

COMPLETION REPORT



ITTO Project PD 617/11 Rev. 4 (F)

Promoting Biodiversity Conservation in Betung Keruhun National Park (BKNP)
as the Trans-boundary Ecosystem Between Indonesia
and Sarawak State of Malaysia (Phase III)

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Jakarta, August 2018

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Convention on
Biological Diversity

ITTO Project PD 617/11 Rev. 4 (F)

Promoting Biodiversity Conservation in Betung Kerihun National Park (BKNP)
as the Transboundary Ecosystem
between Indonesia and Sarawak State of Malaysia (Phase III)

Prepared for the project by:

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Executed by:

Betung Kerihun National Park Authority
Directorate General of Conservation of Natural Resources and Ecosystems (KSDAE)
Ministry of Environment and Forestry of
The Republic of Indonesia

With the assistance of:

The International Tropical Timber Organization

Jakarta, August 2018

Project Title : Promoting Biodiversity Conservation in Betung Kerihun National Park (BKNP) as the Transboundary Ecosystem between Indonesia and Sarawak State of Malaysia (Phase III)

Serial Number : PD 617/11 Rev. 4 (F)

Executing Agency : Betung Kerihun National Park (BKNP), Directorate General of Conservation of Natural Resources and Ecosystems (KSDAE), Ministry of Environment and Forestry

Starting date : 1 November 2013

Duration : 56 months

Budget (USD)

	Original	Revised
ITTO	795,678	764,110
GOI	272,920	281,105
TOTAL	1,068,598	1,045,215

Key Personnel :

- **Project Coordinator** : Ms. Yani Septiani (Nov 2013 – Dec 2016)
Dr. Hiras Sidabutar
(Jan 2017 – project completion)
- **Secretary** : Ms. Natalia Punai (Nov 2013 – Jan 2015)
Ms. Merdiani Aghnia Mokobombang
(Jan 2015 – Jan 2017)
Ms. Astri Indah Afriliani (Feb 2017 – April 2017)
- **Finance** : Ms. Lelly Ekasari
- **Field Supervisor** : Mr. Djoko Kuncoro (Nov 2013 – March 2017)
Mr. Agustinus Irmawan (1 April 2017 – project completion)

led by : BKNP & ITTO

and date : Jakarta, June 2018

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List of Abbreviations and Acronyms

BANP	Batang Ai National Park
BKDSNP	Betung Kerihun and Danau Sentarum National Parks
BKNP	Betung Kerihun National Park ³
BKNR	Betung Kerihun Nature Reserve
BMU	Biogas Management Unit
BNP	Bako National Park
CAP	Community Action Program
DG	Directorate General
ESE	Ecological, Social and Economic
FDS	Forest Department Sarawak
FGD	Focussed Group Discussion
FRI	Forest Research Institute
GGNP	Gunung Gading National Park
IBBE	ITTO Borneo Biodiversity Expedition
ITTO	International Tropical Timber Organization
JTTF	Joint Task Technical Force
KSDAE	Konservasi Sumber Daya Alam dan Ekosistem (Conservation of Natural Resource and Ecosystem)
LEWS	Lanjak Entimau Wildlife Sanctuary
LFM	Logical Framework Matrix
LoI	Letter of Intent
MoEF	Ministry of Environment and Forestry
MTAP	Mid-term Action Plan
NGO	Non-Governmental Organization
NTFP	Non-timber Forest Product
PMT	Project Management Team
RIPPARNAS	Strategic Plan for National Ecotourism Development
SIPAT	Serakop Iban Perbatasan
SNR	Semenggoh Nature Reserve
TBCA	Trans-Boundary Conservation Area
WWF	World Wildlife Fund
YPO	Yearly Plan of Operation

EXECUTIVE SUMMARY

Project identification and design

1. The project was built on findings of completed ITTO Project PD 44/00 Rev. 3 (F). “Implementation of a community-based transboundary management plan for the Betung Kerihun National park, West Kalimantan, Phase II”. The key problem addressed by the project was “Conservation management of Betung Kerihun National Park (BKNP) as the transboundary ecosystem between Indonesia and Malaysia (Sarawak) not well performed”.
2. The key problem addressed was thoroughly analyzed to identify cause-effect relationship which was used as the basis for developing a sound project design and defining the relevant and effective interventions for removing the problems at hand.

Project objectives and implementation strategy

3. The overall objective of the project was to contribute to the conservation of natural ecosystems of protected area in Indonesia through implementation of activities on biodiversity conservation and socio-economic development; its specific objective was to strengthen sustainable conservation management of BKNP as the framework for transboundary conservation management.
4. The specific objective would be achieved through delivery of 4 outputs, namely: i) cooperation between Indonesia and Malaysia in the conservation of transboundary ecosystems of BKNP in Indonesia and BANP and LEWS in Sarawak sustained, ii) management plan for biodiversity conservation in BKNP improved and implemented, iii) sustainable livelihood of local communities living within and around BKNP improved, and iv) community-based carbon and conservation monitoring systems developed.
5. The implementation strategy pursued was built on the lessons learned from completed ITTO transboundary projects in Indonesia and Malaysia (Sarawak) with collaborative efforts, exchanging of experience, information and insight and capacity building as the major elements.

Project Performance

6. All planned activities had been fully executed noting that one activity had been modified from “forming a joint task force between Indonesia and Malaysia” to “signing a Letter of Intent to cooperate” (Activity 1.1) due to complication of the process (Activity 1.1) while one activity was cancelled due to the financial crisis facing ITTO (Activity 4.1)
7. The project required a 8-month extension in time to complete due mainly to the financial crisis facing ITTO back in 2015 – 2016 during which a number of activities had been executed thus enriched achievement of the project, including:
 - Stakeholder consultation on project achievements
 - Formulation of a MTAP on enhancing cooperation between West Kalimantan and Sarawak in ecotourism development

- Application for marketing license (PIRT) for community-produced food products
- Development of technical manuals for production of marketable food products made of NTFPs

Project outcome and involvement of target beneficiaries

8. Project achievement was assessed using the pre-defined indicators:
Output 1 was fully delivered, Output 2 and 3 were partially delivered and Output 4 was fully delivered leading to a less satisfactory achievement i.e. the specific objective was only partially achieved.
9. Among the tangible project results are: different technical reports and documents on individual activities, biogas energy production facilities, renovated wooden bridge at Tekenang village, study reports, technical manuals for edible food production using NTFPs as the basic raw material and equipment and tools for forest monitoring.
10. The primary beneficiaries were heavily involved in project implementation:
 - BKNP leaders and staff were involved in the planning and operational stages.
 - Local communities were involved in the execution of different activities as the executor, trainees, laborers or participants of discussion
 - Local governments were involved in capacity building related activities, dialogues and different discussion sessions.

Lessons learned

11. From the project formulation process:
 - ✓ The key problem addressed was derived from completed ITTO project, affirmed and thoroughly analyzed involving major stakeholders that resulting project design had received strong support in the implementation stage.
 - ✓ The indicators of achievement were weakly defined that their use in assessing achievement was somewhat problematic.
12. From the project implementation process
 - The project management team (PMT), comprised only a few professionals, proved able to manage the project efficiently and to achieve planned objectives of the project.
 - Continued communication and coordination of the PMT with districts government of Kapuas Hulu, local communities, NGOs and ITTO significantly contributed to the smooth project implementation.
 - The support granted to PMT by BKNP authority had considerably contributed to the successful project operations.

Conclusions and recommendations

13. The conclusions drawn are listed below:

- i. The key problem addressed by the project “Conservation management of Betung Kerihun National Park (BKNP) as the transboundary ecosystem between Indonesia and Malaysia (Sarawak) not well performed” was identified involving the main stakeholders and consistent with findings of ITTO completed project PD 44/00 Rev. 3 (F); successful removal of the key problem would greatly contribute to enhancing management of the park.
- ii. The key problem was adequately analyzed involving the main stakeholders, its causes and sub-causes as well as consequence were clearly specified; the project design was develop based on a clear and logical cause-effect relationship that its vertical logic was strong while its elements of intervention were relevant for resolving the problems addressed.
- iii. The project was implemented smoothly by the PMT without any major administrative or operational difficulties; the 8-month extension in time for project implementation was attributable to the slowing down of operation in 2016 brought about by the financial problem of ITTO.
- iv. The smooth implementation and successful completion of the project were made possible by, among others:
 - ✓ The sound project design;
 - ✓ The effective implementation strategy pursued;
 - ✓ The sufficient inputs in terms of manpower, funds and time;
 - ✓ The strong support of the primary beneficiaries, partners and ITTO; and
 - ✓ The able project management team.
- v. The specific objective defined was partially achieved as two out of four planned outputs were not fully achieved, i.e. Output 2 and 3
- vi. Cooperation between BKDSNP and FDS in conservation of TBCA has been enhanced through implementation of jointly identified activities; biodiversity data on BKNP has been updated on limited area, process on improving local livelihood had been initiated yet local livelihood has not reached an improved state, and; community-based forest monitoring system has been developed under the project.
- vii. The assumptions made were valid throughout the project duration and the mitigating measures introduced were effective in preventing the potential risks from materializing.
- viii. The indicators of achievement originally defined in the project document were not all applicable as some were not measurable while some others were not specific nor logical.
- ix. The primary beneficiaries of the project had demonstrated strong cooperation and support to the project management team.
- x. The project has generated a number of tangible results which in the form of technical reports, physical construction and technical documents that should enhance the park management if they are properly and consistently utilized.

14. The important recommendations made include:
- i. It is strongly recommended for any ITTO project proponent to perform adequate analysis of the problem to address in accordance with existing ITTO manual for project formulation to ensure clarify of cause-effect relationship.
 - ii. To be sound, a project design must be constructed using a clear cause-effect relationship, to ensure relevance and effectiveness of planned interventions to resolve the problems at hand.
 - iii. To ensure a smooth and successful completion of a project, appropriateness of the implementation strategy, adequacy of inputs as well as support of the primary beneficiaries, partners and ITTO Secretariat are among the enabling conditions that must prevail.
 - iv. It is best to employ a small but able management team in order to minimize cost of key personnel, ensure effective coordination and increase adaptability to changing environment.
 - v. Achievement of the project should be assessed using pre-defined indicators that such indicators must be defined in a SMART manner in order to be applicable; revisiting defined indicators during the course of project operation may be required taking progress in implementation into account.
 - vi. It is strongly recommended that BKDSNP makes available the necessary resource to continue implementing those activities that have been initiated under the project in order to avoid wasting the positive results, e.g. activities on enhancing cooperation with FDS, promoting local livelihood, including ecotourism and updating biodiversity data for better management planning.



1. Project Identification

1.1. Context

Betung Kerihun National Park (BKNP), around 800.000 hectares in extent, is one of the most important protected areas of Indonesia, not only because of its large area but also due to richness and uniqueness of its biodiversity. The park is home to: more than 48 mammal species including the endangered great ape Orangutan (*Pongo pygmaeus*), more than 1,200 plant species (75 species are endemic species), and 112 fish species of which 14 species are endemic to Borneo.

The project reported here is a follow-up to completed ITTO-sponsored projects, namely:

- PD 26/93 Rev.1 (F) “Development of Bentuang Karimun Nature Reserve as a national park, Phase I”. The specific objectives of that project were to collect biophysical as well as socio-economic data on the reserve and develop management plan for the national park.
- PD 44/00 Rev.3 (F) “Implementation of a community-based transboundary management plan for the Betung Kerihun National Park, West Kalimantan, Indonesia, Phase II”. The objectives of that project were to communicate the park management plan with stakeholders, define park zone and mark boundaries, develop basic infrastructure, recruit needed human resource, and operate park database system.

Although some progress had been made in the management of BKNP through the previous projects, plenty homeworks needed to be accomplished in view of adequately managing BKNP as a transboundary conservation area, as an essential element of Heart of Borneo Initiative and, more importantly, as a primary source of livelihood for the people of Kapuas Hulu, a government territory that has been declared as a conservation district on 1 October 2013. Among the problems that remained to be addressed were: i) weak cooperation between West Kalimantan and Sarawak in TBCA management, ii) current BKNP management plan lacked of conformity to real world situation, iii) local livelihood was underdeveloped, and iv) community-based forest monitoring not operational.

Development of Project PD 617/11 Rev. 4 (F) was solely the initiative of the Executing Agency, meant as a follow up to completed ITTO Projects.

1.2. Origin and the problem

Project PD 617/11 Rev. 4 (F) was built on the results and findings of completed project PD 44/00 Rev. 3 (F) which are summarized below:

- i. BKNP management zones and boundaries clearly defined, agreed with local communities and marked on the ground.
- ii. Basic equipment and facilities for proper functioning of the park procured and operational.
- iii. Park management systems developed and communicated with local government and communities.
- iv. Qualified park personnel recruited and trained as necessary.
- v. Park database system developed and operational.
- vi. Information on sustainable utilization of NTFPs gathered and micro-enterprise models established.
- vii. Community-based ecotourism activities introduced at selected localities.
- viii. Awareness on biodiversity conservation and utilization raised.
- ix. Lessons learned on managing BKNP and LEWS in Sarawak and on developing buffer zones shared by both parties.

While above results and findings of completed project had contributed to improving performance of BKNP management, they had not resulted in a satisfactory management of BKNP. A fundamental problem as regards level of management performance thus remained a serious problem. Therefore, the key problem addressed by the project was "Conservation management of Betung Kerihun National Park (BKNP) as the transboundary ecosystem between Indonesia and Malaysia (Sarawak) not well performed".

The key problem so defined was shared with the primary stakeholders during the stakeholder consultation meeting organized at the BKNP headquarters in Putussibau by the BKNP authority. Among the stakeholders consulted were: community leaders, local governments, NGOs, regional and local forestry institutions and universities. These stakeholders also expressed dissatisfaction with current management of BKNP which required significant improvement especially as regards livelihood development and involvement of stakeholders in management operations.



2. Project Objectives and Implementation Strategy

2.1. Project objectives

Consistent with the key problem addressed by the project, the project objectives were defined as follows:

- Specific objective : To strengthen sustainable conservation management of BKNP as the framework for transboundary conservation management.
- Development objective : To contribute to the conservation of natural ecosystems of protected area in Indonesia through implementation of activities on biodiversity conservation and local socio-economic development.

2.2. Implementation strategy

- The strategy adopted was built on the lessons learned from the ITTO projects implemented at BKNP and at BANP and LEWS in Sarawak, i.e. there was a need to establish a joint technical task force between the neighboring parks in West Kalimantan and Sarawak for purpose of implementing jointly identified activities.
- The project worked collaboratively with all relevant stakeholders of protected areas at different levels.
- The project organized expert meetings, FGDs and workshops at different levels for sharing of experience, insights and information.
- The project undertook capacity building programs through trainings on managerial and technical skills involving local government employees and community leaders and members, giving priority to women as appropriate.
- The project developed network with such international donors as TFCA Kalimantan and GIZ-Forclime Programme, local NGOs such as KOMPAKH and SIPAT and International NGO such as WWF.

The strategy, as outlined above, proved working well. All planned activities had been timely implemented without noticeable difficulties. It is to be noted that extension in time for implementing the project was not attributable to weakness of the strategy adopted but due to the financial crisis facing ITTO back in 2016.

2.3. Assumptions and risks

The major assumptions made to ensure a successful achievement of the project objectives were:

- i. Cooperative Malaysian authorities, the FDS in particular.
- ii. Strong political will of the governments to conserve forest resources and ecosystems.
- iii. Strong support of stakeholders on sustainable forest management.
- iv. Strong commitment of governments to harmonizing forest conservation and local economic development

To avoid the risks associated with each of the assumptions, applied risk mitigating measures are as presented in Table 1.

Table 1: Assumptions, potential risks and mitigating measures

Assumptions	Potential risks	Mitigating measures
i. Cooperative concerned Malaysian authorities	Uncooperative authorities resulting in delayed execution of TBCA joint activities	<ul style="list-style-type: none"> ● Intensive bilateral communication and coordination ● Proactive PMT ● Obtain good advice of ITTO Secretariat
ii. Strong political will to conserve forest resources and ecosystems.	Weakening political support on conservation	<ul style="list-style-type: none"> ● Intensive dialogue and coordination with concerned government authorities at all levels. ● To well inform local governments of the project's objectives
iii. Strong support of stakeholders on SFM	SFM programs not executable and SFM not achievable	<ul style="list-style-type: none"> ● Involvement of key stakeholders in the planning and execution of SFM programs ● Local communities engaged in livelihood development initiatives ● Local governments take forest conservation into account in the spatial planning process
iv. Strong commitment of the governments to conservation and development	Conservation and development do not develop in harmony	<ul style="list-style-type: none"> ● Intensive dialogue and consultation between the PMT and key stakeholders ● Demonstration of economic activities that serve as incentive to conserving forest resource



3. Project Performance

3.1. Planned vs realized performance

a. The specific objective

The specific objective defined during the project formulation stage was “to strengthen sustainable conservation management of BKNP as the framework for transboundary conservation management”, corresponded to the key problem addressed by the project. There was no change made to this defined specific objective during the course of project implementation.

b. The outputs and activities

Table 2: Status of planned and realized outputs and activities

Planned outputs/activities	Realized outputs/activities
Output 1: Cooperation between Indonesia and Malaysia in the conservation of transboundary ecosystems of BKNP, BANP and LEWS sustained	
<u>Activity 1.1:</u> To establish a Joint Task Force to implement joint TBCA management activities	Formation of a Joint Task Force proved not working; it was replaced with the signing of a Letter of Intent (LoI) to cooperate in the conservation of forest resource and ecosystems between BKNP and FDS authorities.
<u>Activity 1.2:</u> To identify partnership / cooperation biodiversity conservation of protected areas	The activity was fully implemented: Conservation activities were collaboratively identified for joint implementation.

<p><u>Activity 1.3:</u> To conduct surveys, studies and exchange of information to improve management of the parks</p>	<p>The activity was fully implemented and consisted of 3 sub-activities identified under the LoI namely:</p> <p>1.3.1 To conduct a collaborative research and joint publication on Orangutan 1.3.2 To promote ecotourism in West Kalimantan and Sarawak 1.3.3 To exchange experience in implementing community empowerment programs.</p>
<p><u>Activity 1.4:</u> To conduct internship and on-the-job training on biodiversity conservation</p>	<p>The activity was fully executed under 3 sub-activities, namely:</p> <p>1.4.1 To carry out on-the-job training on park management skills 1.4.2 To carry out training on Semah fish raising in Kapuas Hulu and Sarawak 1.4.3 To assist local communities in producing quality gaharu commodity in Kapuas Hulu and Sarawak</p>
<p><u>Activity 1.5:</u> To organize a regional workshop on TBCA management</p>	<p>The activity was fully implemented in the City of Pontianak on 6-8 March 2018</p>
<p><u>Conclusion:</u> One planned activity under Output 1 i.e. Activity 1.1, was modified but no change had been made to the output as it was originally defined</p>	
<p>Output 2: Management plan for biodiversity conservation in BKNP improved and implemented</p>	
<p><u>Activity 2.1:</u> To update data and information on biodiversity in BKNP</p>	<p>The activity was fully implemented but only covered app. 200.000 Ha of BKNP area.</p>
<p><u>Activity 2.2:</u> To assess conservation status of biodiversity in BKNP</p>	<p>The activity was fully implemented and covered the biodiversity data generated under Activity 2.1</p>
<p><u>Activity 2.3:</u> To conduct a series of discussion between BKNP, indigenous peoples and local governments on BKNP conservation issues</p>	<p>The activity was fully executed and completed, signified by the signing of partnership agreements between BKDSNP and 16 partners on 13 July 2017 in Jakarta.</p>
<p><u>Conclusion:</u> All planned activities under Output 2 were fully implemented and no change had been made to the output as it was originally defined.</p>	

<p>Output 3: Sustainable livelihood of the local communities living within and around BKNP improved</p>	
<p><u>Activity 3.1:</u> To demonstrate sustainable use of BKNP resources through development of eco-farming and utilization of NTFPs in selected areas of buffer zone</p>	
<ul style="list-style-type: none"> ● Sub activity 3.1.1: To identify potential NTFPs for development by local communities 	<p>The activity was fully implemented as it was defined, with the assistance of competent consultants</p>
<ul style="list-style-type: none"> ● Sub-activity 3.1.2: To establish demo plots for selected NTFPs for purpose of technology transfer 	<p>The activity was fully implemented in the forms of:</p> <ol style="list-style-type: none"> a. Biogas energy production b. Utilization of biogas in the makings of brown palm sugar, fruit cakes and bamboo shoot chips c. Training on semah fish raising under tagang system. d. Training on producing quality gaharu commodity
<p><u>Activity 3.2:</u> To develop community-based ecotourism on TBCA:</p> <ul style="list-style-type: none"> ● Sub-activity 3.2.1: To conduct a study on village-based ecotourism 	<p>This activity was fully executed through 5 sub-activities</p> <p>This study was conducted at Tekelan village</p>
<ul style="list-style-type: none"> ● Sub activity 3.2.2: To develop partnership for ecotourism development ● Sub-activity 3.2.3: To promote village ecotourism 	<p>Sub-activities 3.2.2 and 3.2.3 were executed simultaneously at 3 villages: Kedungkang, Tekenang and Sadap</p>
<ul style="list-style-type: none"> ● Sub-activity 3.2.4: To strengthen involvement of women in ecotourism development 	<p>This activity was fully executed as it was originally defined through a training on homestay and lodge management operations jointly organized by BKNP authority and Kapuas Hulu District Government.</p>
<ul style="list-style-type: none"> ● Sub-activity 3.2.5: To organize one national workshop on the promotion of village ecotourism 	<p>The activity was modified to become 2 FGDs which were implemented under sub activities 3.2.2 and 3.2.3</p>
<p><u>Activity 3.3:</u> To conduct awareness raising campaign focusing on local peoples in border areas.</p>	<p>This activity was fully implemented as it was originally defined with the assistance of SIPAT, a competent local NGO.</p>

<p><u>Conclusion:</u> One sub-activity under Output 3 was modified from one national workshop to become 2 FGDs on the promotion of village-based ecotourism but no change had been made to the output as it was originally defined</p>	
<p>Output 4: Community-based carbon and conservation monitoring systems well developed</p>	
<p><u>Activity 4.1:</u> To conduct a feasibility study on community-based carbon and biodiversity conservation REDD+ project.</p>	<p>This activity was cancelled due mainly to the financial problem facing ITTO</p>
<p><u>Activity 4.2:</u> To support regular forest patrolling operation in BKNP</p>	<p>This activity was fully implemented by providing limited financial support</p>
<p><u>Activity 4.3:</u> To mobilize a well-equipped forest patrol squad</p>	<p>The activity was fully implemented through procurement of operational equipment and facilities</p>
<p><u>Activity 4.4:</u> To conduct training on forest patrolling for forest squad personnel</p>	<p>Activities 4.4 and 4.5 were merged as both had similar objectives and fully implemented at Putussibau and Tanjung Lokang.</p>
<p><u>Activity 4.5:</u> To conduct training on community-based forest monitoring system.</p>	
<p><u>Conclusion:</u> One activity pertained to Output 2 was cancelled, other activities were fully implemented and no change was made to the output definition</p>	
<p>4 unplanned activities were implemented during the extended period in May – June 2018:</p> <ul style="list-style-type: none"> ● Stakeholder consultation on project findings at local and national levels to facilitate formulation of follow-up project ● Formulation of a mid-term action program on enhancing cooperation between West Kalimantan and Sarawak in ecotourism development ● Obtaining license for marketing of community-produced foods ● Development of technical manuals for making brown palm sugar, fruit cake and bamboo shoot chips. 	
<p><u>Conclusion:</u> Unplanned activities had been fully implemented within the sanctioned time and financial resources.</p>	

3.2. Time schedule

The project officially commenced in November 2013, planned for 48 months. The pace of project operations slowed down for about 6 months in 2016 due to the financial crisis then facing the ITTO. As a result, the project was not completed as scheduled.

The first extension in time for 6 months was granted by ITTO per NOL Ref. F. 17-0122 of 2 November 2017 while the second extension for 2 months was further granted by ITTO on 30 March 2018 with NOL Ref. F. 18-0036. The project completion date approved by ITTO was 30 June 2018

In accordance with the project agreement, Section 5.08 of Article V, the Executing Agency is to submit a completion report by September 2018; an audited final financial report shall be submitted by October 2018 in accordance with Section 5.03 of the project agreement. The Executing Agency, however, intended to submit such reports on earlier dates.

3.3. Inputs applied

a. Manpower

i. Project key personnel

The key project personnel initially employed based on the NOL of ITTO Ref. No. F. 13 -0231 of 1 October 2013 were:

- Project Coordinator : Ms. Yani Septiani
- Project Secretary : Ms. Natalia Punai
- Project Finance : Ms. Lelly Ekasari
- Field Supervisor : Mr. Djoko Kuncoro
- Management Advisor : Dr. Hiras Sidabutar

Several project key personnel resigned in December 2016 resulting in the hiring of a new team of professionals starting January 2017 that comprised:

Project Coordinator	: Dr. Hiras Sidabutar
Project Secretary	: Ms. Astri Indah Afriliani
Project Finance	: Ms. Lelly Ekasari
Field Supervisor	: Mr. Agustinus Irmawan

ii. International and National Consultants and Contractors

In total, 1 International Consultant, 8 National Consultants and 4 contractors had been hired by the project to assist in execution of particular activities as detailed in Table 3.

Table 3: Employment of International and National Consultants and Contractors

Nos.	Name	Assisted activity	Length of service	NOL
International Consultant				
1.	Prof. Youn, Yeo-Chang	Act 1.1 & 1.2.	3 weeks	F. 14-0111, 2 Jul 2014
National Consultants				
2.	Mr. Wandoyo Siswanto		2 months	F. 14-0059, 21 Apr 2014
3.	Ms. Soehartini Sekartjakrarini	Act 3.2.1	2 months	F. 14-0059, 21 Apr 2014
4.	Ms. Agus Irianto	Act 3.1	2 months	F. 14-0111, 2 Jul 2014
		Act 3.1.2	2 months	F. 15-0089, 5 Jun 2015
		Act 3.1.3	2.5 months	F. 16-0086, 27 April 2016
5.	Dr. Hari Prayogo	Act 1.3.1	2 weeks	F. 17-0092, 4 Aug 2017
6.	Ms. Wilhelmina Cluny	Act 1.3.1	3 weeks	F. 17-0092, 4 Aug 2017
7.	Mr. Agus Sudrajat	Act 3.1.2 (c)	1 month	F. 18-0004, 9 Jan 2018
		Act add: Tech Manuals	3 weeks	F. 18-0061, 28 Jun 2018
8.	Mr. M. Hermayani Putera	Add Act, Draft MTAP	3 weeks	F. 18-0038, 2 Apr 2018
9.	Ms. Lasmini	Stakeholder Meeting	3 weeks	F. 18-0042, 2 Apr 2018
Contractors				
10.	Mr. Wandojo Siswanto		USD 25,000	F. 14-0059, 21 Apr 2014
11.	KOMPAKH	Act 3.2.2, 3.2.3	USD 6,740	F. 17-0043, 13 Apr 2017
12.	Tekenang Fishermen Assc.	Act 3.2.3	USD 4,979	F. 17-0033, 14 Mar 2017
13.	SIPAT/WWF Indonesia	Act 3.3	USD 9,500	F. 17-0105, 20 Sep 2017
14.	Canopy Indonesia	Act 1.5	USD 16,150	F. 18-0055, 6 Jun 2018

iii. NGOs

To assist in the implementation of Activity 3.2.3, i.e. to promote village ecotourism, local professional NGOs were hired: Tekenang Fishermen Association to renovate the wooded bridge at Tekenang village and KOMPAKH to formulate a strategic plan for promotion of ecotourism at Kedungkang village.

Another local NGO hired was SIPAT (Serakop Iban Perbatasan) to assist in the execution of Activity 3.3 with the full supervision of WWF Kalimantan. Yet another professional local NGO employed by the project was Canopy Indonesia as the Event Organizer of Activity 1.5, i.e. organization of a regional workshop on TBCA on 6-8 March 2018 in the City of Pontianak.

b. Expenditures

Realized expenditures since November 2013 as of 30 June 2018 were as follows:

- i. Total amount of funds received : USD 764,110
 - ii. Total amount expended : USD 764,110
 - iii. Total amount retained by EA : NIL
- at 30 June 2018

Financial audit reports for fiscal years 2014, 2015 and 2016 had been timely submitted to and endorsed by ITTO; the audit report on fiscal year 2017 will be combined with the final audit report scheduled for submission by end of August 2018, ahead of the deadline date required by the project agreement in October 2018.



4. Project Outcome and Involvement of Target Beneficiaries

4.1. Achievement of the specific objective

Achievement of the specific objective was assessed using the indicators defined in the LFM of the project document; defined indicators of the specific objective were:

- i. By 2018, cooperation in conservation of transboundary ecosystems of BKNP, BANP and LEWS enhanced.

Obviously, this particular indicator was inadequately defined that it could not be used to measure level of enhanced cooperation. Implementation of pertinent activities, 6 sub-activities under 2 major activities, pointed to the fact that cooperation between BKDSNP and FDS, representing BANP and LEWS, in biodiversity conservation has been enhanced both in technical and managerial aspects.

- ii. By end of 2015, strategic plan for biodiversity conservation in BKNP adopted and implemented by at least 50% of the stakeholders within the protected area.

This particular indicator is not easy to comprehend and use. Under Activity 2.1, biodiversity data on 200,000 hectares of BKNP area were generated through field survey; under Activity 2.2, scarcity status of wildlife species was assessed using the data produced under Activity 2.1. However, existing strategic plan has not been revised using the newly generated biodiversity data thus the old version of strategic plan was still in use till project end. In addition, the works under Activities 2.1 and 2.2 covered only around 25 percent of the total area of BKNP mainly for reason of insufficient funding.

- iii. By end of the project, sustainable livelihood of the communities in 3 villages improved.

Indeed, villages of Sadap, Kelayam, Kedungkang and Tekenang were the target of the interventions on local livelihood development. At Sadap for instance, biogas energy has been produced and utilized in the processing of NTFPs into brown palm sugar, fruit cakes and bamboo shoot chips. Kelayam community also involved in the training on the making of brown palm sugar and bamboo shoot chips; at Kedungkang, a 80 meter wooden bridge had been renovated to increase safety of pedestrians; at Kedungkang, a village-based mid-term ecotourism development plan had been formulated. Admittedly, these interventions have not

resulted in improved sustainable livelihood; they only initiated the process on local livelihood development which may show positive results only after years if, and only if, the process is consistently carried on.

- iv. At project completion, community-based conservation management and monitoring system well developed.

This indicator was not clearly defined especially intended meaning of “community-based conservation management”. As regards community-based forest monitoring system, selected villagers of Tanjung Lokang and Bungan Jaya were trained on conduct of patrolling operations together with park rangers. In fact, the villagers were enthusiastic with the training and thankful for the skills acquired. Future forest patrolling in no doubt can rely on these trained villagers to work with their park ranger counterparts in carrying out forest patrols.

The above matching of defined indicators with achievements of interventions clearly indicated that the specific objective was not fully achieved. All that can be concluded at this stage was that the specific objective only partially achieved.

It was hypothesized during the project formulation process that delivery of outputs would realize the specific objective. It was therefore necessary to assess to what extent individual outputs had been delivered. To this end, results of individual activities under each output shall be assessed using defined indicators of achievement of that particular output which are presented below:

Output 1

Strengthened cooperation in the conservation of the trans-boundary ecosystems of BKNP in Indonesia and Batang Ai National Park (BANP) and LEWS in Sarawak State of Malaysia.

The full implementation of Activities 1 through 5 including 3 sub-activities under Activity 1.3 and 3 sub-activities under Activity 1.4 has obviously contributed to enhancing cooperation between BKDSNP and Forest Department Sarawak (FDS) in TBCA management in general, in biodiversity conservation as well as local livelihood development in particular. Enhanced cooperation means



Directors of BKDSNP and FDS signed LoI to cooperate in biodiversity conservation



FGD on promoting ecotourism in West Kalimantan and Sarawak

that such cooperation is already in place and now has been improved through joint implementation of particular activities. In other word, cooperation between BKDSNP and FDS that had been initiated in the past is now operational, has been enhanced and it is sustainable.

The improvement made in the cooperation can be assessed at least, qualitatively, using the indicators defined in the LFM presented in the project document. However, those indicators are not all measurable or operational. For purpose of assessing current state of cooperation, below are modified indicators applied:

- i. Signed Lol
- ii. Letter of Intent (Lol) to cooperate in TBCA management between BKDSNP and FDS on behalf of BANP and LEWS, has been duly signed by respective authorized officials.
- iii. Joint activities identified
- iv. Eight joint activities had been identified by BKDSNP and FDS in a collaborative manner: 3 activities dealt with study and exchange of experience and information and 5 activities concerned with capacity building.
- v. Six joint activities and one regional workshop on TBCA implemented
 - One study on Orangutan collaboratively implemented by BKDSNP and FDS experts.
 - One FGD on ecotourism development organized by BKDSNP in close consultation with FDS.
 - 4 FDS staff visited livelihood programs in Kapuas Hulu.
 - 5 BKDSNP staff gained practical skills on protected area management in Sarawak through field visit and discussion.
 - 4 community leaders, 2 BKDSNP staff and community of Bungan Jaya village trained by Sarawakian experts on fish raising under tagang system.
 - 75 community members in Ulu Mujok of Sarawak and Tanjung Lokang of Kapuas Hulu



Successful semah fish raising with tagang system at Long Lidong, Sarawak



Training on gaharu inoculation of gaharu-producing trees (Aquilaria beccariana) at Tanjung Lokang, Kapuas Hulu



A plenary session of the Asia-Pacific Regional Workshop on TBCA Management

trained by Indonesian expert on gaharu commodity development.

- Asia-Pacific workshop on TBCA organized by BKDSNP Agency in collaboration with ITTO, FDS, and other partners.

Close examination of above achievements and indicators clearly indicates that cooperation between BKDSNP and FDS in TBCA management has been enhanced indeed and such cooperation needs to be sustained in the interest of future biodiversity conservation on TBCA.

Output 2

Management plan for biodiversity conservation in BKNP enhanced.

The remaining question to answer at this stage is “have management planning and implementation of BKNP management plan for biodiversity conservation been actually enhanced?”. To answer this question, outcomes of the activities implemented were assessed using the indicators defined in the LFM of the project document

- The indicators defined in the LFM were:

- i. Biodiversity data updated and mapped through conduct of field survey combined with interpretation of satellite imagery and verified through ground truthing exercises.

This indicator has been satisfied, noting that the area covered by the survey and satellite imagery was only about 25% of BKNP total area. That is to say that, biodiversity data updating had been completed only partially.



Endangered Pongo pygmaeus pygmaeus located at BKNP

- ii. Assessment of scarcity status of biodiversity completed

Indeed, this indicator had been met but only on 25 percent of BKNP area. Again, the indicator was partially met.

- iii. Two series of dialogue between BKNP, local communities and local governments conducted

Information on the dialogue processes and outcomes outlined in the previous section (Table 2) clearly indicates that the indicator had been fully satisfied.



Dialog with local community and local government on livelihood and park conservation

- In light of above assessment, it is reasonable to conclude that: biodiversity data updating and assessment of biodiversity conservation status have been partially completed while implementation of BKNP management plan has not been actually enhanced for the following reasons:

- ✓ As shown above, the biodiversity data collected and assessed only covered 25 percent of BKNP area. The management plan, however, has not been revised using updated biodiversity data. The existing management plan should have been revised using the updated biodiversity data yet this work has not been performed by BKNP Agency. In other words, the management plan under implementation is still based on old data.
- ✓ The Community Action Programs (CAPs) developed by 16 Partners and endorsed by BKNP Agency for implementation has, in fact, been only attached to the individual Partnership Agreements signed by authorized Partners but have not been operational at all.

- Above assessment on achievement clearly shows that the project intervention has not enhanced implementation of BKNP management plan; indeed, the intervention has provided needed information for improving the plan for the western part of BKNP area but updated data have not been incorporated into the management plan.

Output 3

Sustainable livelihood of local communities residing in BKNP buffer zones improved.

- Outcomes of individual activities implemented, including sub-activities under major activities, determine level of achievement in the development of livelihood of local communities. Level of achievement was assessed by matching outcomes of the activities implemented with the indicators defined in the LFM presented in the project document.
- Defined indicators of Output 3 “improved livelihood of local communities” were:
 - i. Development of eco-farming and NTFPs implemented in 2 villages.



Installation of biogas production system at Sadap village

Under the project, generation of biogas and its utilization in the processing of NTFPs was demonstrated. The Sadap and Kelayam communities had been trained on the making of brown palm sugar, fruit cakes and bamboo shoot chips noting that Kelayam community



Raising cows and pigs for manure to feed biogas digester and produce biogas energy

- was not involved in the training on fruit cake making. The indicator therefore has been met.
- ii. One programme on community-based ecotourism developed
A Mid-term Action Plan for development of community-based ecotourism at Kedunggang village is now ready for implementation. Hence, this indicator has been satisfied.
 - iii. One feasibility study on ecotourism conducted
Completion of the study at Tekelan site met this indicator.
 - iv. Coordination meeting between local government, community and private sector carried out 3 times on village ecotourism development. Such meetings have indeed been organized several times but without the presence of private sector. Therefore, the indicator was met only partially.
 - v. One set of document/video on village ecotourism produced.
Indeed, several documents and videos have been produced by the project. The indicator therefore was satisfied.

- vi. At least 2 groups of village involved in ecotourism development.
A number of villages including Tekenang, Kedungkang, Sadap and several others were involved in the initiative. The indicator therefore was satisfied.
- vii. One national workshop on the promotion of ecotourism conducted.
Such a workshop was not organized. Instead, a regional FGD and 2 local FGDs had been organized with the consent of ITTO. In this light, the indicator could be considered as fulfilled.
- viii. 5 times of campaign, 2 exhibitions and 3 meetings on awareness raising on conservation among local people in border areas conducted.
Indeed, community meetings were conducted, an exhibition booth established in Pontianak during the occasion of the regional TBCA workshop and several community dialogues on conservation issues organized. In this light, the indicator was essentially met.



Brown palm sugar making through cooking of palm liquid using biogas at Sadap



Identifying bamboo shoot for harvest

- Considering how the eight defined indicators were met, it is reasonable to conclude that, overall, Output 3 “livelihood of local communities improved” has been achieved. This is a bold conclusion indeed. In fact, livelihood of local communities has not been improved. It is more appropriate to say that the process on improving local livelihood has been initiated under the project. Improving livelihood is an on-going and long process. The project just initiated the process and it has to be continued consistently, for which required inputs must be made available. One of the critical inputs is professional technical assistance; without this input, local communities can not be expected to continue practicing the knowledge and skills they have acquired from the project. Technical assistance is best to be provided not only for months but for years. Only then, that the change in mentality promoted would become aculturized and the expected results delivered, i.e. improved livelihood.
- Indeed, local communities do not only need continued technical assistance but also material and financial inputs, at least seed capital under specific agreed-upon terms and condition.

Output 4

Community-based forest conservation monitoring system developed.

The Indicators of achievement of development of community-based monitoring system defined in the LFM of the project were:

i. Study on development of a community-based REDD+ project conducted
This indicator is not applicable as the planned study had been cancelled due to the financial problem then experienced by ITTO.



Learning on using a forest survey navigating device

ii. 10 times forest patrolling operations supported
This was accomplished through cost sharing by the Project and Park.

iii. Forest patrol squad well equipped to carry out operations

This was met through procurement of operational equipment and facilities by the project.

iv. Training for personnel of forest monitoring implemented (3 sessions)

v. Training for local communities on forest monitoring implemented (5 sessions)

Upon consultation with the Education and Training Centre of MOEF, training on forest monitoring for both Park Rangers and community members had been combined as both trainings had the same objectives. The trainings had been fully implemented at two sites involving 15 Park Rangers and 59 community members. Therefore, indicators iv) and v) can be regarded as satisfied.

Overall, it is reasonable to conclude that 4 defined indicators (ii thru v) had been satisfied; in other words, community-based forest monitoring system has been developed. It is to be noted that the Park Ranger trainees had been in the past somewhat exposed to forest monitoring and involved in monitoring operations. Through this training, therefore, their capacity has been enhanced. As for community members, the trainees, the training was new to them. It was found that they participated in the training sessions enthusiastically and had acquired the necessary knowledge and skills to enable them get involved in forest monitoring operations.

Above analyses clearly indicate that Outputs 1 and 4 can be regarded as fully delivered while Outputs 2 and 3 were only partially achieved. These analyses confirm the previously made conclusion, i.e. the specific objective of the project has been met only partially; out of four planned outputs, only two outputs had been fully delivered while the other two outputs had been only partially achieved.

4.2. Pre-project's vs at project completion situations

a. Tangible results

The tangible results of individual project activities under each output which did not exist prior to commencing the project are listed below:

Output 1

- Proceedings of the FGD on promoting ecotourism in West Kalimantan and Sarawak (Activity 1.3.2) and Technical Report on the regional workshop on TBCA management (Activity 1.5) are now available for use by interested parties and individuals.
- Drafts technical report on research on Orangutan at BKNP and BANP are available for reference.

- Inoculated gaharu trees now growing at Ulu Mujok, Sarawak, and Tanjung Lokang (West Kalimantan) can be used as learning material on the effect of inoculation on gaharu resin production.

Output 2

- Technical reports on survey biodiversity and assessment of wildlife species conservation status are now available for use by interested individuals and institutions.
- Community Action Programs on local livelihood development to support biodiversity conservation have been developed by 16 partners of BKDSNP and are ready for execution subject to availability of funding.

Output 3

- Technical report on potential NTFPs for development by local communities is available for use and follow-up action.
- Biogas energy production system was installed at Sadap village.
- Pigs and cows are raised in cages at Sadap village as source of material for biogas energy.
- Cooking equipment and facilities as well as water tower have been installed and operational at Sadap village.
- A mid-term action plan for development of a community-based ecotourism industry is now ready for execution subject to funding availability.
- A study report on village-based ecotourism development is now awaiting investment.
- A MTAP on enhancing cooperation in ecotourism development in West Kalimantan and Sarawak is now available for use by interested parties and individuals
- Technical manuals for making of food products of NTFPs are now available for use by interested local communities

Output 4

- Facilities for forest monitoring operations such as speedboat, life vest, etc. are now available for use
- Guidelines for conducting forest monitoring operations are now available for use by interested parties or institutions.

b. Sectoral policy and program

Through implementation of different activities, the project has contributed to sectoral development in one form or another as highlighted below:

- The FGD on promoting ecotourism in West Kalimantan and Sarawak strongly signaled the need to enhance regional cooperation in cross-border ecotourism inescapably involving different sectors.
- The training on homestay and lodge operational management raised interest of tourism sector in capacity building for ecotourism development.
- The support of the project on the establishment of Kapuas Hulu biosphere reserve promoted attention of Kapuas Hulu district government to natural resource conservation.



Training of women and girls on homestay and lodge operational management

- The Asia Pacific regional workshop on TBCA management exemplified the relevance of TBCA Initiative to Nawacita's third development principle.

c. Physical environment

In terms of physical environment, during the 56-month of project duration, the project has created an environment wherein villagers are now willing to work at no-pay, collective-action basis. This is evident from the changing attitude of Sadap villagers from laborers to owners of village livelihood ventures. During the occasion of Asia – Pacific regional workshop on TBCA management, the role ITTO plays in TBCA development across the region was recognized by the participants.

As regards BKNP accessibility problem, it requires strong commitment of the government to invest in infrastructure development. Such investment will surely promote local economic activities in the mid- to long-term.

4.3. Involvement of the target beneficiaries

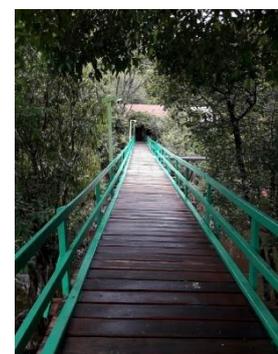
The primary beneficiaries of the project were BKNP, local communities and local governments; these beneficiaries had involved in the project implementation in one way or another, as highlighted below:

a. The BKNP

- BKNP authority had been involved in the planning and operational stages of the project; it involved in the project formulation process, operational planning, execution of activities including monitoring of progress of work and reporting, not the least in project budget management.
- The BKNP authority has and will be benefited from the project if its results and outputs are utilized appropriately, which include: enhanced cooperation in TBCA management with FDS, updated data on biodiversity, stronger support of local communities on conservation of the park brought about by the livelihood development initiated under the project, increased participation in ecotourism industry development and in forest conservation monitoring etc. It has to be emphasized, however, that these results and outputs produced by the project will not benefit BKNP authority unless they are appropriately and consistently used.

b. The local communities

- The local communities residing in the buffer zone and within the park including NGOs, have involved in biodiversity monitoring as species marker and laborer, construction of biogas production system as partner, utilization of biogas in the making of food products as trainees, training program on homestay and lodge management as trainees, promotion of ecotourism as partner, community-based forest monitoring as trainees, etc.
- The local communities have and will be benefited from the project in different ways:
 - ✓ Selected community members received some income through involvement in biodiversity survey, conduct of studies on village-based ecotourism, renovation of Tekenang wooden bridge, etc.



Renovated wooden bridge at Tekenang

- ✓ Trained community members should be able to produce and sell different food products as source of sustainable income.
- ✓ Trained women and girls are now equipped with the necessary skills for running homestay and lodge business
- ✓ Trained community members are now able to produce gaharu resin in a better way in terms of timing and volume of resin production.
- ✓ Trained community members are now able to get involved in the forest monitoring operations.



Brown palm sugar making through cooking of palm liquid using biogas at Sadap

c. The local government

- Local government officers and staff at different levels had involved in the execution of particular project activities including:
 - ✓ Strengthening of role of women in ecotourism development
 - ✓ Conduct of studies on village-based ecotourism
 - ✓ A series of dialogue with BKNP and local peoples on conservation issues.
- Local government will be benefited indirectly from increased participation of local communities in park conservation related activities, more skillful local people through the training programs under the projects, better institutional coordination with BKNP and village development programs initiated under the project.

4.4. Project sustainability

Sustainability of the project after its completion is expected to last through the prevailing condition that had been developed under the project:

- The growing interest of local communities in the utilization of NTFPs as source of sustainable income for which local peoples have been equipped with needed skills.
- Large number of women and girls had been trained on homestay and lodging business that will promote ecotourism industry development
- Larger number of local people now opt to grow gaharu trees and apply inoculation technology to ascertain production of gaharu resin in terms of timing and volume compared to hunting natural gaharu in the forests.
- Local peoples eager to continue the livelihood activities that have been initiated under the project as a promising source of sustainable income.
- The BKNP has indicated its intention to continue on the livelihood activities as an incentive for local communities to support conservation of the park.

In addition, BKDSNP authority is strongly considering to submit a follow up project proposal to ITTO for possible funding; such a proposal will be built on findings of this completed project.



5. Assessment and Analysis

5.1. Project rationale and identification process

Betung Kerihun National Park is one of the most important protected areas of Indonesia, not only because of its extent of slightly over 800,000 hectares but also because of its unique and rich biodiversity, its role as a transboundary ecosystem and its significant potential as source of livelihood. Although some progress has been made in its management since its establishment in the nineties, some major issues remained, which included: i) weak cooperation with Sarawak in TBCA management operations, ii) weak development and implementation of the management plan, iii) lack of support by local stakeholders due to underdeveloped local livelihood initiatives, and iv) lack of involvement of local people in forest monitoring operation.

In essence, BKNP has not been adequately managed that sustainability of the park is at risk. Consequently, the key problem addressed by the project was defined as “conservation management of BKNP as a transboundary ecosystem between Indonesia and Sarawak (Malaysia) not well performed”. This key problem was then shared with the primary stakeholders, i.e. local government, local communities and NGOs for their affirmation or otherwise. The stakeholder consultation meetings indicated that majority of the stakeholders agreed on the key problem defined. In fact, the stakeholders also contributed to identification of relevant and needed interventions to resolve the problems causing the key problem.

5.2. The problem addressed, project design and implementation strategy

The key problem addressed, as defined above, was thoroughly analyzed involving the primary stakeholders using problem tree technique. By so doing, direct causes and indirect causes of the key problem were properly and fully identified which facilitated construction of a solution tree

which is simply an inversion of the problem tree. In fact, the solution tree clearly mimicked the relevant project design which consisted mainly of the specific objective, outputs and activities.

The implementation strategy pursued consisted of several critical elements as highlighted below:

- i. Enhancing cooperation with Forest Department Sarawak
This was accomplished through sharing of experience and information and learning each other. Reciprocal visits and field discussion were proved effective for enhancing cooperation in biodiversity conservation management.
- ii. Promoting involvement of stakeholders
The project was implemented in a collaborative and participative manner; local stakeholders, as appropriate, were engaged in the execution of particular project activities.
- iii. Sharing of experience and information
This was done through organization of group discussions at different levels, from a village one to the Asia-Pacific region gathering.
- iv. Local capacity building
Capacity building was accomplished through different training programs giving priority to participation of women and local communities.
- v. Village-based ecotourism development modelling
This modelling was practiced at selected villages for purpose of demonstration and technology transfer among others at Sadap, Kedungkang, Tekenang and Tekelan villages.

5.3. Critical differences between planned and actual implementation

A number of deviations from the original plans occurred due to unforeseen circumstances as summarized below:

- i. Activity 1.1: to establish a joint task force to implement joint TBCA management activities.
Establishment of such a task force proved complicated that it was replaced with the signing of a “letter of intent” to cooperate in TBCA management and the LoI had been used as the basis for undertaking technical cooperation between BKNP and FDS
- ii. Activity 3.2: Sub-activity 3.2.5 “to organize one national workshop on the promotion of ecotourism”, had been changed to 2 FGDs on the same subject, implemented as part of Sub-activity 3.2.2 “to promote village ecotourism”, with the prior consent of the ITTO Secretariat.
- iii. Activity 4.1.: “to conduct a feasibility study on community-based REDD+ conservation project” had been cancelled due mainly to reduced project budget.
- iv. Activities 4.4 and 4.5 were treated as the same activity due to similarity in their objectives and executed simultaneously.
- v. The project duration was extended from 48 months to 56 months with the approval of the ITTO due to the slowing down project operation in 2016 brought about by the financial problem then facing ITTO.
- vi. Amount of ITTO budget was reduced by USD 31,568 in accordance with ITTO letter Ref No. L.16-0065 dated 9 June 2016 while Gol’s contribution increased by USD 8,185

5.4. Adequacy of project inputs

In terms of human resource, project inputs were adequate. The key project personnel were able to properly handle the overall operational management of the project. The consultants hired, both national and international ones, as well as the contractors were able to successfully accomplish tasks within the sanctioned time and budget.

In terms of funding, the sanctioned reduced ITTO budget was sufficient to fully finance the project operations. No problem had occurred with respect to financing of activities, purchasing of capital items and procuring needed materials. The project funds were timely disbursed to the EA in eight installments.

Disbursed ITTO funds had been used in accordance with the provisions of the agreement. Appropriateness of use of funds had been audited by an independent, registered public accountant and yearly reported to ITTO. Indeed, disbursements of funds were subjected to the appropriateness of funds usage of the preceding disbursements.

5.5. External influences

The assumptions made with regard to influence of external forces on the project implementation process were valid throughout the project duration as highlighted below:

- The FDS demonstrated strong efforts on enhancing cooperation with BKNP since the signing of LoI, identification and execution of joint activities under the LoI as well as on the organization of the FGD on ecotourism and Asia – Pacific regional workshop on TBCA management. In short, FDS had eased the work of EA on implementing the activities under the first output.
- The Kapuas Hulu district government had played an active role in the execution of such activities related to ecotourism development as the training on operational management of homestay and lodge, development of village-based ecotourism and organization of the regional discussion on ecotourism as well as workshop on TBCA management. The active role of district government favorably affected the implementation process of the project.
- Attitude of local community affected the pace of project operation. When the Sadap community once did not commit to support the biogas energy development, the initiative went stagnant for nearly two years.

5.6. Project beneficiaries

The primary beneficiaries of the project were the BKNP, local governments and local communities including NGOs. BKNP had benefited from the project in different ways:

- The visits to different protected areas had enhanced skills of staff on operational management.
- The training on community-based forest monitoring had improved capacity in forest patrolling
- Conduct of the discussions and workshops by BKNP had contributed to enhancing capacity of BKNP managers and staff in the area of operational management.

The local government had benefited from the project through the different community development programs introduced by the project which otherwise is one of its major tasks to accomplish. The project had also assisted the district government of Kapuas Hulu in the development of a proposal on “Development of Kapuas Hulu Biosphere Reserve” for submission to UNESCO through Indonesia Man and Biosphere Program. In fact, UNESCO has approved the establishment of Betung Kerihun and Danau Sentarum Biosphere reserve during its ICC of the MAB Programme meeting held on 23 – 28 July 2018 in Palembang, Indonesia. Last but not least, the local government had gained benefits from the project through implementation of the regional events on ecotourism and TBCA development that have made Kapuas Hulu district known better to international communities as the locus of biodiversity conservation activities supporting the Heart of Borneo Initiative.

Several local communities and NGOs alike had gained benefits from the project, some directly and some others indirectly. The communities that gained benefits directly included: The Sadap community through the construction of biogas of energy production system, training on the utilization of biogas in the conversion of NTFPs to food products, revitalization of Sadap longhouse, etc.; the Tekenang community through renovation of the wooden bridge; the Kedungkang community through the formulation of Kedungkang mid-term ecotourism development plan, and; the Tekelan community through the feasibility study on village-based ecotourism development, to mention only some of the communities targeted by the project.

Some communities that indirectly gained benefits from the project were the neighbouring villages of Sadap village through visit, talk and customary events or deliberate demonstration. For example, the official re-opening of the biogas energy program at Sadap village, neighbouring communities and local officials were invited to the event and had the opportunity to watch and learn the different functions performed by the biogas energy.

5.7. Project sustainability

As has been touched upon in Section 4.4, sustainability of the project basically depends on the primary stakeholders, namely the BKNP, local communities and local government. The level of commitment of BKNP authority to continue implementing the crucial interventions that have been initiated under the project to a larger extent determines sustainability of the project. Needed resources to continue those activities in terms of organization, manpower and funds need to be made available by BKNP in a timely and sufficient manner.

The growing interest of local communities in non-extractive local livelihood development such as in the processing of NTFPs, in homestay and lodging business and in fish raising and gaharu resin production are among the local livelihood activities that ought to be sustained.

The political will of the government at district, provincial and central levels also need to be preserved and strengthened over time in order to sustain the project on park conservation.

5.8. The institutional involved in the project implementation.

Among the institutions that were involved in implementing the project are listed below:

At local level

- Village administration leaders, as partner
- Temenggung, customary community leaders as partner
- BKNP resort organization as supervisor
- KOMPAKH, a local NGO, as consulting institution
- Tekenang Fishermen Association as contractor
- Biogas Management Unit as partner representing Sadap Community

At district level

- The Kapuas Hulu district planning board (BAPPEDA) as partner
- The Sports and Tourism Agency of Kapuas Hulu as partner
- The BKNP authority as the Executing Agency

At provincial/regional level

- Forest Department Sarawak as partner
- SIPAT/WWF Kalimantan as partner
- GIZ/FORCLIME Programme and TFCA Kalimantan as partners
- Canopy Indonesia as the event organizer

At national level

- DG of Conservation of Natural Resource and Ecosystems (KSDAE) as the supervising body of BKNP and chair of the PSC
- Bureaus for Finance, Planning and International Cooperation of MoEF as members of the PSC



6. Lessons Learned

6.1. Project identification and designing

- The key problem addressed by the project had a strong rationale as it was based on findings of the previous project and was affirmed by the primary stakeholders.
- The key problem addressed was thoroughly analyzed involving the primary stakeholders that its cause-effect relationship was clearly identified which had facilitated construction of a relevant and sound project design.
- Weakly defined indicators of achievement posed problem on the assessment of project achievement at the outputs and outcome levels.
- The clearly defined tasks and responsibilities of the PMT leader and personnel had avoided confusion in institutional relation between the PMT and the EA.
- The variations between planned and actual implementation had occurred due mainly to the financial problem facing the ITTO, thus not attributable to operational management problem.

6.2. Project implementation

- The project management team (PMT) established by the EA, employed only a few professionals, proved able to manage the project effectively in achieving its planned objectives.
- The district government of Kapuas Hulu was the “landlord” of the project site; continued communication and coordination with concerned district authorities had avoided unnecessary operational problems.
- Continued communication and coordination with ITTO Secretariat had significantly contributed to the smooth project operations and so was the high compliance of the PMT to rules and procedures applying to ITTO projects as well as to the project agreement.
- The project indicators weakly defined in the project planning phase need updating during the operational phase take the progress in implementation into account to ensure their measurability and use in the final assessment of project achievements.
- BKNP management and staff at different levels, from the headquarters to the Resort, had demonstrated honest support on project operations in one form or another since commencement of the project which had contributed considerably to the successful operations.



7. Conclusions and Recommendations

7.1. Conclusions

- i. The key problem addressed by the project “Conservation management of Betung Kerihun National Park (BKNP) as the transboundary ecosystem between Indonesia and Malaysia (Sarawak) not well performed” was identified involving the main stakeholders and consistent with findings of ITTO completed project PD 44/00 Rev. 3 (F); successful removal of the key problem would greatly contribute to enhancing management of the park.
- ii. The key problem was adequately analyzed involving the main stakeholders, its causes and sub-causes as well as consequence were clearly specified; the project design was developed based on a clear and logical cause-effect relationship that its vertical logic was strong while its elements of intervention were relevant to resolving the problems addressed.
- iii. The project was implemented smoothly by the BKNP authority without any major administrative or operational difficulties; the 8-month extension in time for project implementation was attributable to the slowing down of operation in 2016 brought about by the financial problem of ITTO
- iv. The smooth implementation and successful completion of the project were made possible by among others:
 - ✓ The sound project design;
 - ✓ The effective implementation strategy pursued;
 - ✓ The sufficient inputs in terms of manpower, funds and time;
 - ✓ The strong support of the primary beneficiaries, partners and ITTO; and
 - ✓ The able project management team.
- v. The specific objective defined was partially achieved as two out of four planned outputs were not fully achieved, i.e. Output 2 and 3
- vi. Cooperation between BKDSNP and FDS in conservation of TBCA has been enhanced through implementation of jointly identified activities; biodiversity data on BKNP has been updated on limited area, process on improving local livelihood had been initiated yet local livelihood has not been changed to an improved state; and community-based forest monitoring system has been developed under the project.
- vii. The assumptions made were valid throughout the project duration and the mitigating measures introduced were effective in preventing the potential risks from materializing.

- viii. The indicators of achievement originally defined in the project document were not all applicable as some were not measurable while some others were not specific nor logical.
- ix. The primary beneficiaries of the project had demonstrated strong cooperation and support to the project management team.
- x. The project has generated a number of tangible result in the form of technical reports, physical construction and technical documents that should enhance the park management if they are properly and consistently utilized.

7.2. Recommendations

- i. It is strongly recommended for any ITTO project proponent to perform adequate analysis of the problem to address in accordance with existing ITTO manual for project formulation to ensure clarify of cause-effect relationship.
- ii. To be sound, a project design must be constructed using a clear cause-effect relationship, to ensure relevance and effectiveness of planned interventions to resolve the problems at hand.
- iii. To ensure a smooth and successful completion of a project, appropriateness of the implementation strategy, adequacy of inputs as well as support of the primary beneficiaries, partners and ITTO Secretariat are among the enabling conditions that must prevail.
- iv. It is best to employ a small but able management team in order to minimize cost of key personnel, ensure effective coordination and increase adaptability to changing environment.
- v. Achievement of the project should be assessed using pre-defined indicators that such indicators must be defined in a SMART manner in order to be applicable; revisiting defined indicators during the course of project operating may be required taking progress in implementation into account.
- vi. It is strongly recommended that BKDSNP makes available the necessary resource to continue implementing those activities that have been initiated under the project in order to avoid wasting the positive results, e.g. activities on enhancing cooperation with FDS, promoting local livelihood, including ecotourism and updating biodiversity data for better management planning.

Responsible for the Report



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