to contribute to conservation of natural ecosystems in the northern highland of Sarawak and to the sustainable development of local communities, through the implementation of activities of biodiversity and support to local socio-economic development initiatives. The two specific objectives were (1) to promote the ecosystem values of Pulong Tau N.P. through integrated conservation management; and (2) to strengthen transboundary conservation management emphasizing cross-border participatory approach involving the local communities. No adjustments was made in the course of implementation, but a 6-month extension in 2010 without additional fund and a further 12-month extension in 2011 with additional fund had made it possible to implement several additional community-based activities to benefit the people, and to initiate a pilot study to restore degraded sites in the park's extended area that was affected by logging.

2.2 Project implementation strategy

The Project implementation adopted a multi-disciplinary approach, and relevant government agencies and local key stakeholders were consulted. Active local participation was pursued as a crucial factor to achieve the project's objectives. Further park extension and transboundary cooperation would ensure biodiversity conservation at the landscape level; and a scientific approach in conservation management was envisaged. The need for a park management plan to outline strategies for management planning was recognized, emphasizing a participatory approach in management and sustainable development of resources to benefit the people.

2.3 Assumptions and Risks

The Sarawak state government first made a request to ITTO to start phase I of the project in 2005. This current phase was similarly backed by political, financial and technical support from the Malaysian and Sarawak state governments. Government commitment was in fact strengthened by allocation of additional fund in 2011. An efficient project team supported by local key stakeholders and relevant government agencies ensured that there was no risk in implementation. However, support in park management and transboundary cooperation was somewhat below expectation.

Section 3. Project Performance

Overall, the planned activities in the project document, as well as additional activities approved by the Project Steering Committee for the extended periods were successfully implemented. In reality, the performance was better realized with substantial additional financial contribution from the EA in 2010 and 2011, amounting to some US\$ 550,000. The local communities were able to enjoy more benefits as a result. The realized performance is summarized below.

- (a) **Specific objectives.** The project succeeded in promoting the ecosystem values of PTNP through integrated conservation management, and utilization of resources to support community development, and partially succeeded in realizing local participation in management and strengthening transboundary conservation management.
- (b) **Outputs and related activities.** Outputs and activities as appeared in the Project document and realized performance were as follows:

Specific objective 1 outputs and activities

Output 1.1. The conservation and management capacity for PTNP secured. Management capacity could have been better secured with more effort and input from the park authority.

A 1.1.1. To create the park's management unit. This was created.

A 1.1.2. To service the park's field management unit's basic equipment and staff. This was implemented.

A 1.1.3. To construct three field rangers posts. Two posts were constructed, the third one at Ba' Kelalan could not be done due to problem in land acquisition.

Output 1.2. The extensions of PTNP secured. One extension covering 10,000 ha of Batu Lawi was extended. A second extension was in progress.

A 1.2.1. To develop accurate thematic maps of the PTNP based on better satellite images using systematic analysis and interpretation for park management. This was carried out.

A 1.2.2. To survey and mark extended boundaries and community use zones. This was partially implemented due to bad weather.

Output 1.2. Baseline ecological and biodiversity surveys carried out and results published. This was implemented.

A 1.3.1. To conduct post logging ecological survey and establish ecological plots, floral inventory and resource use in extended park areas and mixed dipterocarp forest in the core area, monitor ecosystem changes. The study was conducted in the extended area of Batu Lawi.

A 1.3.2. To conduct faunal survey in the core area and extended park area and monitor ecosystem changes. As in A 1.3.1 above.

A 1.3.3. To organize scientific workshop. This could not be organized due to time constraint and uncertainty of participants attending.

A 1.3.4. To publish results of ecological and biodiversity studies and workshop. Results were published.

Output 1.4. Survey on uses of natural resources carried out and community activities developed

A 1.4.1. To monitor resource use by Lun Bawang and Penan. This was carried out.

A 1.4.2. To develop community-based activities. The number of activities exceeded the ones planned.

A 1.4.3. To conserve the fragile montane vegetation and flora of Mt Murud and re-establish the natural vegetation. Effort to improve the trails was carried out

A 1.4.4. To support highland conservation and ecotourism. Visitor trails were surveyed and marked and places of interest identified.

Output 1.5. Conservation awareness programme for local stakeholders carried out.

A 1.5.1. To conduct conservation awareness activities. This was carried out to benefit four schools and many community groups.

Specific objective 2 outputs and activities

Output 2.1. Bi-national cooperation in transboundary biodiversity conservation area management is strengthened

A 2.1.1. To organize and attend joint task force meetings. Only one meeting was organized due to lack of response from KMNP.

A 2.1.2. Joint scientific research in PTNP. This was attended by seven researchers from KMNP.

A 2.1.3. To characterize transboundary ecosystems and habitats and identify bi-national interests in biodiversity conservation and ecosystems protection. Report completed.

A 2.1.4. Joint patrol/enforcement. Not carried out.

Output 2.2. Awareness in transboundary conservation and sustainable utilization of natural resources at the community level is raised

A 2.2.1. To initiate cross-border socio-economic activities among the local communities. This involved cross visits and handicraft training.

Added outputs from the extended period (June 2011 to May 2012)

A.1. Community development activities carried out:

- Registration of identity documents for Penan and others.
- Construction of the 73-metre long Adang bridge, Ulu Limbang
- Repair of Church Camp trail with galvanized wire platforms.
- Construction of Penan rest house in Bario was delayed pending solution on land.
- Supply of farming tools and equipment to Penan farmers to Long Sabai and Ba' Medamot.

A.2. Eco-tourism

- Survey and marking of trails from Bario the Long Lellang and Penan villages.

A.3. PTNP extension – One extension was achieved.

A.4. Restoration of degraded sites. Carried out in Ulu Limbang with some 5,000 tree seedlings planted and maintenance carried out.

A.5. Preliminary buffer zone survey at Kubaan outside PTNP carried out.

(c) Schedule and duration

The project duration was 36 months starting in January 2008. A six-month extension without additional funding was approved during the 46th session of the ITTC in Yokohama in December 2010. A further extension with additional funding of US\$218,160 covered the period from August 2011 to July 2012. The Malaysian government's additional contribution was about US\$753,000.

(d) Total amount of expenditures; analysis of applied input

The 36-month project budget totaled US\$1,490,165, comprising \$874,800 from ITTO and \$615,365 from the Malaysian government. For the 12-month extension, \$218,160 was from ITTO and \$753,000 from the Malaysian government.

In the applied input, although the cost for each activity was estimated, minor adjustments were often necessary due to increasing cost of travel, transport and materials which could not be predicted. Another cause for adjustment was delay in implementation of certain activities or incomplete implementation due to administrative or social issues. Examples were transboundary cooperation; the rest house for the Penan had to be delayed pending land issue to be resolved, while in the case of the Pa' Umor salt mine, the local Kelabit leaders had requested a government agency to implement it for them instead. The budget was adjusted and re-located for other activities like house and bridge construction for the Penan the cost for which was very substantial and was largely provided by the EA. The overall project budget was not affected and over expenditure was not a problem.

Section 4. Project outcome, target beneficiaries involvement

(i) Achievements of Project objectives

The project had achieved the development objective of promoting the natural ecosystems of the highland for biodiversity conservation and contributing to the socio-economic development of the local people. Specific objective 1 to promote the ecosystem values of PTNP was also achieved, particularly in basic research and community development. There was an obvious improvement in the lives of communities like the Penan that was most in need of assistance. The degree to which the different local communities had benefitted depended on their initiative and attitude when it came to active participation. Specific objective 2 on transboundary cooperation could have been more fully achieved if both sides were equally proactive. The KMNP did not have management presence near the common border to initiate joint community activities and patrolling/enforcement.

(ii) The situation existing after project completion

• *Tangible outputs of the project*

- (a) The local communities had become more aware of the importance of PTNP and conservation in general. For example, the people in Bario refrained from felling trees inside the park after learning that their mini-hydro and wet paddy farms depended PTNP's catchment for water supply;
- (b) The communities of Ba' Kelalan stopped felling trees in the national park to repair the trails and huts at the Church Camp; and erected signs along the trails to remind visitors not to throw rubbish and to keep the park clean;
- (c) The nature museum at the secondary school in Bario became a visitor attraction;
- (d) The teachers and students of the Ba' Kelalan primary school benefitted from environmental education and had become very interested in nature conservation. Led by their teachers, the students formed groups to study about plants and birds and make records of their presence and uses;
- (e) For the Penan, provision of housing, water supply, suspension bridges for safe river crossing, improved trails, and farming tools and equipment, as well as on-farm training and training on sanitation and hygiene had enabled them to lead a better and healthier life. Fruits and vegetables had found it less necessary to visit the forest;
- (f) The project had enabled timber companies operating in the area to better demonstrate their corporate responsibility by actively participating in project implementation. Their contributions were in the form of free transport and accommodation, building materials and manpower for construction, and as collaborators in surveys and restoration of degraded sites. A private helicopter company helped airlift construction materials to remote locations at subsidized rates;
- (g) The above were planned outcomes described in the project document. Additional inputs and efforts by ITTO and the state government had produced the following effects:
 - Support from the EA and state government was most encouraging: (i) The EA formed the Community Service Initiative Unit (CSIU) in 2010 with the intention of continuing the project work and extending and applying it to other TPAs; (ii) The State Ministry of Resource, Planning and Environment (MRPE) allocated additional fund to enable more community development activities to be implemented for the people in 2011 and 2012;
 - The project's community development work became a significant part of the social forestry programme of the EA whose image was also boosted;
 - The project's achievements were frequently reported or quoted in local and overseas meetings, conferences and seminars, and were used to report on the progress of the Heart of Borneo initiative;
 - The CSIU had been approached to share experience and assist in community development work by several government agencies;
 - ITTO had become well known among many government agencies and the private sector.

- *Sectoral policy and programmes*

There was a positive change in the policy of the EA and certain other government-related agencies in regards to the roles of local ethnic communities in social forestry. With support from the MRPE, the CSIU's task is to strengthen the government's social forestry programme. Related to this is the restoration of degraded sites in logged-over forests, the first such effort between the government and a timber company. The CSIU's work is linked to the HoB initiative which expected to secure funding from the Republic of Korea. Collaboration between and CSIU was also a possibility.

The physical environment

Within the PTNP domain, the project succeeded in securing the first extension of PTNP covering some 10,000 ha of the Batu Lawi area, and initiated the process for a second extension at Long Repung along the Kalimantan border. In the Batu Lawi extension forest, an assessment of the ecosystems and biodiversity in logged-over forests was conducted. The study confirmed that the area was still very rich in plant and animal species including some that were rare and endemic. The forest forming the core of PTNP had remained intact.

Outside the PTNP domain, the damaged water catchment at the border with the national park in Bario was replanted with popular fruit trees. Visitors' trails linking Bario and Penan villages were upgraded, including construction of two suspension bridges. Through community-based development, the lives of many Penan participants had also improved significantly. Unfortunately, logging east of Bario has caused damages to the forest and water sources in the area and somewhat affected the ecotourism business.

(iii) Participation of target beneficiaries and results

The target beneficiaries belonged to three main groups: local communities, schools, and timber companies.

- (a) Besides being employed as field workers and porters, the indigenous communities participated in biodiversity resource survey, restoration of degraded sites, development of visitor trails and community-based development. The Penan have had their quality of life improved with new housing, gravity feed water supply and amenities, fruit gardens, and suspension bridges for safe river crossing while travelling through the forest. The Kelabit and Lun Bawang communities received benefits via improved ecotourism facilities, fish culture and catchment protection. Their participation provided an opportunity for them to become more enterprising and improve their cash income.
- (b) Four schools participated in environmental education programme. The schools' headmasters and teachers played a critical role in sustaining the interest of the students. Benefits included a natural museum each in Bario and Ba' Kelalan, and a

field study centre at Ba' Kelalan. The Bario museum is open to visitors. The teachers and students of the Ba' Kelalan primary school had organized nature study groups to learn about plants and animals, i.e. birds.

- (c) Samling Timber Company allocated annual budget for road repairs and transport for project staff, and participated in the pilot study to rehabilitate degraded sites in the extended park area near Batu Lawi. Their demonstration of CSR had improved the company's image.

(iv) Expectation of project sustainability after completion

The conditions prevailing at completion laid the foundation for continued cooperation with the timber operators and local communities, specifically to maintain and monitor community development activities, and engage them in follow-up activities. Activities already initiated by CSIU in recent months were visits to two Penan villages to undertake maintenance work, giving out more planting materials to interested farmers, and organizing handicraft training workshops in collaboration with the State Handicraft Department at Ba' Kelalan. Another planned activity in 2012 is to promote the *tagang* fish project at Long Lidong in Lawas as a tourist attraction, a collaborative work with the local people and Department of Agriculture (DOA).

For 2013 and beyond, the CSIU has made arrangements with the local key stakeholders to (a) pursue extension to the PTNP; (b) to develop NTFP in Bario and Ba' Kelalan; (c) to improve visitors' trails linking Batu Lawi, Kelabit and Penan villages; (d) to maintain and expand tree planting on degraded sites, and (e) to contribute to progress of the HoB initiative.

Section 5. Assessment and Analysis

Through media publicity and presentation of the work in many local meetings and international conferences the work of ITTO in LEWS and PTNP had become widely known within and outside Sarawak. Support from the state MRPE, other state government (DOA) and private agencies (STA) provided an independent assessment of the Project.

i) Analysis on project rationale and project identification process

This Phase II of the project was identified and developed based on the outcomes and recommendations of the previous phase. It noted problems and weaknesses in park management, urgent need to extend the national park' domain, incomplete baseline data on biodiversity, dependence of local ethnic communities on PTNP and forests, and need to strengthen transboundary cooperation. The local key stakeholders were correctly identified but it was not possible to determine to their level of commitment and attitude towards Project participation among all the communities.

ii) Analysis on (in)adequacy of the results of identification process

The identification process was adequate in correctly defining the problems, project objectives and choice of implementation strategy, but had somewhat underestimated the people's dependence on outside assistance. The identification process also assumed full cooperation from participants but this did not turn out to be the case and had affected the project's outcome. For example, some participants or community groups preferred to have the work done for them without having to be actively involved, while others expected monetary gain as an incentive.

iii) Highlight and analyse the most critical differences between planned and actual Project implementation

The most critical difference between planned and actual Project implementation was added activities in basic research and community development, made possible with the support of the PSC and additional funding from the Sarawak government.

Some activities were affected by factors that could not be predicted or controlled, such as the Penan rest house due to land issue, change in decision by community decision (e.g. improving salt making facility at Pa' Umor), and lack of active participatory support (e.g. fish culture and NTFP). Park extension required more concerted inputs from the EA. TBCA cooperation also fell short of expectation.

iv) Evaluate and comment on the (in)adequacy of time and Project inputs for Project formulation and implementation

The time and Project inputs for formulation and implementation were adequate but were influenced by factors that could not be controlled, such as weather and others mentioned above. This partly led to the six-month extension without additional finding. Further financial inputs by the EA helped to address several urgent needs of the Penan community.

v) Evaluate the anticipation and reality of external influences, assumptions and risks etc. and the effectiveness of mitigating measures

Major external influences were weather and local key stakeholder support. The project assumed active support from all participants but this did not turn out to be the case. One mitigating measure was to focus on participants that were proactive. TBCA cooperation could have been improved.

vi) Evaluate the participation of anticipated and actual Project beneficiaries in Project implementation and how they have or will be benefitted from the Project

Active Project beneficiaries enjoyed better gain from implementation. The timber company demonstrated their social corporate responsibilities well. Active participation is the most effective way for communities to benefit from the Project.

vii) Analyse Project (in)sustainability after Project completion, referring to Section 4, as a result of Project conceptualization assumptions made and implementation conditions

Like the LEWS project, sustainability depends on active involvement of project beneficiaries. After project completion, the EA will continue to provide various forms of assistance to those who continue to be involved in fishery and crop cultivation. It will not be possible to sustain fish culture projects if community groups are unable to work as a team.

viii) Analyse and comment on the understanding and appropriateness of the roles and responsibilities of the institutions involved with the Project implementation

The institutions involved were from the government and private sectors. Regional government institutions (Residents and District offices) in Miri and Limbang where the park is located were fully aware of the Project and local social and environmental conditions, and provided advice especially on issues concerning the people and their needs, and rendered necessary support in implementation. They also participated in PSC meetings and discussions. The DOA provided advice on fishery and crop planting. The timber company (Samling) was similarly represented in PSC meetings and Project implementation.

Section 6. Lessons learned

i) Project identification, design and implementation

- The Project correctly identified the problems facing PTNP, namely, potential risk/damage due to commercial logging and local land use, lack of baseline data required for effective management, and lack of management presence. The Project also recognized the need of the local communities to reduce their dependence on forests in order to become self reliant. It further noted the lack of active local involvement in the management of the national park.
- The Project had a good understanding of the socio-economic background of the three ethnic communities and their needs, and designed appropriate activities for best benefits. For example, the Kelabit and Lun Bawang communities would benefit from activities to enhance ecotourism and farming, while for the Penan a chance to live above poverty level was their greatest wish. Success or failure was influenced by the extent of participation of key stakeholders, including TBCA cooperation.
- The Project took appropriate actions to avoid variations between planned and actual implementation by taking into consideration factors such as rainy weather and

rising cost. With the help of timber contractors materials were transported during fine weather mostly in the morning. To cope with rising cost, some activities were be re-scheduled to shorten field work or scaled down without adversely affecting the outputs. The Project was fortunate to receive additional funding from the EA and was assisted by a team of hard working personnel that enabled not only planned but also additional/new activities to be successfully implemented.

- Factors that would most likely affect Project sustainability would be (a) delays in implementing the park's management plan, (b) inaction of the EA to continue the work, and (c) inactive local key stakeholder participation. It would be important for the EA to address these issues for best interest. Important post project strategy was to continue to strengthen park management, improve ecotourism and cash income, render support to the ethnic communities that were most in need of outside assistance, continue to provide guidance and training, and monitoring of existing activities - these to be the responsibilities of the CSIU.
- Political support and recognition of the Project's contributions was a definite advantage in boosting the image of the Project and that of the government in enhancing its community development efforts.

b) Operational matters

- The Project Management Unit (PMU) was responsible for planning, organizing and managing the Project, and was assisted by all relevant stakeholders. Guidance provided by the PSC was most valuable.
- The flow of Project fund was somewhat affected by increasing cost of travel, local wages and materials, and had to be adjusted to avoid over expenditure. Additional allocation from the government was put to good use.
- Forest Department Sarawak was the Executing Agency of the Project. The Department is responsible for the management and conservation of forest resources in the state. Its operating arm, the Sarawak Forestry Corporation, is tasked with the management of all totally protected areas and biodiversity conservation. To facilitate implementation, the EA appointed a senior officer as the coordinator of the ITTO Project to handle administrative matters, and another as the local Project counterpart dealing with Project implementation. The implementation team comprised the Project Leader and his research assistants, the local counterpart, and group of selected forest guards and officers from the FDS.
- Documenting the results of research, studies and community activities was an essential component of the Project. A series of technical reports covered the subjects on NTFP and utilization, scientific research on mammals, birds and amphibians, survey and documentation of biodiversity in logged-over forests, and rehabilitation planting.

- Project monitoring and evaluation was handled by the Project Leader and his Local Counterpart who reported the findings to the Project Coordinator. The PSC played a critical role in independently assessing the Project's progress and making recommendations for improvement.
- One external factor that affected implementation but could not be foreseen was inadequate active involvement of some local communities that expected financial benefit or preferred the work to be done for them.

Section 7. Conclusion and recommendations

a) Identification

Project identification requires a good knowledge of the physical and biological environments as well as socio-economic aspects of local ethnic communities. This is particularly important for a project that is diverse in objectives and involves multi-stakeholder approach in implementation. Correctly indentifying the associated problems and proposing appropriate actions would contribute towards the project success.

b) Design

The knowledge described above is also a necessary prerequisite for designing a good project. When a national park is involved, the design should meet the policy needs of the government in protected area management and resource utilization. Another factor to consider is how conservation management would benefit the local ethnic communities that are dependent on forests for livelihood, and in what way they can derive such benefits without affecting the resources and environment.

c) Implementation

Implementation must consider external influencing factors like the local environment, remoteness and difficulty of access, weather condition, and attitude or characteristics of local beneficiaries. To develop a sense of responsibility and ownership, local participants must be proactive in implementation. Much time and cost could be saved if local participants were to assist in acquisition of materials from local sources like timber and become a part of the work force.

d) Organization

A project that is remotely located with no proper access, such as this PTNP project, would call for exceptional skills and efforts in organization in order to deal with difficult or unforeseen conditions. Familiarization visits to the project site and meeting local communities for advice and support are an essential aspect of the organization process. Maintaining good relations with local stakeholders is often crucial to project's success.

e) Management

Management of a project requires a good understanding of resource base, local socio-economic situation, planning, implementation, coordination and monitoring. Management personnel must possess the necessary knowledge and be action-oriented, i.e. willingness to go to the field and work with their colleagues. Information sharing between colleagues and with local communities is an effective way to learn about management problems and find solutions. It is also important to realize that management should not be restricted at the top level but should involve those that are directly responsible for project implementation at the ground level.

f) Potential for replication and scaling up

With the government's interest and commitment to promote social forestry among local communities and to boost its image, there is definitely potential for replication and scaling up of the Project work. In fact, the CSIU has already received several requests from other government agencies for assistance and advice. Collaboration with other agencies that are involved or interested in similar activities can help to secure additional funding.

Annex 1. Project financial statement

FINANCIAL STATEMENT - PERIOD ENDING 31 JULY 2012
PD 451/07 Rev.1 (F) - Transboundary Conservation Area:
The Pulong Tau National Park, Sarawak State, Malaysia - Phase II
ITTO Contribution - Breakdown of expenditure (in US\$)

COMPONENTS	# CONTRIBUTION	UP TO DATE			BALANCE OF FUNDS (A)-(D)
	U.S. \$ (A)	Committed (B)	Spent (C)	Committed & Spent (D)=(B)+(C)	
I. Funds managed by Executing Agency					
A. PERSONNEL - LOCAL					
Project Manager	216,000.00	-	299,173.95	299,173.95	(83,173.95)
Administration	73,200.00		93,620.51	93,620.51	(20,420.51)
Sub - Contracts	405,300.00	-	507,827.60	507,827.60	(102,527.60)
DUTY TRAVEL	26,000.00		29,882.81	29,882.81	(3,882.81)
CAPITAL ITEMS	2,000.00		2,199.81	2,199.81	(199.81)
CONSUMNABLES	46,500.00		48,502.00	48,502.00	(2,002.00)
MISCELLANEOUS	8,000.00		3,721.54	3,721.54	4,278.46
sub - Total :	777,000.00		984,928.21	984,928.21	(207,928.21)
TOTAL in VOTE LEDGER	978,960.00	-	984,928.21	984,928.21	(5,968.21)
II. Funds Retained By ITTO					
Monitoring, Evaluation & Administration	18,000.00	-	-	-	a/
Ex - Post Evaluation Costs	15,000.00				
Total : (777,000.00+18,000.00+15,000.00)	810,000.00				
Administration Support Costs 8% of Sub - Total	64,800.00	-	-	-	a/ a/
Sub - Total : (18,000.00+15,000.00+64,800.00)	97,800.00	-	-	-	a/
TOTAL IN VOTE LEDGER :					

Note : Balance in Ledger Book
 RM (19,224.76) = US\$ (5,968.21)

a/ Funds retained and accounted by ITTO - details not available with Executing Agency

Annex 2. Project cash flow statement

CASH FLOW STATEMENT - PERIOD ENDING 30 JUNE 2012
PD 451/07 Rev.1(F) - Transboundary Biodiversity Conservation Area :
The Pulong Tau National Park, Sarawak State, Malaysia - Phase II

Component	Reference	Date	Amount	
			in US\$	in R.M.
Funds received from ITTO				
1. First Installment	TT From Japan	30.01.2008	\$ 119,995.00	RM 384,218.99
2. Second Installment	TT From Japan	29.08.2008	\$ 189,995.00	RM 636,098.26
3. Third Installment	TT From Japan	05.10.2009	\$ 179,995.00	RM 615,217.91
4. Fourth Installment	TT From Japan	30.06.2010	\$ 139,995.00	RM 449,798.94
5. Fifth Installment	TT From Japan	01.12.2010	\$ 79,995.00	RM 249,579.40
6. Sixth Installment	TT From Japan	20.04.2011	\$ 66,995.00	RM 199,506.11
7. First Additional Installment	TT From Japan	09.08.2011	\$ 101,995.00	RM 308,019.90
8. Second Additional Installment	TT From Japan	13.01.2012	\$ 99,995.00	RM 310,979.45
5. Interest Earned	as at May 2011			
6. Opening Balance				
Total:			\$ 978,960.00	RM 3,153,418.96
Expenditures by Executive Agency:				
Personnel - Local	-	-	392,794.46	1,265,266.71
Sub - Contract			507,827.60	1,635,810.65
Duty Travel	-	-	29,882.81	96,258.28
Capital Items	-	-	2,199.81	7,086.00
Consumnables	-	-	48,502.00	156,234.29
Office Expenses	-			
Miscellaneous	-		3,721.54	11,987.79
Total:			\$ 984,928.21	RM 3,172,643.72
REMAINING BALANCE:			\$ (5,968.21)	RM (19,224.76)

The exchange rate \$ to RM is 3.2212

Annex 3. Summary of main achievements and outputs

PROJECT ELEMENTS	INDICATORS	MEANS OF VERIFICATION	STATUS OF EXPECTED OUTCOME
<p>DEVELOPMENT OBJECTIVE Contribute to conservation of natural ecosystems in the Northern Highlands of Sarawak and to the sustainable development of the local communities, through the implementation of biodiversity conservation and support to local socio-economic initiatives</p>	Extensions of the current PTNP area pursued, higher involvement of highland communities in conservation management activities; increased awareness in conservation	One extension secured, second in progress, local communities involved in rehabilitation, livelihood improvement for community development participants	Knowledge on ecosystems & biodiversity enhanced, community development exceeded expectation, facilities for on-ground management improved, political support & continued funding secured.
<p>SPECIFIC OBJECTIVE 1 To promote the ecosystem values of PTNP through integrated conservation management</p>	Implementation of approved PTNP management plan; promoting sustainable use of forest resources, stakeholder participation	Integrated management achieved through local involvement in resource survey & ecotourism, NTFP development & employment as local park assistants	Local community participation could have been improved, greater effort required to improve on-ground management & conservation work by park management authority
<p>SPECIFIC OBJECTIVE 2 To strengthen transboundary conservation at the management and local community levels</p>	Continued liaison with KMNP, cross-border socio-economic activities and joint scientific training implemented	Organized joint cross-border activities on handicraft and research training, information exchanged, report to characterize TBCA habitats completed	TBCA management requires greater effort & commitment from both sides in order to achieve expected objectives
<p>Output 1.1 The conservation and management capacity for PTNP strengthened</p>	Extension of rangers station in Bario, planned rangers stations or field posts,	Two rangers posts constructed, park boundary marked & access (trails)	PTNP adequately safeguarded, significant contribution by Samling in building

	infrastructures and equipment provided; maintenance of park boundaries and law enforcement continued	improved	rangers posts
A 1.1.1- To create the Park's Field Management Unit, the PSC and SCC	PMU, PSC & SCC form a part of implementation process	Created and operational	Expected outcome achieved
A 1.1.2- To service the Park's Field Management Units basic equipment and staff	EA to help service the PMU	Equipment & staff provided	Outcome expected
A 1.1.3- To construct 3 field rangers post	Posts required for park management with local involvement	Two posts constructed at Lepo Bunga & Ba' Medamot	Post at Ba' Kelalan delayed pending land acquisition
Output 1.2 The extensions of PTNP initiated	Park extension helps to widen conservation base	First extension of 10,000 ha gazetted, timber licensee surrendered site in June 2011	Second extension delayed, greater effort needed to speed up constitution process
A 1.2.1- To develop accurate thematic maps of the PTNP based on better satellite images using systematic analysis and interpretation for Park management	Accurate maps vital for management planning	Maps indicating extensions & study areas developed for management & reporting	Necessary to upgrade information with better satellite images
A 1.2.2- To survey and mark extended boundaries and community use zones	Process to upgrade information on the national park	Boundaries marked, community use zone identified	Information used to improve park management and development of new project proposal
Output 1.3 Baseline ecological and biodiversity surveys carried out and results published	Surveys in Batu Lawi extension to upgrade biodiversity data base	Baseline data analyzed, technical reports prepared	Base for conservation extended, rare species recorded

A 1.3.1- To conduct post-logging ecological survey and establish ecological plots, floral inventory and resource use in the extended Park areas and mixed dipterocarp forest in the core area, monitor ecosystem changes	Linear sampling plots for different forest types	Plots established, status of logged-over forests described, data on natural regeneration compiled, rehabilitation of degraded sites carried out	Results indicate richness of biodiversity in logged-over forests, promising result from rehabilitation of degraded sites
A 1.3.2- To conduct faunal surveys in the core area and extended Park areas and monitor ecosystem changes	Surveys by camera trapping & sample plots in extended park area	Records of mammals & birds, rare species discovered	Enhanced database on fauna
A 1.3.3- To organize scientific workshop	To present results and exchange knowledge	Discussion groups organized to present and discuss results	Helped to improve scientific work and reporting
A 1.3.4- To publish results of ecological and biodiversity studies and workshop proceedings	Reports are proofs of scientific studies	Technical reports prepared	Expected outputs achieved
Output 1.4 Survey on uses of natural resources carried out and community-based activities developed	Continuing collection of information from local communities	NTFP survey for Penan completed, planting of selected species carried out	Encouraging response from Penan community groups, Penan with good local knowledge identified
A 1.4.1- To monitor resource use by Penan and Lun Bawang	Resources important for forest dependent communities	Supported use of NTFP by Penan and Lun Bawang participants via community development activities	Number of interested participants below expectation
A 1.4.2- To develop community-based activities	Create opportunities to improve local community livelihood	Benefits enjoyed by pro-active participants with improved livelihood	Participation by some communities below expectation
A 1.4.3- To conserve the fragile montane vegetation and flora of Mt. Murud and re-establish the natural vegetation	Vegetation affected by park visitors & tree felling requires protection	Visitor trails upgraded, damaged vegetation recovered	Constant maintenance of trails required, more effort to come from SFC

A 1.4.4- To support highland conservation and ecotourism	Ecotourism assets emphasize culture, nature & adventure	Trails improved, information materials prepared	Local travel agencies must engage outside help to improve the industry
Output 1.5 Conservation awareness programmes for local key stakeholders carried out	Importance of awareness education emphasized	Programmes focused on younger generations	Dialogues with communities led to better appreciation of importance of PTNP, Programmes for schools received good response from teachers and students
A 1.5.1- To conduct conservation awareness activities	Programmes focus on younger generations	Education programmes conducted in 4 schools, nature museum & field study centre in Bario & Ba' Kelalan established	EA/SFC should continue to collaborate with communities & schools to promote nature conservation
Output 2.1 Bi-national cooperation in TBCA management is strengthened	JTF meetings, cross-border activities and joint scientific training	Joint scientific & handicraft training organized	Greater effort needed to strengthen TBCA cooperation
A 2.1.1- To organize and attend Joint Task Force meetings	Joint planning and Information exchange important	One meeting organized	Outcome below expectation
A 2.1.2- Joint scientific research in PTNP	Need to enhance cooperation & scientific knowledge	Joint training organized	More collaborative effort required
A 2.1.3- To characterize transboundary ecosystems and habitats and identify bi-national interests in biodiversity conservation and ecosystem protection	Sharing information for collaborative management	Reported completed	Outcome achieved
A 2.1.4- Joint patrol/enforcement	Safeguarding TBCA	Not carried out	Greater bi-national effort needed
Output 2.2 Awareness in transboundary conservation and	Continue to encourage cross-border activities and	Joint handicraft training completed	Greater collaborative effort needed

sustainable utilization of natural resources is raised	dialogues		
A 2.2.1- To initiate cross-border socio-economic activities among the local communities	Emphasis on handicraft & ecotourism	Cross-border trade in handicrafts, rice & salt, etc.	More effort needed to promote cross-border ecotourism

Responsible for Report

Name: Dr. Paul P.K. Chai

Positions held: Project Leader

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