

Project Brief

The UBFA covers an area of some 283,500 ha of forest between 300 m and 1,800 m a.s.l., located in the Upper Baram of Sarawak. Four minor ethnic communities that live in area are the Penan living in 18 villages, Kenyah in six villages, and Kelabit and Saban in one village each. A common characteristic of the groups is continuing reliance on forest for subsistence livelihood. In the early 1980s, the peoples' lives became disrupted when some 50% of the project area was licensed for timber harvesting. Logging was met with intense protest especially from the Penan group who put up road blockades to keep contractors out and prevented a core area of 79,000 ha of primary forest from being logged. Their actions caught the attention of international communities and NGOs.

A turning point came when in 2015, when the late Chief Minister of Sarawak Tan Sri Haji Adenan Satem accepted the people's proposal dated August 2010, entitled "Penan Peace Park: Community-based Rain Forest Conservation and Sustainable Development in the Upper Baram Region of Sarawak". Following that, the Sarawak Government directed Forest Department Sarawak to pursue the matter with the local communities to come up with a plan for implementation of the PPP, which is here renamed as the Upper Baram Forest Area (UBFA).

On biodiversity conservation, UBFA can play a very important role because of its diverse ecosystems and flora and fauna. Most significantly, the 79,000-ha core area of undisturbed primary mixed dipterocarp forest represents the last remaining primary forest not only in the Upper Baram but also in Sarawak. It is also rich in belian trees (Borneo ironwood, *Potoxylon melagangai*), a popular hardwood that is being threatened by over exploitation. In spite of long local presence, forests outside of timber licenses have remained essentially little disturbed, providing environmental services and subsistence needs to the people living in 26 villages. The watersheds also benefit several hundred thousand people living downriver of the Baram River. Baram River is the largest river in northern Sarawak, with Miri City located not far from its estuary, and the Kingdom of Brunei Darussalam to its north.

Over the past 10 years or so and in collaboration with several NGOs (local and international), a detailed survey of the forests and lands occupied by the Penan ethnic group and their ancestors was carried out to locate, mark and name all known old settlements, burial sites, rivers, unique landforms and features and hunting grounds, as well all the trees used for food (sago-producing palm) and for blowpipe poison (ipoh tree). The information is contained in a set of 26 maps that were presented to the Sarawak Government in late 2017. In order to preserve the extremely valuable historical and cultural resources, the forests and lands must be sufficiently safeguarded, and long-standing land use conflicts resolved.

The project's objectives and outputs will be delivered through an integrated management plan (IMP) to be led by Forest Department Sarawak as the Executing Agency, with support from other government agencies and ministries, consultants and NGOs. Management strategies will follow the conservation-community development models of past ITTO projects in Lanjak Entimau Wildlife Sanctuary (LEWS) and PTNP, from where many useful lessons have been learned. At the end of the project, an integrated management plan will be prepared, and the UBFA secured as a protected area for conservation, sustainable development and community use.

The key assumptions are: i) government political support and commitment to the UBFA management concept, ii) cooperation from all concerned local communities and other key stakeholders; iii) support from divisional and district offices and government-linked agencies; and (v) institutional and human capacities to deliver, led by strong leadership and good governance at government and community levels.

Expected main risks may arise from (a) un-cooperative communities, land owners and farmers, (b) current community land use conflicts, (c) future government land use development policies in the Upper Baram, (d) problem of access if logging roads are not maintained, (e) ineffective management, decision making and poor delivery due to weak stakeholder cooperation and weak leadership, and (f) government suspicion of some NGOs' intentions.

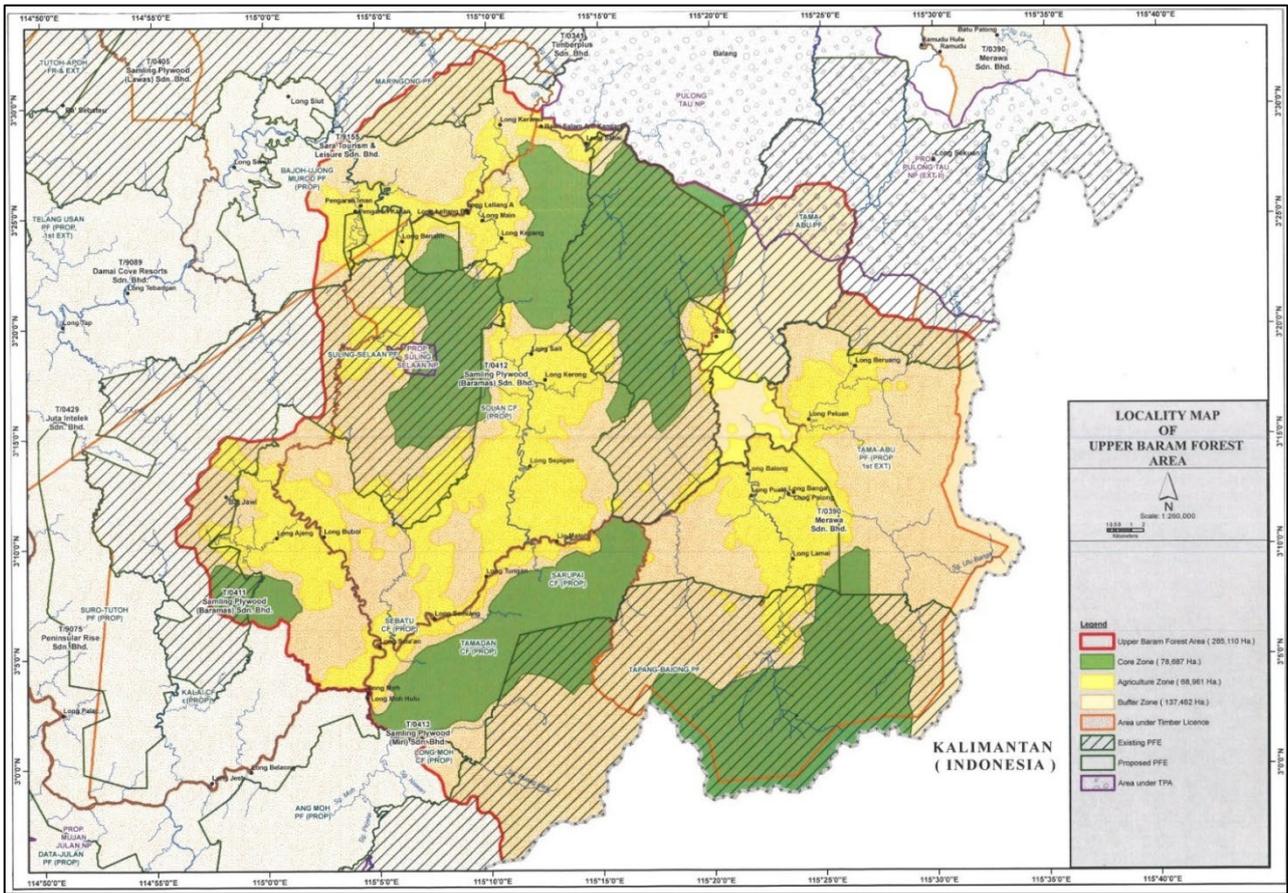
The total amount of project budget proposed is US\$ **1,358,783** comprising US\$ **556,083** of ITTO contribution and US\$ **802,700** of GoM contribution.

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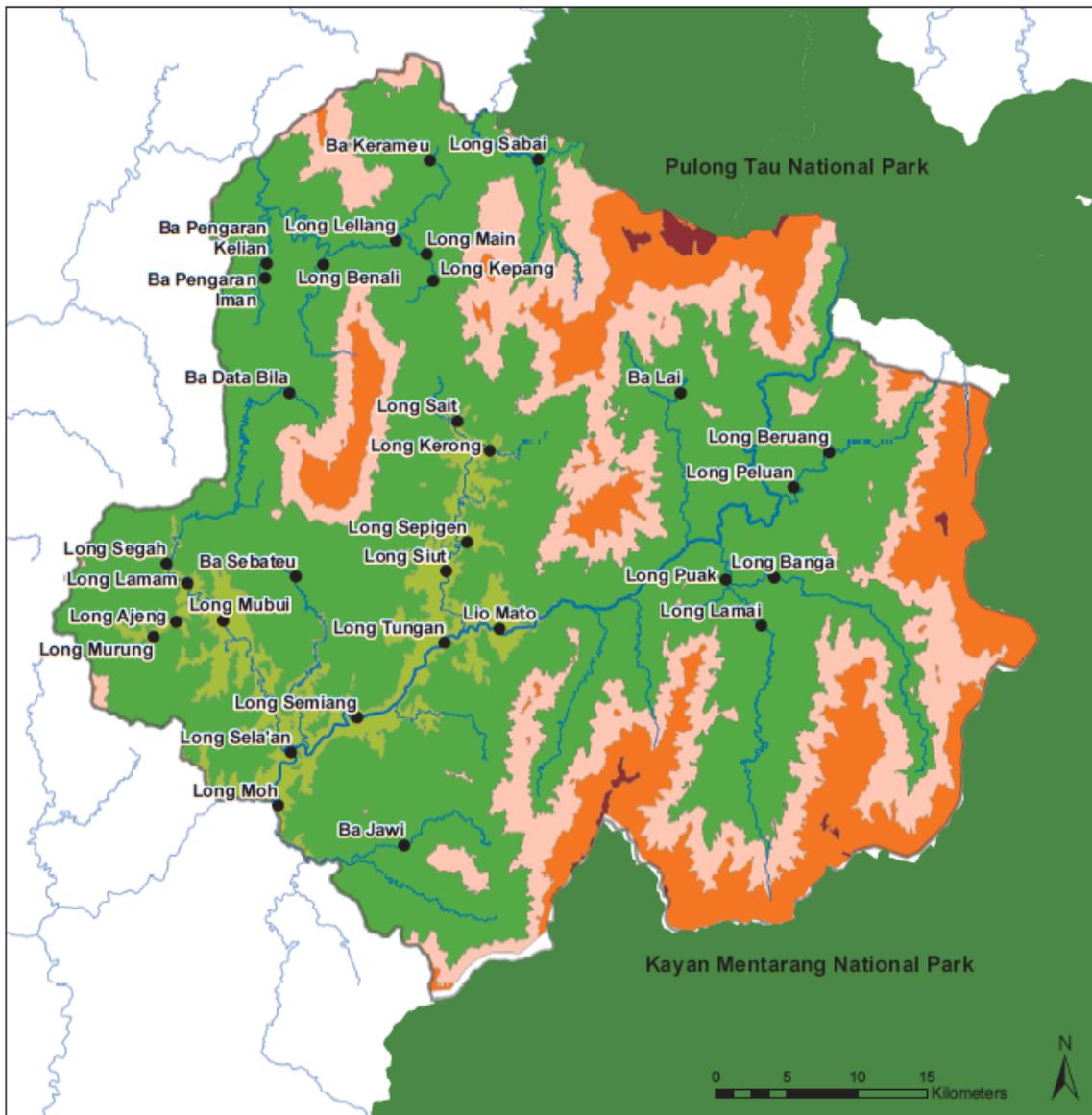
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List of Abbreviations and Acronyms

BMF	:	Bruno Manser Fund
C&I	:	Criteria and Indicators
CF (prop)	:	Communal Forests (proposed)
EA	:	Executing Agency
EIA	:	Environmental impact assessment
FDS	:	Forest Department Sarawak
HoB	:	Heart of Borneo
IMP	:	Integrated Management Plan
FMU	:	Forest management unit
FMC	:	Forest management certification
ITTA	:	International Tropical Timber Agreement
ITTO	:	International Tropical Timber Organization
IUCN	:	International Union for the Conservation of Nature
KMNP	:	Kayan Mentarang National Park
MPI	:	Ministry of Primary Industries
MUDeNR	:	Ministry of Urban Development and Natural Resources
NCR	:	Native Customary Right
NGO	:	Non-governmental Organization
NTFP	:	Non-Timber Forest Products
PC	:	Project Coordinator
PFE	:	Permanent forest estate
PL	:	Project Leader
PMU	:	Project Management Unit
PTNP	:	Pulong Tau National Park
PSC	:	Project Steering Committee
RECODA	:	Regional Corridor Development Authority
RIL	:	Reduced impact logging
RTP	:	Rural Transformation Programme
SCORE	:	Sarawak Corridor of Renewable Energy
SFD	:	Social Forestry Division of FDS
TBCA	:	Transboundary Biodiversity Conservation Area
TOR	:	Terms of Reference
UBFA	:	Upper Baram Forest Area
YPO	:	Yearly Plan of Operation

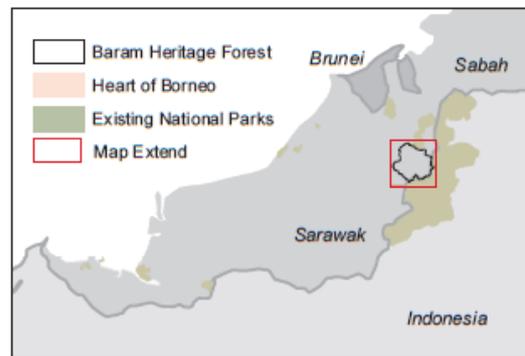


Map 1: Locations of timber licenses and core (conservation) area in project site

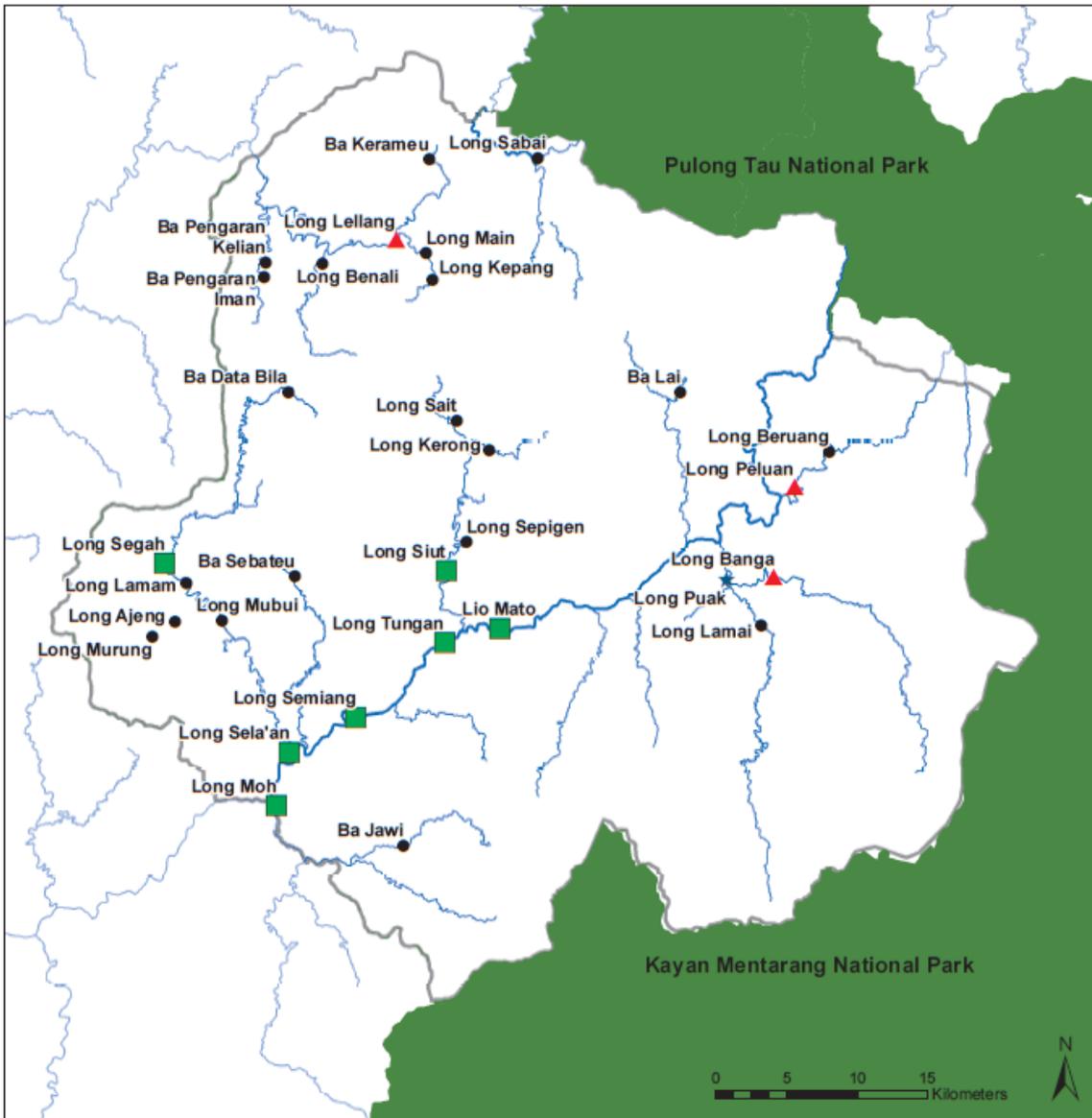


Altitudinal forest classification

- 0-300m - Lowland forest: Lowland dipterocarp
- 300-900m - Lowland forest: Hill dipterocarp
- 900-1200m - Lower montane forest: Upper dipterocarp
- 1200-1800m - Lower montane forest: Oak-Laurel
- >1800 m - Upper montane forest: Montane ericaceous

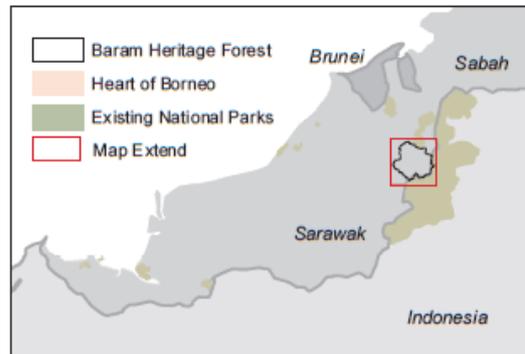


Map 2: Forest types and local settlements along rivers in project site



Ethnic

- Eastern Penan
- ▲ Kelabit
- Kenyah
- ★ Saban



Map 3: UBFA showing distribution of ethnic groups

PART 1. CONTEXT

1.1 Origin

In Sarawak, there are 27 ethnic communities living mostly in the rural area in some 5,000 scattered longhouses or villages, many without proper road access and basic facilities and still depend on forest for much of their subsistence needs. Extensive commercial logging and land development over the past four decades have brought about drastic change to the rural landscapes and lives of the people. While logging has damaged the environment and threatened forest resources and sustainability, logging roads have provided faster and easier access to education, health and other modern facilities, and created new business opportunities. Government's rural economic transformation programme will require road access to make delivery.

In the Upper Baram in northern Sarawak where the project site is located, logging has affected four ethnic communities, with the Penan forming the largest group. After several protests logging from 1997 to 2006, the Penan community in 2010 decided on a positive approach by preparing a proposal for a PPP to entitled "Community-based Rain Forest Conservation and Sustainable Development in the Upper Baram Region of Sarawak, Malaysia". In 2015, the late Chief Minister (CM) of Sarawak Tan Sri Haji Adenan Satem accepted the proposal presented to him and pledged his support if the people were genuine about environmental conservation. The late CM was quoted as saying, "If you have the same agenda with us, why must we quarrel?"

After the meeting with the late CM in 2015, Forest Department Sarawak (FDS) was directed to initiate a series of dialogues and workshops with community representatives, the first on 18.4.2016 in Miri, to officially convey the message of the government, and to discuss plans for further actions. In 2017 from 12 to 18 February, FDS organized a familiarization trip to four Penan villages to meet the people and learn about the local situation. FDS noted the people's serious intention on conservation and sustainable development to improve livelihood and wanted the government to help them, as indicated by these remarks quoted from three Penan Headmen: a) "We do not want to continue to protest. It will never end", b) "We do not want to give away the opportunities to cooperate with the government", c) "We want to protect the forest for the benefits of all and want the government to understand and support us".

On 18.02.2017 in Miri, the then Forest Department Director Haji Sapuan Ahmad received a copy of pre-project proposal from Mr. Komeok Joe representing the Penan community and Keruan Organization, and Mr. Peter Kallang of Save Rivers (local NGO, also representing the Kenyah and others). The proposal suggested strategic integrated management with four components, namely, environmental protection, biodiversity conservation, socio-economic development and community use. On 10.04.2017 in another meeting with the communities in Miri, Haji Sapuan Ahmad reaffirmed government support, and agreed to submit a project proposal to ITTO to request for funding. A working committee comprising FDS, Keruan Organization and Save Rivers representing the local people, and Bruno Manser Fund (BMF) was established. The name Penan Peace Park is changed to Upper Baram Forest Area (UBFA).

Of the total 283,500 ha in the UBFA, 79,000 ha are primary forest (within timber licenses), 65,000 ha agricultural land and settlements, and 139,000 ha under five timber licenses, of which 60% are suitable for logging. The 79,000 ha of primary mixed dipterocarp forest block is the largest of such remaining forest in Sarawak. The project area is also located within the proposed Baram Hydro-electricity project, which the government has decided to put on hold due to strong protest from the people.

The key problems that concern the local communities are (i) uncertainties of land tenure over native customary right (NCR) lands, (ii) long standing land disputes, (iii) impacts of logging on environment and forest, (iv) lack of basic facilities like roads, water and power supplies and health services, (v) lack of opportunities for sustainable development and alternative income, and (vi) lack of capacity building and skills to engage in new sustainable economic activities. Integrated management approach is proposed to address these key problems, through active multi-stakeholder involvement led by the government and assisted by NGOs. Empowering the communities and women is essential to build capacity through training and active participation, since they are the principal target groups and beneficiaries.

This community-initiated integrated management concept is consistent with the present government's policy and aspirations to strengthen governance on environmental protection and biodiversity conservation, and sustainable development and livelihood improvement under the rural transformation

programme (RTP), which has the support of the current Chief Minister Datuk Sri (Dr.) Haji Abang Zohari bin Tun Abang Haji Openg since taking office in 2017.

This proposed project will lend support to the policy guided by the development objective to “manage the Upper Baram Forest Area for ecosystem conservation and socio-economic development for the benefits of local communities”, and the specific objective to “promote rural economic transformation through sustainable resource development with good governance”. Integrated management planning (IMP) will encompass logistic functions to support project implementation, environmental education, eco-tourism, training, research and monitoring related to local, national and global issues on conservation and sustainable development.

1.2 Relevance

1.2.1 Conformity with ITTO’s Objectives and Priorities

a. ITTA 2006

The proposed project’s concern on environmental protection, land tenure, rural community livelihood and sustainable development is consistent with the International Tropical Timber Agreement 2006 in the following context:

- Article 1 (c): contributing to sustainable development and to poverty alleviation.

The project will introduce sustainable livelihood strategies through agro-forestry, reforestation, and development of NTFP, and training to build capacity to enhance skills in implementation and employment, leading to food security and regular incomes. Conservation will be assured when dependence on the forest is reduced.

- Article 1(n): strengthening the capacity of members to improve forest law enforcement and governance and address illegal logging and related trade in tropical timber.

The project will seek government support to resolve the problems of ownership of customary right lands by recognizing traditional user rights, bearing in mind the people’s need for continued dependence on land and forest. For the private sector, improving law enforcement and practices with reduced impact logging (RIL) and stricter monitoring of operational activities will minimize impacts on the environment and community livelihood. Improving law enforcement will also help to combat illegal logging and harvesting of NTFP including many protected species.

- Article 1 (r): encouraging members to recognize the role of forest-dependent indigenous and local communities in achieving sustainable forest management and develop strategies to enhance the capacity of these communities to sustainably manage tropical timber producing forests.

This proposed project will support recognition of community right to use of forests, seek to resolve land use conflicts and provide opportunities for sustainable utilization and livelihood improvement through a platform for effective communication and cooperation between government, local communities and other relevant stakeholders.

b. ITTO Strategic Action Plan 2013-2018

The proposed project’s objectives on environmental and cultural conservation, socio-economic development and enhancing community livelihood conform to ITTO’s Strategic Priority 3 “enhance the conservation and sustainable use of biodiversity in tropical timber organization producing forests” and Strategic Priority 4 “reduce tropical deforestation and forest degradation and enhance the provision of environmental services”.

The project’s strategy on integrated multi-stakeholder engagement to strengthen institutional capacities in management and sustainable utilization is consistent with ITTO’s Strategic Priority 1 “promote good governance and enabling policy frameworks for strengthening SFM and related trade and enhancing SFM financing and investment”. By improving forest governance and land use practices with community involvement in planning, consultation and implementation, the project is also consistent with ITTO’s Strategic Priority 2 “increase the contribution of tropical forests to national and local economies”.

c. ITTO/IUCN Guidelines for the Conservation and Sustainable Use of Biodiversity in Tropical Timber Production Forests

In the project area, 139,000 ha (49%) are occupied by timber production forest under five timber licenses. The ITTO/IUCN guidelines define the principles, guidelines and priority actions for the conservation and sustainable use of biodiversity in tropical timber production forests. Some of the principles, guidelines and priority actions defined in the guidelines may also be applicable to biodiversity conservation and SFM in the UBFA which include:

- Principle 3: Political commitment, policies and laws
Strong commitment from decision-makers and adequate national policies, laws and regulations are needed to ensure that forest management addresses biodiversity issues within forest management units as well as at the landscape and national levels.
- Principle 9: Biodiversity considerations at the forest management unit level
An effective forest management planning process, in which economic, social and environmental objectives are balanced in accordance with societal needs and priorities, is essential for setting and achieving biodiversity conservation and sustainable use goals.

d. Joint ITTO-CBD Collaborative Initiative for Tropical Forest Biodiversity

The proposed project is generally consistent with the objectives of the Joint ITTO-CBD Initiative with objectives nos. 2, 3, and 4:

- Conservation and sustainable management (Objective 2).
- Safeguarding forest biodiversity in logged-over forest and secondary forest through enrichment planting and intensified monitoring (Objective 3).
- Improving welfare of local communities and awareness on nature conservation and sustainable development (Objective 4).

These will be adequately addressed through the various outputs and activities.

1.2.2 Relevance to Malaysia's Policies

The project proposal conforms to Malaysia's National Policy (revised 1993) to conserve and manage the nation's forest based on the principle of SFM, to protect the environment as well as to conserve biodiversity and genetic resources, and to enhance research and education.

For Sarawak, the project is especially relevant to the following:

1) Sarawak's Statement of Forest Policy (1954)

The policy's objectives of forest management are:

- a) To preserve permanently for the benefit of the present and future inhabitants forest land sufficient;
 - i. for the assurance of the sound climatic and physical conditions of the country; the safeguarding of soil fertility, and of supplies of water for domestic and industrial use, irrigation and general agricultural purposes; and the prevention of damage by flooding and erosion to rivers and to agricultural land;
 - ii. for the supply in perpetuity and at moderate prices of all forms of forest produce that can be economically produced within the country, and that are required by the people for agricultural, domestic and industrial purposes under a fully developed national economy.
- b) To manage the productive forests with the object of obtaining the highest possible revenue compatible with the principle of sustained yield and with the primary objectives set out above;

- i. to promote, as far as may be practicable, the thorough and economical utilization of forest products on land not in the Permanent Forest Estate, prior to the alienation of such land;
- ii. to foster, as far as may be compatible within the prior claims of local demands a profitable export trade in forest produce.

In Sarawak all lands are government owned. Sustainable development goals (SDGs) are indicated in the current land use policy under which five million ha of forest are Permanent Forest Estate (PFE) for sustainable timber harvesting to generate revenue and provide employment, one million ha as licensed planted forests to be planted with fast-growing trees, one million ha as Totally Protected Areas comprising national parks, wildlife sanctuaries and nature reserves, four million ha for agriculture including oil palm, and the remaining 1.4 million ha for miscellaneous development. Lands for forestry may be State land or forest reserves and protected forests, whereas agriculture lands are in State land.

Land use affects more than 5,000 scattered rural settlements/villages. Rural communities are largely engaged in subsistence agriculture while also living off the forests. Beside shifting agriculture and fishing and hunting in the forest, many farmers also plant rubber, pepper and oil palm. The government's overall SDG is to eradicate poverty through rural transformation programme (RTP), by providing modern economic activities with integrated farming and upgraded amenities. RTP will also deal with land tenure issues, and many native customary right (NCR) lands are being surveyed for titles to be issued. NCR lands in State land are recognized by government only if they were cleared and cultivated before 1958.

Women play crucial roles in rural society but are normally excluded from decision making in regard to important matters such as land ownership and land use policy. With ITTO Guidelines on Gender Equality and Empowering Women (GEEW), it is intended to introduce gender integration in this project to empower women in land use and development planning and resource management to achieve gender equality as stated in SDG 5.

2) Rural Transformation Programme

This government programme is designed to ensure balance in socio-economic development between the urban and rural populations of Sarawak. The programme is linked to several key agencies such as Sarawak Corridor for Renewable Energy (SCORE) and Regional Corridor Development Authority (RECODA) and is relevant to a recent study to develop a Regional Integrated Highland Development Master Plan (RIHD-MP) for the Upper Baram. This proposed UBFA project will lend support to the RTP, as a model for replication.

3) Forest Ordinance (1997)

This Ordinance enacted in 1958 and revised in 1997, serves to regulate commercial logging to safeguard continuous timber production by practicing polycyclic felling on a rotational basis. Cutting cycles of 10 to 25 years are imposed depending on the conditions of the forest stand and will be fixed at 25-30 years for certified forest management units (FMU). The current minimum diameter cutting limits for commercial trees are 60 cm dbh for dipterocarp species and 45 cm for non-dipterocarp species. Merchantable trees below these diameters are retained for future crops.

4) National Parks and Nature Reserves Ordinance (1998) and Wildlife Protection Ordinance (1998)

These two Ordinances were introduced in 1958 and revised in 1998, and together serve to establish national parks and nature reserves and wildlife sanctuaries as Totally Protected Areas (TPAs) for conservation of a full range of forests and habitats for biodiversity.

5) Transboundary Biodiversity Conservation Area

Sarawak and Indonesia have been active partners in transboundary cooperation since 1994. The UBFA project is located adjacent to TBCA between Pulong Tau N.P. and Kayan Mentarang N.P.

and provides an opportunity to extend the TBCA domain for biodiversity conservation. **The core area in UBFA is outside of PTNP and falls within timber licenses. With government decision it can become an extended area of PTNP for biodiversity conservation. The proposed project aims to recommend to Sarawak Government to secure UBFA as multi-purpose biodiversity corridor linking PTNP and the TBCA.**

6) Heart of Borneo (HoB) Initiative

The UBFA falls within Sarawak's HoB which was extended in 2018 by 560,000 ha to 2.69 million ha. The project is in line with the HoB Declaration signed by the three member countries in Bali on 12.2.2007: "With one conservation vision and with a view to promote people's welfare, we will cooperate in ensuring the effective management of forest resources and conservation of a network of protected areas, productive forests and other sustainable uses'.

1.3 Target Area

1.3.1 Geographic location

UBFA is located in the Upper Baram in northern Sarawak and contains a diverse range of inland forest ecosystems from lowland to hill and montane forests at 300 m to 1,800 m a.s.l. (Map 1). The Baram River is the largest river in Miri Division and is the lifeline of several hundred thousand people living in numerous towns and villages along the banks. It runs in the NE-SW direction and divides the Study Area into 2/3rd in the north-west and 1/3rd in the south-east. Its eastern boundary joins the TBCA of Pulong Tau National Park in Sarawak and Kayan Mentarang N.P. in East Kalimantan in Indonesia. With the UBFA, the last remaining block of primary rain forest of 79,000 ha in Sarawak can be secured.

1.3.2 Socio-cultural, economic and environmental aspects

a. Socio-cultural aspects

The Kenyah villages are scattered along the Baram River, which has been silted and made shallow by erosion from logging for many years. The Penan live along the main tributary of Sg. Sela'an, a shallow fast-flowing river strewn with big rocks and pebble stones but can swell to several meters during a heavy rain and has remained unpolluted as it is not affected by logging. At low water, it is only navigable by small longboats each carrying two to three persons, powered by small engine modified from a water pump, with the propeller fixed at the end of long iron shaft for easy lifting out of the water to avoid hitting the rocky riverbed.

The Penan live in 18 villages, the Kenyah in six villages, and the Kelabit and Saban in one village each (Map 2). Their settlement history dates back to many generations, and they still live a forest-dependent life and sustainably utilize forest resources based on traditional ecological knowledge since the times of their ancestors. The Penan call this sustainable practice 'molong'. Hunting and gathering are important activities, while many have started rice farming on suitable lands near villages, and planted fruit trees in village compounds. Due to lack of employment and for children's education, many have migrated to the towns. It is estimated that some 30% of the Penan have migrated but return to join their families and relatives during Christmas and other festive occasions. For those that remain, social lifestyle has undergone little change. Mass conversion to Christianity has resulted in many traditions, customs and beliefs being discarded, but rich folklore knowledge on uses of plants for healing and other purposes is still being retained and need to be documented.

b. Economic aspects

The Kenyah and Kelabit have enjoyed better education opportunities, producing many graduates who have become government officers and teachers, and working in the private sector; while others have become businessmen. Penan children who have attended school rarely go beyond lower secondary level. Many who have lived and worked in the towns speak good English. All the communities are still actively engaged in subsistence farming, hunting and fishing, and selling the surplus for cash. The women make mats, baskets and bracelets of rattan for sale to occasional visitors. One of the reasons for the Penan initiating the PPP is to improve livelihood through sustainable utilization, but is constrained by lack of capacity and skills, and lack of opportunities for employment and help in learning new economic activities. Land contest and security of tenure is one of the key problems, which can only be resolved with government intervention.

c. Environmental aspects

Forest ecosystems in the UBFA are classified as follows:

- i. 300 to 800 m – Mixed dipterocarp forest (MDF) dominates but 139,000 ha (49%) has been logged, except for 79,000 ha in the core area which represents the largest block of remaining primary forest of this type in Sarawak. Riparian forest and alluvial forest are confined to the rivers and alluvial plains respectively, and kerangas forest on podzolized sandy terraces, mostly unaffected by logging, although some have been cleared for settlements. Secondary forest up to 60 years old may be seen near some villages and are rich in timber and fruit trees. Riparian and alluvial vegetation occupy riverbanks and alluvial plains, while MDF dominates the hills and ridges.
- ii. 800 m to 1,200 m – Lower montane forest with pole-like appearance to 25 m tall. High humidity causes mosses to grow on the ground and trees. Important for conservation and water catchments;
- iii. Above 1,200 m to 1,800 m - Upper montane forest with stunted or pole-sized trees rarely exceeding 5 m and are covered in water dripping mosses. Important for conservation and water catchments.
- iv. Not much is known about the local fauna, but from studies in other areas with similar forest ecosystems, such as in the adjacent PTNP by ITTO, rich faunal diversity can be expected among the mammals, birds, reptiles and amphibians, and fish and insects. The Penan at Long Sait and Long Kerong have reported the presence of orangutan, which this project hopes to confirm.
- v. Several timber licenses are still valid, but logging is expected to slow down due to depleting timber resource and may be suspended pending mandatory forest management certification studies. Certified Forest Management Units (FMU) will more strictly conform to SFM regulations to reduce impact and maintain sustainability, including mandatory enrichment planting of degraded areas. This proposed project will initiate a process to secure the UBFA as the largest remaining block of rain forest in Sarawak for conservation, community use and sustainable economic development in line with government policy on rural transformation.

1.4 Expected Outcomes at Project Completion

Upon completion, the project is expected to achieve several outcomes and make desired changes as follows:

- i. The UBFA secured with government-endorsed integrated management policy and framework for conservation, community use and sustainable development. Integrated management involving local communities in past ITTO projects in LEWS and PTNP has created awareness and brought about a positive change in perception and attitude on conservation and sustainable development, government recognition of forests for community use, and opportunities to engage in new economic activities. The people of the Upper Baram will have the opportunities to enjoy similar benefits under the proposed project;
- ii. Primary forest of 79,000 ha within timber licenses secured for biodiversity conservation;
- iii. Process to resolve land use conflicts between communities and individuals/farmers initiated and operational. Disputes over many native customary right (NCR) lands are often due to a) lack of perimeter survey to demarcate boundaries, b) land is used by another for farming after the owner has left the village, c) one community taking over and settling in a village land vacated by another community, and d) non-recognition of NCR by government especially of the Penan due to their past nomadic existence. The Penan communities have over the past 10 years or so taken the initiative to have their lands surveyed and mapped and await government support through the Lands and Surveys Department (LSD) to survey and confirm the boundaries and ownerships before issuing titles. It is further hoped that strained relationship between the communities and private sector over logging and land use could be eased through understanding and goodwill;
- iv. Productivity of damaged/degraded/idle forests and lands restored through enrichment planting of suitable indigenous tree species, agro-forestry and NTFP of economic potential;
- v. Platform for integrated management, consultation and communication established and functional. Vision for development will consider the complex multifunctional aspects of the UBFA for

conservation, generating revenue and income, and community use. Appropriate terms of reference and operational mechanisms will be set up. The forum will bring together stakeholders at the government, community and private sector levels stakeholders to communicate and enhance goodwill;

- vi. Community livelihood improved in line with government's rural transformation programme (RTP) to eradicate poverty and reduce dependence on forest. Transformational growth will focus on agriculture, agro-forestry/social forestry, and NTFP development including tagang fishery system. Enhanced infrastructure development will include water and power supplies and toilet facilities. Land use management plans will be developed to increase productivity and value. In order to do this, opportunities for active community participation including women, will be encouraged with training and capacity building. With increased productivity and new income opportunities, a value chain for product processing and marketing could be created, with government acting as the facilitator.

PART 2. PROJECT RATIONALE AND OBJECTIVES

2.1 Rationale

2.1.1 Institutional setup and organizational issues

In Sarawak, all forests and lands are government-owned, except for titled lands. The forest and land issues in the UBFA are complex and involve conservation, community livelihood and sustainable development. Management planning through prior informed consent and consultation is recommended, with a government-led institutional setup fully supported by the communities and other relevant stakeholders. Project management planning will involve the following institutions:

- i. The Federal Ministry of Primary Industries (MPI), the State Ministry of Urban Development and Natural Resources (MUDeNR). The MPI represents the Malaysian Government as a member of the ITTO. The MUDeNR oversees all matters and policies relating to forests; both will play important advisory roles to the project;
- ii. Forest Department Sarawak (FDS) comes under the MUDeNR and will be appointed as the Executing Agency (EA) to facilitate project planning, organization and implementation, both in kind and through direct involvement. FDS will appoint a Project Coordinator, a Chief Local Counterpart, and a team of local experts and technical support staff, mostly through its Social Forestry Division (SFD). In consultation with ITTO, it will appoint a Project Leader and local consultants. The Director of Forests will act as the Chairman of the Project Steering Committee (PSC);
- iii. Resident and District Offices in Miri Division (where the project is located), representing the Sarawak Government in all matters relating to administration, economic development, and the people's welfares within the Division. They will also be involved as members of the PSC;
- iv. Lands and Surveys Department to help resolve land and ownership issues by carrying out perimeter surveys to demarcate boundaries, and issuing ownership titles where appropriate;
- v. Department of Agriculture to provide training and advice on agro-forestry, food crop cultivation and tagang fishery system;
- vi. Local communities with their respective village committees or represented by Keruan Organization for the Penan and Save Rivers for Kenyah, Kelabit and Saban. They have all been working closely with FDS since 2016 that led to the conception of this project proposal. BMF is also expected to play facilitating and supporting roles;
- vii. Timber licensees under Samling Group will be expected to improve SFM in a manner that is environmentally friendly, economically viable and socially acceptable, and to undertake mandatory enrichment planting (EP).

Institutional setup and organization issues will be complex and will require full understanding, support and cooperation between government-linked agencies and all four ethnic communities down to the village level, with the will to build trust and goodwill. FDS as the EA will apply lessons learned from past ITTO projects to streamline coordination and communication problems and obstacles that may arise.

2.1.2 Stakeholder analysis

The key stakeholders and direct beneficiaries are the Penan, Kenyah, Kelabit and Saban communities, upon which success of the project will rest. These communities share a common vision to safeguard the forest for conservation and to meet their present and future needs, but differ in cultural background and history, which included tribal fights and head hunting in the past. **These community groups have lived and roamed the forest for many generations, long before the onset of commercial logging. Five timber concessions now exist in the UBFA. To the local communities, logging is**

unsustainable and destructive, causing pollution and depriving them of use of many forest resources. Community lands are confined to NCR and patches of forest that have been preserved by respective settlements as a source of food, timber and other building materials. Interestingly, these lands are managed on a sustainable principle, by taking only what they need and leaving the rest for the future. Logging has encroached into forests that their ancestors used to roam, prompting the Penan and Kenyah to lodge strong protests. Women also take part in protest, but their roles are looking after the families, farming and gathering forest produce. They rarely take active part in decision making led by the headmen. Two local NGOs (Keruan Organization and Save Rivers) provide advice on matters relating to conservation, environmental protection, logging, land use and community welfare.

Table 2.1: Summary of Stakeholder Analysis

Stakeholder	Characteristics	Problems/ needs/ interest	Potential	Involvement in the project
<p><u>Primary stakeholders</u></p> <p>i. Local Penan, Kenyah, Kelabit and Saban communities as direct beneficiaries</p>	Reside inside UBFA, forest-dependent practicing hunting, fishing, forest produce collecting, hill paddy planting, and fruit crops and poultry farming; many have moved to live in the towns.	Settle land issues, safeguard forests, traditional cultures, knowledge and skills, lack basic water, power & health facilities, need new economic activities with training to improve income; against logging but need logging road for access.	Opportunities for sustainable livelihood, government support to address problems and needs.	As management co-partners, participate in project implementation and development of new economic activities, women's role enhanced, sharing traditional knowledge and cultures.
ii. Forest Department Sarawak (FDS)	Custodians of forests and project's EA	Need community support to resolve forest and land use issues, and in law enforcement, promotes community based social forestry.	Project management, substantial contribution to basic infrastructures via social forestry programme	Finance project build basic facilities (water, power), undertake R&D, agro-forestry, NTFP and reforestation, training.
iii. NGO (Keruan, Save Rivers, BMF)	Familiar with local conditions, community representatives.	Understand local problems and want to help, limited financial resources	Enhance community partnerships, maintain communication and goodwill, build trust, coordinate in project implementation	Advisory, coordinate and facilitate working committees and project activities, members of PSC.
iv. Samling Group of Timber Companies	Timber license holders, undertaking forest management certification (FMC).	Logging damage to forest and environment, community objection to logging, CSR.	Generate revenue and provide employment, support to project and conservation.	Provide camp facilities and funding, maintain roads, restoration under FMC, CSR.

Stakeholder	Characteristics	Problems/ needs/ interest	Potential	Involvement in the project
<u>Secondary stakeholders</u> i. Ministry of Urban Development and Natural Resources (MUDeNR) ii. Divisional Resident & District Offices	Political support oversee all State forestry matters. Has administrative mandate to execute government projects.	Enhance rural transformation and economic development, forest management certification, SFM Large administrative area with many communities and problems to take care of.	Support to project, funding, SFM and certification. Make available socio-economic database and information.	Policy, advisory, funding. Advisory, members of PSC
<u>Tertiary stakeholder</u> i. Lands & Survey Dept ii. Dept of Agriculture	Survey land and land use planning has power to issue land titles. In charge of agriculture development and research.	Complex and sensitive land issues, tedious & expensive boundary surveys. Provide extension services to rural settlements.	Resolve land disputes. Advisory, training, technical inputs.	Advisory, members of PSC Help implement selected project activities.

2.1.3 Problem Analysis

Sharing the UBFA are five timber licenses and 26 community settlements. The timber licenses are located within five Protected Forests (PF) and one Forest Reserve (FR), in addition to several proposed PFs, collectively known as Permanent Forest Estate (PFE). **Local communities claim that logging has damaged lands that they have inherited from their ancestors but ownership or user right to these ancestor lands are not recognized by government, especially if the land were cleared after 1958. In spite of this, the Penan have taken the initiative to survey and mark their NCR land which they hope the government will grant them with titles. Land use disputes are complicated, and occur between communities and timber licensees, among members of a community, and between different ethnic communities. All the communities are against logging but have become almost totally dependent on timber roads for access; many also rely on assistance from licensees through corporate social services (CPR). Government intervention is necessary in order to resolve many of the problems.**

Within the communities, unsustainable land use is often due to many lands being under-utilized or left idle, either because of lack of market for products or shortage of labour due to urban migration. Farmers also lack opportunities and support for modern or stabilized agriculture. With modern agriculture or agro-forestry, women can be empowered to play active roles in planning and decision making - their knowledge of forest products and uses is invaluable.

Within the settlements and agriculture zone (Map 1), local communities are faced with the problem of land disputes and ownerships, either over NCR lands without titles or State lands belonging to the government. Furthermore, lands inherited from forefathers or claimed by individuals lack clearly marked boundaries and are subject to contest. These problems will pose immense challenges to the people's desire to advance to sustainable livelihood when new economic activities offer themselves. The communities have come to realize the need for outside help from government and others to resolve many problems, as indicated by the remarks of three Penan Chiefs: a) "We do not want to continue to protest, it will never end", b) "We do not want to give away the opportunities to cooperate with the government", c) "We want to protect the forest for the benefits of all, and want the government to

understand and support us". Government support was pledged in 2015 by the late CM Tan Sri Haji Adenan Satem and has been fully endorsed by the present CM.

Complementary functions to harmonize conservation with sustainable economic development and community use are:

- i) Environmental conservation to preserve landscapes, forest ecosystems and genetic resources and habitats, and recording their uses. **Enhanced community participation in conservation management and economic development empowering women is envisaged.**
- ii) Minimize damage in PFE with reduced impact logging, FMU certification and mandatory EP or forest landscape restoration;
- iii) **Further deforestation and land conversion including community lands will be prevented or minimized:**
- iv) New socio-economic development opportunities including social forestry/agro-forestry;
- v) Improve productivity and value of community-owned forests and lands.

All stakeholders will work together to:

- a) Secure the core area of MDF for biodiversity conservation and environmental protection;
- b) Initiate sustainable livelihood models with best practices to improve land productivity and enhance economic development and income;
- c) Resolve land disputes with perimeter surveys and granting land titles;
- d) Provide basic infrastructure for water, power, health care services, and road maintenance;
- e) Study and research to obtain resource information to enable the above to be carried out, and using the results for decision making;
- f) Create awareness, provide training and capacity building.

From the government point of view, resolving these problems will (i) enhance environmental protection and conservation by securing a substantial area of additional forested land, (ii) serve as a development model for rural transformation, and (iii) initiate an institutional process for integrated management with the government, private sector and people as co-partners, with consultation and free prior informed consent.

The Problem Tree and Objective Tree are shown in Figures 1 and 2 respectively.

Figure 1. Problem Tree

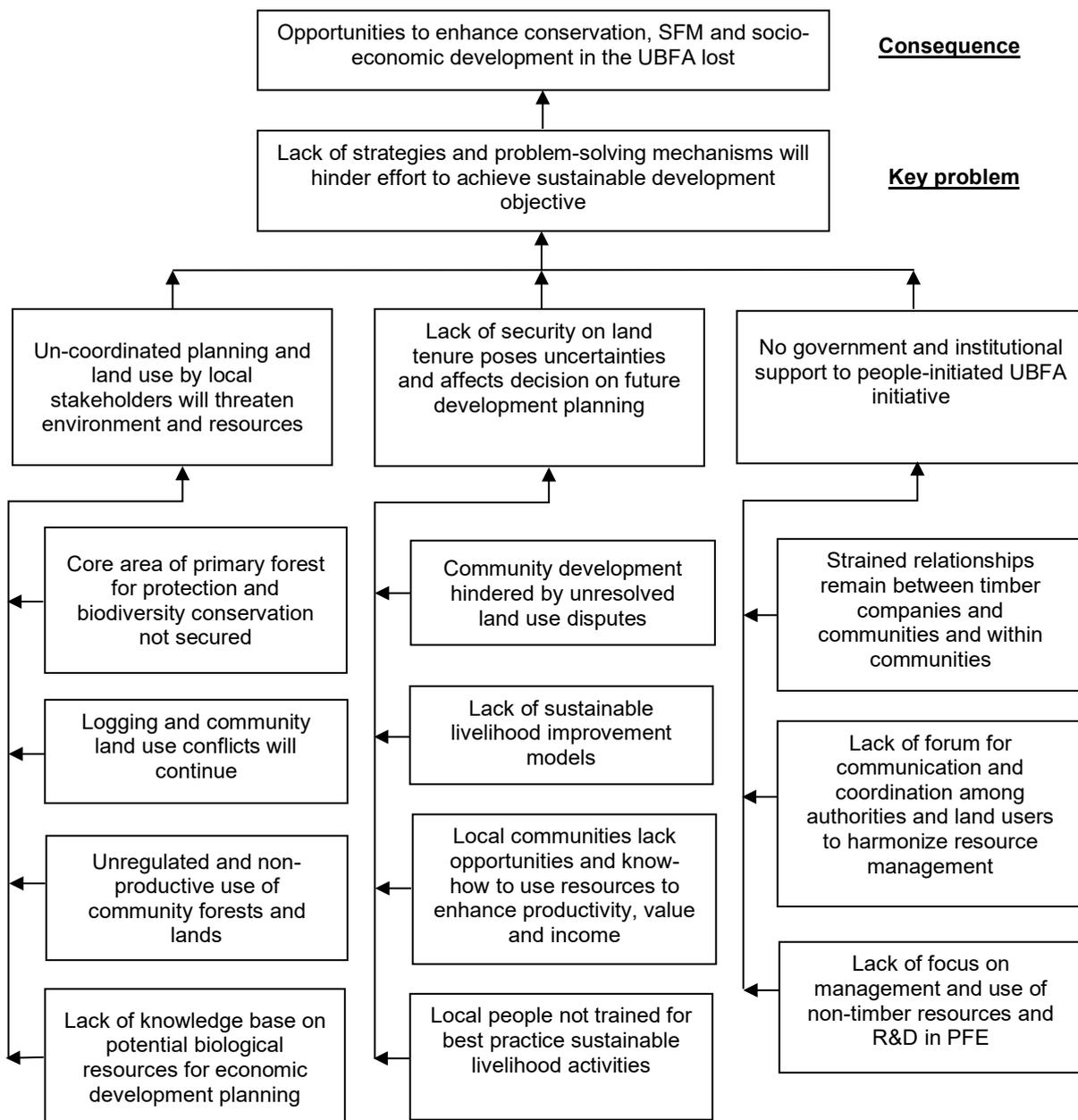
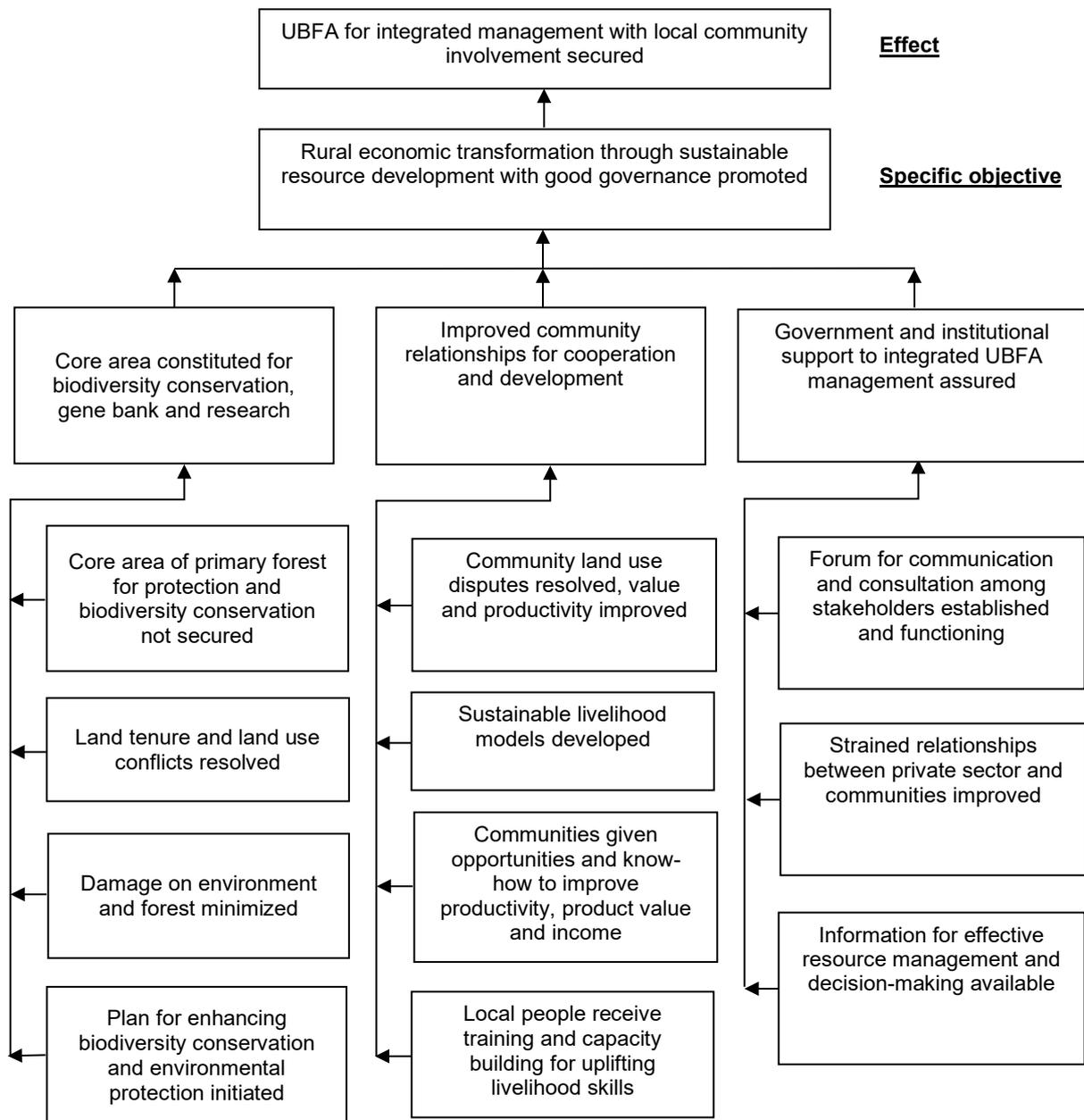


Figure 2. Objective Tree



2.1.4 Logical Framework Matrix

Table 2.2: The Logical Framework Matrix (LFM)

Strategy Intervention	Measurable indicators	Means of verification	Key assumptions
<p><u>Development objective:</u></p> <p>To manage the Upper Baram Forest Area for biodiversity conservation and socio-economic development for the benefits of local communities</p>	<p>After project completion:</p> <ul style="list-style-type: none"> - <u>At least three FMU timber licenses certified to enhance SFM</u> - <u>In each certified FMU, mandatory enrichment planting in harvested forest carried out</u> - <u>79,000 ha of core area forest secured for conservation by year 2</u> - <u>One sustainable community economic development model for each ethnic group operational by year 2</u> - <u>Integrated UBFA management plan produced</u> 	<ul style="list-style-type: none"> - <u>Forest management certificates issued. One FMU with 148,000 ha already certified</u> - <u>Required to enrichment plant at least 1,000 ha per year</u> - <u>79,000 ha of core area for conservation recommended</u> - <u>Improved livelihoods and skills for 5,000 people living in 26 settlements/villages</u> - <u>Integrated MP will incorporate conservation of forests, flora and fauna, SFM, and use of community lands</u> 	<ul style="list-style-type: none"> - Government/political support - <u>Follow-up actions by licensees after FMU certification</u> - <u>Government decision to excise core area from license areas for conservation</u> - Understanding and goodwill among local stakeholders to realize integrated development objectives - Interested and proactive land-owners/ Farmers - Compliance on RIL and land use strengthened - Strong leadership at all management levels
<p><u>Specific objective:</u></p> <p>To promote rural economic transformation through sustainable resource development with good governance</p>	<p>After project completion:</p> <ul style="list-style-type: none"> - <u>Baseline studies for 5 major forests linked to community livelihoods obtained and uses proposed</u> - <u>Agro-forestry to enhance land use for five ethnic groups initiated in year 1</u> - <u>Platform for local stakeholder consultation on UBFA established and functional in year 1</u> - <u>Mechanisms to resolve land disputes proposed by year 2</u> 	<ul style="list-style-type: none"> - <u>10 community use forests for Penan, 5 for Kenyah, and 1 each for Kelabit and Saban studied and secured</u> - <u>5 suitable sites for Penan, 3 for Kenyah and one each for Kebabit and Saban selected</u> - <u>Effective communication with communities established and yielded results</u> - <u>Intervention by L&S in perimeter surveys and identifying land owners</u> 	<ul style="list-style-type: none"> - Government commitment - <u>Supportive local stakeholders and participants</u> - Goodwill and understanding among local communities - Local communities and farmers ready to participate in new economic activities - Effective leadership at all levels

<p><u>Output 1</u></p> <p>Studies to establish values of forest ecosystems and biological resources carried out</p>	<ul style="list-style-type: none"> - <u>Forest ecosystem and biodiversity surveys in five main forest types carried out</u> - <u>Potential uses of NTFP described 200 species of medicinal plants</u> - <u>NTFP promoted</u> - <u>Carbon stock studies conducted in 2 primary and 2 old secondary forests</u> 	<ul style="list-style-type: none"> - <u>Baseline data for 5 major forest types on timber and NTFP obtained</u> - <u>At least 500 species lists with uses by communities, including Penan medicinal plants</u> - <u>Five NTFP gardens established (3 Penan, 2 Kenyah)</u> - <u>Values of carbon stock per ha in 5 forests assessed</u> 	<ul style="list-style-type: none"> - Core conservation area secured - Proactive community leaders and participants - Increased awareness on conservation and SFM
<p><u>Output 2</u></p> <p><u>Studies on traditional land use carried out, identifying options for community development.</u></p>	<ul style="list-style-type: none"> - <u>Studies on traditional land use among Penan and Kenyah communities initiated in year 1</u> - <u>Studies on four ethnic communities and gender equality carried out</u> - <u>A workshop for sustainable community development in the UBFA organized in year 2</u> 	<ul style="list-style-type: none"> - <u>Baseline data on traditional land use by six Kenyah and Penan villages obtained</u> - <u>Database on social and cultural background and economic activities, at least three women representatives from each village selected for leadership training (total 78)</u> - <u>Two workshops organized to share outcomes of the studies conducted</u> 	<ul style="list-style-type: none"> - <u>Government support</u> - <u>Cooperation and goodwill among involved parties</u>

<p><u>Output 3</u></p> <p>Sustainable development planning models for uplifting community livelihood implemented</p>	<ul style="list-style-type: none"> - <u>Two inter-ethnic committees for consultation and development planning established in year 1</u> - <u>One development model for each ethnic community group produced in year 1</u> - <u>Studies on CAN eco-tourism potential completed by year 2</u> - <u>Livelihood improvement training to include all 26 villages</u> - <u>Basic infrastructure for villages lacking such facilities</u> 	<ul style="list-style-type: none"> - <u>Penan-Kenyah committee to benefit 18 Penan and 6 Kenyah villages, & Kelabit-Saban committee for two villages</u> - <u>Development models to target 10 agro-forestry and five eco-tourism (home stay) projects covering all 4 ethnic groups</u> - <u>Five representatives from each village including two women to be trained (total 130)</u> - <u>Infrastructure (e.g. bridges, water supply) to target five most needy Penan villages</u> 	<ul style="list-style-type: none"> - Support from FDS and other government agencies - Private sector and community cooperation - Communities and farmers willing to participate and remain committed to make further improvement
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2.2 Objectives

2.2.1 Development Objective and Impact Indicators

The project's development objective is to manage the Upper Baram Forest Area for biodiversity conservation and socio-economic development to benefit local communities. **The socio-ecological productive landscapes of UBFA are extremely complex and involve extensive use of productive forest lands for commercial timber harvesting and meeting communities' social, cultural and economic needs. In this case, local community livelihoods are highly dependent on commercial forest remaining sustainable and productive to protect resources, soil fertility and water. Compared to commercial land, community land is limited and under-utilized and will remain so without outside help. The challenge facing the UBFA is for local stakeholders to ensure harmony with nature while driving changes in the socio-ecological landscapes. The government's recent policy on mandatory forest management certification and enrichment planting of degraded forest lands is a right step forward in ensuring that the landscapes remain productive and sustainable.**

The expected impact indicators after project completion will be:

- UBFA endorsed by government for integrated management with institutional arrangement to ensure sustainability by **(i) improving sustainable management of 139,000 ha of commercial production forest, (ii) conserving 79,000 ha of core area for biodiversity and serving community needs, and (iii) creating a healthy socio-ecological landscape that favours conservation and rural community well-being.**
- Threats on biodiversity and environment reduced **through two EIAs and two RIL studies within 139,000 ha of FMUs and improvement in land productivity and value;**
- Good progress in land conflict resolution, **with government committed to resolving land ownership issues among local stakeholders;**
- **Local communities to benefit from use of logging roads under certified FMUs;**
- **Ten-year integrated management plan for UBFA developed.**

2.2.2 Specific Objective and Outcome Indicators

The specific objective of the project is to promote rural economic transformation through sustainable resource development with good governance.

The expected outcome indicators after project completion will be:

- Baseline data for ecosystems, flora and fauna collected, and suitable resources for sustainable development by communities identified and listed;
- **Baseline socio-economic studies focusing on use of land and forest resources;**
- **Gender equality in decision making;**
- **Development models to suit different community conditions and needs demonstrated with best land use practice;**
- **Basic infrastructure (bridges, mini-hydropower, water supply) in at least three villages improved;**
- **Three training courses for and capacity building conducted.**

PART 3. DESCRIPTION OF PROJECT INTERVENTION

3.1 Outputs and Activities

Each output will incorporate hands-on training under the respective activities.

3.1.1 Outputs

Three outputs to address the identified main problems are as follows:

- Output 1** : Study to establish values of five main forest ecosystems and biological resources carried out. To the forest-dependent communities especially the Penan, plant and animals are main sources of food, medicine and materials. The women produce handicrafts with rattans obtained from these forests. Penan who still live close to the forests are said to know up to 1,000 types of medicinal plants for traditional cures, plus many food plants. It is vital that sufficient forests are conserved to protect these resources.
- Output 2** : Study on traditional land use carried out, identifying options for sustainable community development. Process to address land use conflicts in UBFA initiated and demonstrated. Expected outcome will be interest over land discussed, opening opportunities for farmers to improve productivity and values of their land.
- Output 3** : Sustainable development planning models for uplifting community livelihood implemented. Three development models to cover (i) the Penan group in 18 villages, (ii) Kenyah group in six villages, and (iii) Kelabit/Saban group who live in one rural centre. Different models are necessary in view of differing ethnic origins and socio-economic patterns. Penan will continue to rely more on the forest than the other groups.

3.1.2 Activities

Output 1

- Activity 1.1 : To establish Project Management Unit (PMU) to oversee and advice on project execution and report to the PSC. Its importance has been proven in past ITTO projects in Sarawak, allowing community participants to air their views and contribute to decision making.
- Activity 1.2 : To collect baseline data on ecosystems, flora and fauna, establish gene banks, and initiate enrichment planting in idle community lands. Focus will be on forests that provide livelihood support especially to the Penan group. Expected outcomes will be (i) forests and biodiversity conserved, including several threatened Borneo ironwood forests, (ii) useful plant and animal resources for livelihood support identified, and (iii) selected resources of economic importance developed, e.g. rattan, gaharu scented wood, and fish. Gene banks for seeds are necessary to raise planting materials of timber and non-timber species for enrichment of under-utilized lands to improve productivity and value.
- Activity 1.3 : To initiate studies on ethnobotany and NTFP among the different ethnic groups. Focus will be on (i) species that are threatened with habitat destruction, e.g. rattan and gaharu, and (ii) species that are little known but with economic potential, e.g. medicinal plants. Rattans are needed for handicrafts, while gaharu has a huge global market, with values ranging from US\$500 to over US\$10,000 per kg depending on the grades. Sarawak Biodiversity Centre (SBC) has an on-going programme to document native

species and development of products for nutraceuticals and essential oils for skin care, soap and insect repellents.

Activity 1.4 : To assess carbon stocks in different forest types for low carbon trade. The recent formation of the Sarawak Economic Action Council (SEAC) has recognized mitigating climate change among the environmental agenda, through forest landscape restoration of logged and degraded forests. Both the business sector and communities will be able to contribute through sustainable management. Different forests will be assessed for their capacities to sequester carbon, and strategies for carbon trade will be proposed. This could become a potential income source for the rural communities.

Activity 1.5 : To publish results of studies. Sufficient copies of technical reports will be published for distribution at the end of the project.

Output 2

Activity 2.1 : To study traditional community land use for improving livelihoods.

Activity 2.2 To carry out baseline studies on communities and gender equality. Ethnic diversities are defined by socio-cultural characteristics have different development needs and expectations. Unlike the other groups, the Penan are still very much forest-dependent and lacking in education, thus not ready for modern and skilled agriculture or business. Empowering women is an important step towards recognizing their contributions to socio-economic development as active rather than passive partners. In particular, their roles in agro-forestry and eco-tourism (homestays) will be enhanced.

Activity 2.3 : To establish government-people platform for communication, **consultation** and problem solving.

Output 3

Activity 3.1 : To formulate sustainable development plans and models for demonstration and replication by local communities.

Activity 3.2 : To study ecotourism potential based on culture, adventure and nature (CAN) in selected villages.

Activity 3.3 : To support development of basic infrastructure and facilities in selected villages.

3.2 Implementation Approaches and Methods

Rural communities living in remote areas are isolated and depend on outside help to make improvement to their lives. The project proposes participatory approach in implementation, through which planned activities shall be executed by stakeholders in close consultation, cooperation and collaboration. Emphasis will be to empower and encourage local participation including women to prepare them for new challenges of switching from traditional subsistence to modern sustainable economic activities.

The outputs and activities have been defined to fully address the problems and issues that will lead to securing the UBFA to strengthen conservation, environmental protection, socio-economic development and community well-being. Implementation will be carried out in the following fashions:

Output 1 recognizes that forest possesses immense tangible and intangible values and is fundamental in maintaining environmental health and services and must be adequately protected and sustainably managed in order to benefit the people.

Activity 1.1 will establish the PMU to ensure smooth project management, to be headed by the Director of Forests, with key members comprising the Project Coordinator, Project Leader, chief local counterpart and representatives from private sector, NGO and communities. PMU will meet at least twice a year.

Activity 1.2 will survey five major forest types to collect baseline data on flora and fauna. In each forest type, five systematic linear transects each 500 m long and 20 m wide will be established, and further divided into subplots of 20x20m to facilitate survey. All trees exceeding 10 cm dbh will be identified and their timber and non-timber values noted. In each transect, three subplots will be randomly selected to study species below 10 cm dbh as well as non-wood species like herbs and climbers to determine overall species diversity. Fauna including mammals and birds will be identified by sighting, sound, footprints and droppings. Protected and endangered species will be noted. Five gene banks to study phenology of seed producing trees to raise planting materials for enrichment is proposed, plot size to depend on number of selected species and stand densities. Local communities will advise on selection of suitable sites and species. Phenological observations will be made twice a year.

Activity 1.3 will study to document at least 500 forest plant species including 300 Penan medicinal plants. Selected species will be cultivated in herbal gardens in at least four Penan villages, to produce products for sale, to encourage *ex-situ* conservation and R&D.

Activity 1.4 is in line with the key principles of the SEAC to mitigate climate change through forest landscape restoration. It is mandatory for FMUs to plant at least 1,000 ha of forest per year. For the local communities, carbon sequestration by their communal forests could become a potential source of income. It is learned that carbon in Sarawak forests is worth up to RM50.00 (US\$13.00) per ha (Kho L.K., *pers. comm.*). Carbon stocks in four primary forests and four old secondary forests will be assessed using the above ground biomass.

Activity 1.5 will publish results of studies in final technical reports produced by respective consultants.

Output 2 will study traditional land use by local communities to identify options for sustainable development of UBFA

Activity 2.1 To study traditional community land use for livelihoods is critical because sustainability in land use is sometimes interrupted by disputes. This includes community farming lands that are located in State lands that are under timber license. Results of survey will be reported to government with recommended actions for land use right to be recognized. Secondly, community lands for different uses for paddy farming and agro-forestry will be determined by soil types and soil fertility in relation to terrain conditions. Expected outcomes will be lands for paddy farming, fruit trees and agro-forestry allocated, and sustainability in land use and productivity assured.

Activity 2.2 on studies of communities and gender equality will help to determine needs and expectations from project implementation, and the extent to which they are dependent on forest resources. Gender equality will focus on promoting women's roles in the family and community, and their willingness to be trained to take up management and decision making roles. The initial target is to train five women leaders from each of the 26 settlements for a total of 130.

Activity 2.3 To establish government-people platform for communication, consultation and problem solving. Effective platform for communication in rural areas has always been a problem due to lack of proper access. Two-way communication process provides an opportunity for the people to voice their problems and concerns on land use and livelihood issues, and seek appropriate assistance. In this case, the government-piloted project can do much to help resolve land use issues and offer opportunities to participate in new economic activities with skill training.

Output 3 will enable sustainable development planning and activities to be executed and replicated in phases.

Activity 3.1 is aimed to formulate three sustainable development plans and models to cater to the needs of different ethnic groups. The Penan are by comparison, still largely forest-dependent, and will benefit from learning the proper ways of using the rich forest resources around them to secure regular incomes, e.g NTFP like rattan, gaharu and medicinal plants. Successfully demonstrated models will be replicated for all to benefit.

Activity 3.2 To study CAN tourism potential is appropriate for UBFA with diverse cultures and many still intact forests rich in flora and fauna and with many waterfalls and clean rivers. Study is aimed to identify eco-tourism products and attractions in each community group and how these products may be developed, along with basic visitor amenities and services. It is envisaged that the upper Baram area will become more accessible to tourists when rural roads are improved under the government's on-going rural transformation programme. One unique and popular feature of rural tourism is homestay which can only be efficiently run with women playing a key role. The strategy to empower women will involve selecting candidates from each ethnic group for training in (i) homestays and hospitality, (ii) nature tours, and (iii) development of handicrafts and farm products for sale. Experts from tourism industry will be invited to conduct training.

Activity 3.3 To support development of basic infrastructure and facilities will focus on bridges, water and power supply and toilets for needy villages especially among the Penan. Implementation will require collaboration and inputs from government and private sector (timber companies) and NGOs (BMF, Save Rivers and Keruan). It is to be noted that travels in rural Sarawak are almost totally dependent on timber roads that are built and maintained by timber companies.

3.3. Work Plan

Table 3.1. Work plan for the entire project duration

Output/Activity	Responsible party	Year 1				Year 2			
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Output 1 <u>A 1.1. To establish PMU to oversee and advise on execution of project and report to the PSC</u>	EA (FDS), PM								
<u>A 1.2. To collect baseline data on ecosystems, flora& fauna, establish gene banks, and initiate enrichment planting in degraded or idle community lands</u>	EA, PM, NGO								
<u>A 1.3. To initiate studies on ethnobotany and NTFP among different ethnic groups</u>	EA, PM, NGO								
<u>A 1.4. To assess carbon stocks in different forest types for low carbon trade</u>	EA, PM								
<u>A 1.5. To publish results of studies</u>	EA, PM								
Output 2 <u>A 2.1. To study traditional community land use for improving livelihoods</u>	EA, LSD, PM, NGO								
<u>A 2.2. To carry out baseline studies on communities and gender equality</u>	EA, PM, NGO								
<u>A 2.3. To establish government-people platform for communication, consultation and problem solving</u>	EA, PM, NGO								
Output 3 <u>A 3.1. To formulate sustainable development plans and models for demonstration and replication by local communities</u>	EA, PM, NGO								
<u>A 3.2. To study ecotourism potential based on culture,</u>	EA, PM, NGO								

<u>adventure and nature (CAN) in selected villages</u>									
<u>A 3.3. To support development of basic infrastructure and facilities in selected villages</u>	FDS, NGO, PM								

Note: EA= Executing Agency, PL=Project Leader, PC=Project Coordinator, LSD=Lands & Surveys Department

3.4 Budget

3.4.1 Master Budget Schedule

Outputs/ Activities	Description	Budget Comp.	Quantity		Units	Unit cost US \$	Total Cost US \$	ITTO		Exec Agency
			Yr 1	Yr 2				Yr 1	Yr 2	
Output 1	Studies to establish values of forest ecosystem and biological resources carried out									
A 1.1	To establish Project Management Unit (PMU) to oversee and advice on execution of project and report to the PSC									
	Project Leader	11	12	12	Man month	4,500	108,000	54,000	54,000	-
	1 Accounting officer	11	12	12	Man month	1,000	24,000	12,000	12,000	-
	1 Project officers	11	12	12	Man month	1,000	24,000	12,000	12,000	-
	Employees' contribution to EPF 13 %	13	12	12	Man month	845	20,280	10,140	10,140	-
	Project Coordinator	1.1	12	12	Man month	-	-	-	-	72,000
	Chief Local Counterpart	1.2	12	12	Man month	-	-	-	-	48,000
	Forestry support staff	1.3	12	12	Man month	-	-	-	-	160,000
	Air travel inside Malaysia	31, 3.1	8	8	Trip	-	20,000	10,000	10,000	60,000
	Air travel outside Malaysia	32, 3.2	1	1	Trip	-	7,000	3,500	3,500	16,000
	DSA Project staff	33	8	8	Trip	-	15,000	7,500	7,500	-
	Staff field allowance (EA)	3.3	10	10	Trip	-	-	-	-	100,000
	PSC meeting	61	1	1	Per year	2,500	5,000	2,500	2,500	

	ITTO Annual Financial Audit	65	1	1	Per year	12,000	12,000	6,000	6,000	
	2 Personal computers	41, 4.1	2	-	Unit	1,250	2,500	2,500		4,000
	2 Portable Generators	42	3	-	Unit	1,000	2,000	2,000	-	-
	1 AV equipment (camcorder)	43	1	-	Unit	1,023	1,023	1,023	-	-
	2 Cameras	44	2	-	Unit	1,000	2,000	2,000	-	-
	2 communications	45	2	-	Unit	1,000	2,000	2,000	-	-
	2 Projectors	46	2	-	Unit	500	1,000	1,000	-	-
	2 GPS	47	2	-	Unit	500	1,000	1,000	-	-
	Office supplies	51, 5.1	1	1	Set	1000	2000	1000	1000	3,000
	Camping equipment	4.2	1	1	Set	-	-	-	-	5,000
	Miscellaneous consumables	5.3	-	-	Set	-	-	-	-	30,000
Activity 1.2	To collect baseline data on ecosystems, flora and fauna, establish gene banks, and initiate enrichment planting in degraded or idle community lands									
	Forest Botanist	14	6		Man month	2,500	15,000	15,000		-
	2 Biologists (mammals and birds, amphibians)	14	5		Man month	2,500	25,000	25,000		-
	Forest Ecologist/ Silviculturist	14		5	Man month	2,500	12,500		15,000	-
	Technical assistants	15	5	4	Man month	1,000	8,000	4,000	4,000	-

	Local assistants for establishing & monitoring EP plots	15		8	Man month	800	6,400		6,400	-
	Planting material & fertilizers	52		1	Set	1,000	1,000		1,000	-
	Tools & material	52		1	Set	1,000	1,000		1,000	-
	Logistics	53	10	10	Per pax	400	8,000	4,000	4,000	
Activity 1.3	To initiate studies on ethnobotany and NTFP among the different ethnic groups									
	Forest Botanist	14	6		Man month	2,500	15,000	15,000		-
	2 Botanical assistants	15	5	5	Man month	1,000	10,000	5,000	5,000	-
	Local assistants for establishing & monitoring 3 NTFP plots & 4 herbal gardens	15		8	Man month	800	4,000		4,000	-
	Planting material & fertilizers	52		1	Set	2,500	2,500		2,500	-
	Tools & material	52	-	1	Set	2,500	2,500	-	2,500	-
	Logistics	53	8	8	Per pax	400	6,400	3,200	3,200	-
Activity 1.4	To assess carbon stocks in different forest types for low carbon trade									
	Consultant	14	-	6	Man month	2,500	15,000		15,000	
	2 Technical Assistants	15	-	3	Man month	1,000	6,000		6,000	

	Logistics	53	-	5	Per pax	400	2,000		2,000	
Activity 1.5	To publish results of studies									
	Reports	63	-	-	Copies	4	4,000		4000	
Output 2	Studies on traditional land use by local communities to identify options for sustainable development of UBFA									
Activity 2.1	To study traditional community land use for improving livelihoods									
	2 Technical Assistants	15	4		Man month	1,000	8,000	8,000		
	Local field assistants	15	3		Man month	800	2,400	2,400		
	Stakeholder consultation	62	2	2	Per Year	2,000	400	2,000	2,000	
	Logistics	53	5	5	Per pax	400	4,000	2,000	2,000	
Activity 2.2	To carry out baseline studies on communities and gender equality									
	Sociologist	14	4	-	Man month	2,500	10,000		10,000	
	Technical assistants	15	3	-	Man month	1,000	3,000		3,000	
	Logistics	53	5	-	Per Pax	400	2,000		2,000	
Activity 2.3	To establish government-people platform for communication and problem solving									
	Meetings & workshops	62	2	2	Per year	2,000	8,000	4,000	4,000	

Output 3	Sustainable development planning models for uplifting community livelihood implemented									
Activity 3.1	To formulate sustainable development plans and models for demonstration and replication by local communities									
	Consultant	14	-	4	Man month	2,500	10,000	-		
Activity 3.2	To study eco-tourism potential based on culture, adventure and nature in selected villages									
	Survey potential attractions for CAN	21	-	6	Man month	1,000	6,000		6,000	
	Guide training	64	-	10	Per pax	250	5,000	2500	2,500	
	Produce promotion material (video, etc)	63	-	2	Set	3,500	7,000	3500	3500	
	Logistics	53	-	10	Per pax	400	4,000		4,000	
Activity 3.3	To support development of basic infrastructure and facilities in villages									
	Support for community development (basic facilities & infrastructures)	6.1	-	-	Set					200,000

Note: EA= Executing Agency, PL=Project Leader, PC=Project Coordinator, LSD=Lands & Surveys Department

3.4.2 Yearly Consolidated Budget

Category	Description	Total	Year 1	Year 2
10	Project Personnel			
11	National experts (long-term)			
	11.1 Project leader	108,000	54,000	54,000
	11.2 Accounting officer	24,000	12,000	12,000
	11.3 Project officers	24,000	12,000	12,000
1.1	Project Coordinator	72,000	36,000	36,000
1.2	Chief Local Counterpart	48,000	24,000	24,000
1.3	Forestry Support Staff	160,000	80,000	80,000
13	EPF contribution 13 % (National experts & other personnel)	20,280	10,140	10,140
14	National consultants			
	14.1 Ecological and Biodiversity Surveys	40,000	40,000	
	14.2 Enrichment planting, establishment of plots	12,500		12,500
	14.3 Ethnobotany and NTFP studies, establishment of plots	15,000	15,000	
	14.4 Communities and gender studies	10,000		10,000
	14.5 Carbon stocks for low carbon trade studies	15,000		15,000
	14.6 Formulate sustainable development plans and models	10,000		10000
15	Technical assistants and labourers			
	15.1 Technical assistants	35,000	17,000	18,000
	15.2 Local labourers and field assistants	12,800	2,400	10,400
19	Sub total	606,580	302,540	304,040
20	Sub contracts			
21	Potential attractions for CAN survey	6,000		6000
29	Sub total	6,000		6000
30	Duty Travel			
31	Travel to project site	20,000	10,000	10,000
32	Travel outside Malaysia	7,000	3,500	3,500
33	DSA for project staff	15,000	7,500	7,500
3.1	Travel to project site	60,000	30,000	30,000
3.2	Travel outside Malaysia	16,000	8,000	8,000
3.3	Staff field allowance	100,000	50,000	50,000
39	Sub total	218,000	109,000	109,000
40	Capital Items			
41	Computers (2 Laptops)	2,500	2,500	-
42	2 Portable Generators	2,000	2,000	-
43	1 AV (Camcorder)	1,023	1,023	-

44	2 Cameras	2,000	2,000	-
45	Satellite phones (communications)	2,000	2,000	-
46	2 Projectors	1,000	1,000	
47	2 GPS	1,000	1,000	
4.1	Personal computers	4,000	2,000	2,000
4.2	Miscellaneous camping equipment	5,000	3,000	2,000
49	Sub total	20,523	16,523	4,000
50	Consumables			
51	Office supplies	2,000	1,000	1,000
52	Planting materials & tools	7,000		7,000
53	Logistics (Rental of vehicles, boats/ counterpart support)	26,400	9,200	17,200
5.1	Office supplies	3,000	1,500	1,500
5.2	Miscellaneous consumables	30,000	15,000	15,000
59	Sub total	68,400	26,700	41,700
60	Miscellaneous			
61	PSC meetings	5,000	2,500	2,500
62	Meetings, workshops and stakeholders' consultation	12,000	6,000	6,000
63	Publication			
	63.1 Final technical reports @ 1000 copies	4,000	-	4000
	63.2 Promotion material (video, etc.)	7,000	3500	3500
64	Guide training	5,000	2500	2500
65	Annual financial audit cost (ITTO)	12,000	6000	6000
6.1	Support for community development (basic facilities & infrastructures)	200,000	100,000	100,000
69	Sub total	245,000	120,500	124,500
70	Total Project	1,164,503	575,263	589,240
80	National Management Cost	104,700		
90	Project monitoring and administration		-	
91	ITTO Monitoring and Review	20,000		
92	ITTO ex-post Evaluation	10,000		
93	ITTO Programme support (12% of 70+91+92)	59,580		
100	Total Project Monitoring & Administration	89,580		
	GRAND TOTAL	1,358,783		

3.4.3 ITTO Yearly Budget

Category	Description	Total	Year 1	Year 2
10	Project Personnel			
11	National experts (long-term)			
	11.1 Project leader	108,000	54,000	54,000
	11.2 Accounting officer	24,000	12,000	12,000
	11.3 Project officers	24,000	12,000	12,000
13	EPF contribution 13 % (National experts & other personnel)	20,280	10,140	10,140
14	National consultants			
	14.1 Ecological and Biodiversity Surveys	40,000	40,000	
	14.2 Enrichment planting, establishment of plots	12,500		12,500
	14.3 Ethnobotany and NTFP studies, establishment of plots	15,000	15,000	
	14.4 Communities and gender studies	10,000		10,000
	14.5 Carbon stocks for low carbon trade studies	15,000		15,000
	14.6 Formulate sustainable development plans and models	10,000		10,000
15	Technical assistants and labourers			
	15.1 Technical assistants	35,000	17,000	18,000
	15.2 Local labourers and field assistants	12,800	2,400	10,400
19	Sub total	326,580	162,540	164,040
20	Sub contracts			
21	Potential attractions for CAN survey	6,000		6000
29	Sub total	6,000		6000
30	Duty Travel			
31	Travel to project site	20,000	10,000	10,000
32	Travel outside Malaysia	7,000	3,500	3,500
33	DSA for project staff	15,000	7,500	7,500
39	Sub total	42,000	21,000	21,000
40	Capital Items			
41	Computers (2 Laptops)	2,500	2,500	-
42	2 Portable Generators	2,000	2,000	-
43	1 AV (Camcorder)	1,023	1,023	-
44	2 Cameras	2,000	2,000	-
45	Satellite phones (communications)	2,000	2,000	-
46	2 Projectors	1,000	1,000	
47	2 GPS	1,000	1,000	
49	Sub total	11,523	11,523	
50	Consumables			
51	Office supplies	2,000	1,000	1,000
52	Planting materials & tools	7,000		7,000

53	Logistics (Rental of vehicles, boats/ counterpart support)	26,400	9,200	17,200
59	Sub total	35,400	10,200	25,200
60	Miscellaneous			
61	PSC meetings	5,000	2,500	2,500
62	Meetings, workshops and stakeholders' consultation	12,000	6,000	6,000
63	Publication			
	63.1 Final technical reports @ 1000 copies	4,000	-	4000
	63.2 Promotion material (video, etc.)	7,000	3500	3500
64	Guide training	5,000	2500	2500
65	Annual financial audit cost	12,000	6000	6000
69	Sub total	45,000	20,500	24,500
70	Total Project	466,503	231,763	234,740
80	National Management Cost	-	(See Executing Agency)	
90	Project monitoring and administration		-	
91	ITTO Monitoring and Review	20,000		
92	ITTO ex-post Evaluation	10,000		
93	ITTO Programme support (12% of 70+91+92)	59,580		
100	Total Project Monitoring & Administration	89,580		
	GRAND TOTAL	556,083		

3.4.4 Executing Agency Yearly Budget (GoM)

Category	Description	Total	Year 1	Year 2
1	<i>Personnel</i>			
1.1	Project Coordinator	72,000	36,000	36,000
1.2	Chief Local Counterpart	48,000	24,000	24,000
1.3	Forestry Support Staff	160,000	80,000	80,000
19	Sub total	280,000	140,000	140,000
3	<i>Duty Travel</i>			
3.1	Travel to project site	60,000	30,000	30,000
3.2	Travel outside Malaysia	16,000	8,000	8,000
3.3	Staff field allowance	100,000	50,000	50,000
39	Sub total	176,000	88,000	88,000
4	<i>Capital Items</i>			
4.1	Personal computers	4,000	2,000	2,000
4.2	Miscellaneous camping equipment	5,000	3,000	2,000
49	Sub total	9,000	5,000	4,000
5	<i>Consumables</i>			
5.1	Office supplies	3,000	1,500	1,500
5.2	Miscellaneous consumables	30,000	15,000	15,000
59	Sub total	33,000	16,500	16,500
6	<i>Miscellaneous</i>			

6.1	Support for community development (basic facilities & infrastructures)	200,000	100,000	100,000
69	Sub total	200,000	100,000	100,000
	Total Project	698,000		
7	National Management Cost (15%)	104,700		
	GRAND TOTAL (70+80)	802,700		

3.5 Assumptions, Risks and Sustainability

3.5.1 Assumptions and Risks

The key assumptions as regards achievements of the project's objectives and outputs are (i) government commitment and political decision to make UBFA into a protected area for conservation, sustainable development and community use, (ii) full cooperation of local ethnic groups, local NGO, land owners and farmers and private sector, which are all beyond the control of the project. Logging in the Upper Baram has created intense conflicts with the people that got the government involved. To some extent, the tension is still real and could pose potential risk to the project. Inter-ethnic misunderstanding and land use issues are two others potential risk factors. Table 3.2 present the key assumptions, potential risks and proposed mitigating measures.

Table 3.2: Key Assumptions, Potential Risks and Mitigating Measures

Key assumptions	Potential risks	Mitigating measures
Government agreed to securing the UBFA for integrated development with maximum benefits for the people	<ul style="list-style-type: none"> • Project execution will continue ineffectively, outputs delayed or not fully delivered • Development objective not achieved • Securing core area for conservation may be delayed 	<ul style="list-style-type: none"> • EA & project committee must convince policy makers of importance of UBFA • Promote project with publicity and greater awareness • No logging is permitted in the core area • Government and private sector to sustain project funding
Community and private sector cooperation improved	<ul style="list-style-type: none"> • Unregulated logging damaging environment and forest resources • Indifference of certain communities to logging for quick gains • Lack of understanding and goodwill 	<ul style="list-style-type: none"> • Government to ensure compliance • Platform to promote goodwill through communication and free prior informed consent • Ensure community lands and properties are not damaged • Timber companies to continue assistance with CSR
Land use conflicts resolved	<ul style="list-style-type: none"> • Land contest will deter socio-economic pursuit which is land-dependent • Communities continue to protest against logging • Problems and obstacles for rural development will remain 	<ul style="list-style-type: none"> • Political support • Aim for win-win solution through dialogue and negotiation to reach consensus, coordinated by Keruan and Save Rivers • Government intervention to reach decision to speed up process • Reduce community reliance on forests
Cooperative local communities, landowners and farmers	<ul style="list-style-type: none"> • Landowners do not allow use of their lands • Sustainable livelihood models lacking support 	<ul style="list-style-type: none"> • Intensive consultation through local committee meetings and dialogues

	<ul style="list-style-type: none"> • Land disputes continue 	<ul style="list-style-type: none"> • EA to share lessons learned on past successful ITTO projects • Local NGO to help convince communities and landowners
Communities to understand that development plans need to be implemented in phases	<ul style="list-style-type: none"> • Communities not ready for change or are not cooperative are left out • Too many requests for project to handle • Villagers or participants not proactive 	<ul style="list-style-type: none"> • Through consultation, identify villages that need urgent help • Plan activities within capacity of project to implement • Propose 1-village-1 project programme and activities
Additional funding for social forestry development from FDS	<ul style="list-style-type: none"> • No. of community activities will be limited • Livelihood improvement will be delayed • Project execution will be less effective 	<ul style="list-style-type: none"> • SFD of FDS to secure funding • Adequate manpower for implementation • Participants are proactive • Support from NGO

On land use conflicts involving NCR lands in Sarawak, perimeter survey has been carried out by government, but the process is going to take a long time with very high cost. In the UBFA, the initiative taken by the Penan to have their lands survey should help to shorten the process.

3.5.2 Sustainability

Sustainability of the project will depend on full cooperation from local communities and private sector and government commitment. Dialogues and road shows in 2016 and 2017 indicated majority support from the people. Sustainability will be assured when trained local participants begin to engage in new economic activities to better their incomes, and integrated management plan for the UBFA is fully endorsed **by government and operational. Participants of new economic activities will require continued guidance and upgrading of knowledge and skills via follow-up actions after project completion at least two times per year, led by FDS to provide advice, technical expertise and secure additional funding**, as was done with previous ITTO projects. It is beyond the capacity this project to reach all the local communities in the UBFA **but assistance will be rendered to interested participants**. Findings and recommendations from this project phase will determine the need for further extension.

Commercial logging will have definite impacts on sustainability. On the positive side, logging roads provide the only land access to the upper Baram, thus the lives of the people would be immediately affected and economic activities put to a halt if timber harvesting were to stop. Continued logging will undoubtedly inflict further damage to the environment and affect local livelihoods, which had caused the people to protest in the past by putting up road blockage. Mandatory certification with sustainable and reduced impact logging should serve to minimize impacts, with strict and effective management and enforcement mechanisms.

PART 4. IMPLEMENTATION ARRANGEMENTS

4.1 Organization Structure and Stakeholder Involvement Mechanism

4.1.1 Executing agency and partners

Long experience gained by FDS as EA of past ITTO projects, as well as cordial political and administrative platforms that have been put in place for ITTO will help to enhance smooth planning and implementation. EA will select and appoint key management personnel and consultants, provide office and facilities, and annual allocation of counter budget, plus possible additional budget to be made available under FDS' social economic development programme. The profile of FDS is given in Annex 1.

Key personnel to be appointed will be Project Coordinator, Project Manager and Chief Local Counterpart, who will be assisted by officers and experts from other divisions of FDS. Technical outputs and activities will be delivered by local consultants and experts, **many of whom will be women, as in**

past ITTO projects. Co-partners will include NGO in particular Keruan and Save Rivers representing the communities. The project's organizational chart is presented in Annex 2.

4.1.2 Project management team

EA will establish a project management team (PMT) headed by Project Coordinator (PC), and consisting of Project Leader (PL), Chief Local Counterpart (CLC), Project Accounting Officer, and Head of Social Forestry Division (SFD). PL will head the consultant team and provide advice and guidance in planning and implementation of planned activities, with local NGOs playing complementary roles. Community members will include **at least two women leaders from each of the four ethnic groups and will be empowered to play leading roles in resource development, training and decision making especially in NTFP, farming and handicraft and eco-tourism.** Much help will be expected from community and village committees, as well as other government agencies.

Curriculum vitae of professionals to be appointed by the EA along with their terms of reference are given in Annex 3, and TOR for PC, PM and CLC and Accounting Officer in Annex 4.

4.1.3 Project steering committee (PSC)

PSC will be established to oversee progress in project implementation as specified in the logical framework matrix, review progress reports and any changes to the project design including extensions and approve work plans and associated budget. Membership will consist of:

- A chairperson appointed by FDS
- Ministry of Primary Industries (MPI)
- Ministry of Urban Development and Natural Resources (MUDeNR)
- ITTO representative
- Donor representatives
- Resident Miri Division
- Regional Forest Office, Miri
- NGO and Community representatives **including at least three women leaders**
- Timber industry representatives.

The Committee shall meet twice a year, and a special meeting may be called forth by EA at any time as need arises. The official language will be English.

4.1.4 Stakeholder involvement mechanism

This is shown in the organizational structure in Annex 2. PSC will provide the platform for key stakeholders to be actively involved to exchange information, give advice, and make important changes or decisions on project implementation. The stakeholder involvement mechanism will further ensure smooth implementation led by EA and assisted by its management team.

4.2 Reporting, Review, Monitoring and Evaluation

Project consultants will be required to produce field and progress reports and final technical reports for all planned activities under their charge. At the start, each consultant will prepare a monitoring plan indicating scope of work, methodology and survey techniques, data to be collected and indicators of progress. His performance will be monitored and evaluated by PL or other experts authorized by EA. Results will be reviewed by PC and PL and presented to PSC.

Where follow-up monitoring is necessary, such as for gene banks, agro-forestry and reforestation activities, consultants will be required to prepare monitoring plans for EA to follow up. Participating farmers will be trained to monitor progress and maintenance of economic activities.

The types of reports to be produced in accordance with the ITTO Manual on Standard Operating Procedures will be:

- i. Inception report. To be submitted after signing of agreement between ITTO, EA and GoM. It will contain matters such as availability of office space and facilities, opening of a separate bank account, and proposed key project personnel.
- ii. Yearly Plan of Operation (YPO). To be submitted yearly prior to commencing operation, for endorsement by ITTO. YPO for the first year shall be attached to the inception report, and the subsequent ones to be submitted before the beginning of the planned year. ITTO will approve YPO upon recommendation of PSC.
- iii. Progress report. To present information on executed activities and findings, and inputs applied, to be submitted by each consultant to EA.
- iv. Final Technical report. To contain technical and scientific data and project results, with conclusions and recommendations.
- v. Financial report. Audited annual report is to be submitted to ITTO within three months after the end of the current financial year. EA will appoint a registered independent public accountant with prior endorsement of ITTO.
- vi. An Integrated Management Plan for UBFA.
- vii. Completion report. To be submitted by EA within three months of project completion. The report will summarize activities, inputs and expenditure, achieved outputs and objectives, and highlight the most critical differences between planned and realized project elements, using the original project document as a reference, and lessons learned from project implementation.

4.3 Dissemination and Mainstreaming of Project Learning

4.3.1 Dissemination

Project results will be disseminated through reporting and workshops during the implementation phase and after project completion.

- Final technical reports will be published and widely distributed to ITTO and involved stakeholders, Ministries and government departments, with additional soft copies for ITTO.
- Integrated Management Plan for the UBFA.
- Brochures on awareness and eco-tourism will be produced and distributed.
- Short audio visuals for publicity and education will be produced and distributed to ITTO, PSC members, NGO and communities and schools.
- Project completion report will be distributed to ITTO, PSC members, Ministries and government departments.

4.3.2 Mainstreaming

Results of the project and relevant information and lessons learned will be documented and put up in ITTO website and made accessible to all ITTO members, donors and interested institutions. In Sarawak, FDS website is available. Completed UBFA management plan will enable policy decision making by government to benefit communities of the Upper Baram.

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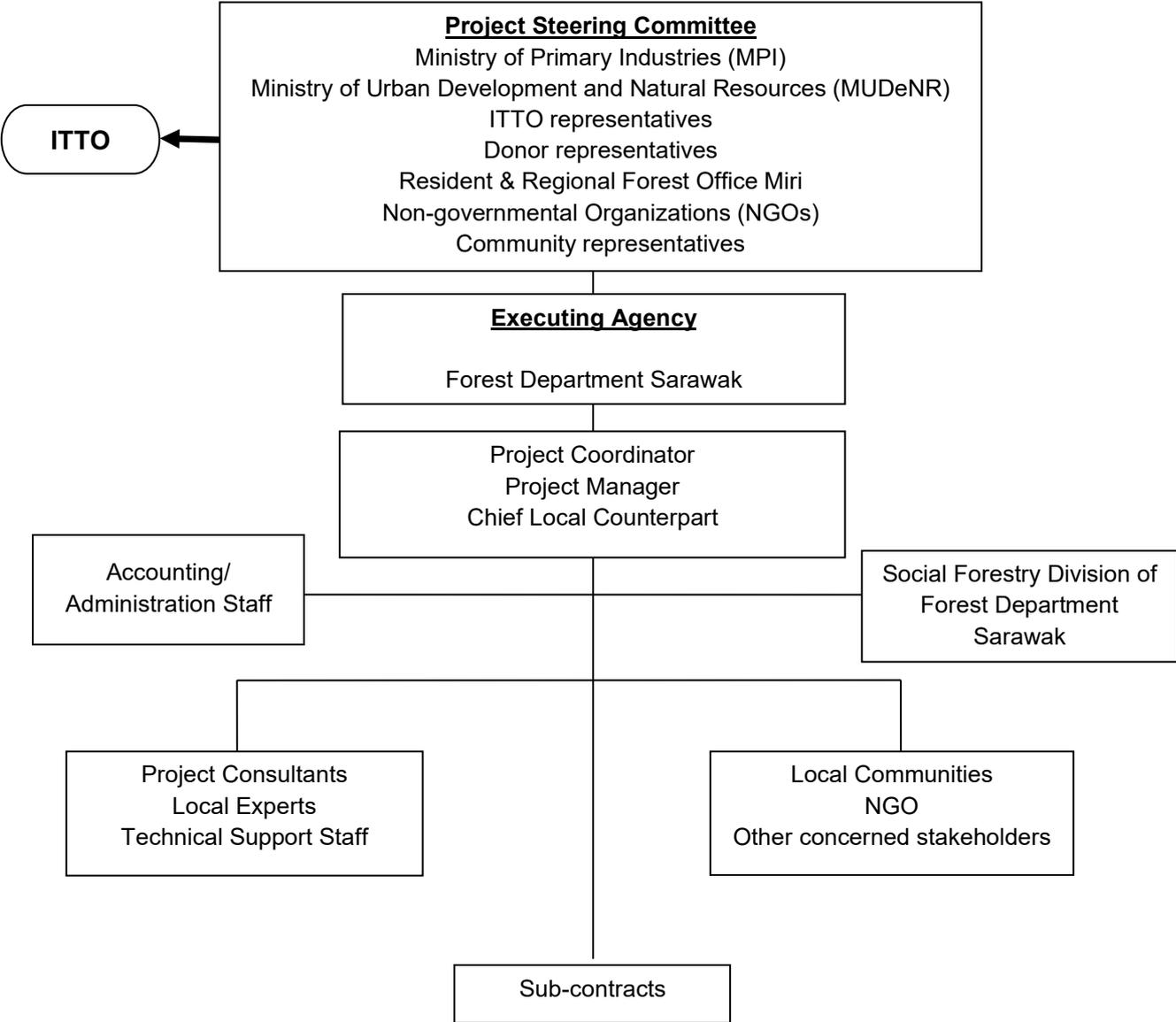
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ANNEX 1. PROFILES OF THE EXECUTING AGENCY

FDS will be the project’s EA. The Department comes under Sarawak Ministry of Urban Development and Natural Resources and is located in Petra Jaya in Kuching. FDS holds important policy and regulatory functions and is assisted by Sarawak Forestry Corporation (SFC) as its operating arm. FDS’ association with ITTO started with ITTO Mission to Sarawak in 1989/1990 and as EA of all ITTO projects since 1993. Additional input from FDS is expected under its social forestry programme. Its current major undertakings are mandatory forest management certification, forest landscape restoration initiative, and social forestry. The Department was established in 1999 is celebrating its 100 year anniversary this year.

ANNEX 2. PROJECT ORGANIZATIONAL STRUCTURE



ANNEX 3. TASKS AND RESPONSIBILITIES OF KEY PERSONNEL PROVIDED BY THE EXECUTING AGENCY

No	Name	Professional education	Position in present organization	Experience relevant to the project	Involvement in the project
1	Hamden Mohammad	M.Sc in Environmental science	Director of Forests	Forest management & conservation	Chairperson of PSC, Project Coordinator
2	Zarina Shebli	B.Sc. Forestry	Head, Social Forestry Division	Has worked with ITTO projects in Sarawak since 2005	Chief Local Counterpart
3	Sarzali Sahamat	Malaysian Certificate of Education	Accounting Officer	Involved in ITTO projects since 2014	Accounting, bookkeeping and office administration

ANNEX 4. OUTLINES OF THE TERMS OF REFERENCE OF KEY PERSONNEL, CONSULTANTS AND SUB-CONTRACTS TO BE PAID WITH ITTO FUNDS

Position	Main task
A. Project Key Personnel	
Project Coordinator (PC)	<ul style="list-style-type: none"> To coordinate project management and operation, and lead FDS team in planning, implementation and monitoring To work with PL and consultants to ensure smooth operation, and report to ITTO in accordance with project agreement To select consultants and other professionals for the project To organize PSC meetings and render support to additional community-based activities
Project Manager (PM)	<ul style="list-style-type: none"> To assist PC in project implementation To run ITTO project office, manage consultants and support staff, and liaise with NGO and communities To organize meetings and dialogues To attend meetings on behalf of PC
Chief Local Counterpart (CLC)	<ul style="list-style-type: none"> To represent PC in project implementation and counterpart to PL To prepare annual budget and control expenditure To make available local experts and technical staff To organize additional social forestry activities under SFD
Accounting Officer	<ul style="list-style-type: none"> To assist PL in financial management and office administration To undertake bookkeeping and banking work To help select auditor for financial auditing
Local experts and technical support staff	<ul style="list-style-type: none"> To help source maps and information for project planning To design basic infrastructural plans and undertake construction To implement project activities and conduct skill training
B. Consultants and Sub-contracts	
Consultants for Activity 1.2	<ul style="list-style-type: none"> To conduct ecosystem and biodiversity surveys and develop database To establish gene banks and recommend species for reforestation <u>To be in charge of enrichment planting</u> To conduct training To produce final technical reports
Consultants and NGOs for Activity 1.3	<ul style="list-style-type: none"> To document ethnobotanical knowledge of forest plants

	<ul style="list-style-type: none"> • To identify potential NTFP species for research and economic development by communities • To propose strategies on research and preservation of traditional knowledge • To promote <i>ex-situ</i> conservation • To produce final technical reports
Consultant and SFD for Activity 1.4	<ul style="list-style-type: none"> • <u>To conduct studies on issues related to community well-being</u> • <u>To select a team of enterprising women to be trained in decision making and resource management</u> • <u>To empower women to play leading role in agroforestry and eco-tourism</u> • To produce final technical reports
Consultant for Activity 1.5	<ul style="list-style-type: none"> • To identify forests for potential carbon sinks • To assess above ground biomass and estimate carbon stock • To recommend carbon offset schemes for carbon trade and produce final report
Consultant and NGOs for Activity 2.1	<ul style="list-style-type: none"> • To study existing land use conflicts faced by local communities • <u>To propose appropriate mechanisms for community use of forest and lands in State land and PFE respectively</u> • <u>To form community/village land use committees to coordinate and facilitate studies</u> • <u>To seek advice from LSD on survey of NCR lands</u>
EA and NGOs for Activity 2.2	<ul style="list-style-type: none"> • To establish platform for effective communication and consultation between government/communities/private sector on land use conflicts, <u>with members to include women leaders</u> • To initiate intensive consultation process to address issues faced by land users
EA, NGOs for Activity 2.3	<ul style="list-style-type: none"> • <u>To gather data for development of masterplan for UBFA</u> • <u>To consult with government agencies, local communities, NGO and timber sector</u> • <u>To produce a 10-year integrated management plan for UBFA</u>
Consultant, EA, NGOs for Activity 3.1	<ul style="list-style-type: none"> • To formulate plans and models for sustainable economic development in consultation with local participants • <u>To form a team comprising community representatives and NGOs for gathering and analysis of data</u> • <u>To seek advice from project consultants</u> • To empower women in management and decision-making • To produce final technical reports
EA, local experts, NGO for Activity 3.2	<ul style="list-style-type: none"> • To study eco-tourism potential on culture, adventure and nature • To support eco-tourism development in selected villages • To improve basic facilities and amenities
EA with local experts and support staff, NGOs for Activity 3.3	<ul style="list-style-type: none"> • <u>To study and make plans for infrastructure development</u> • <u>To identify the types and number of facilities to develop</u> • <u>To engage local communities in construction and skill training and maintenance</u> • <u>To be responsible for supply and transport of building materials, equipment and tools, including for future repairs and maintenance</u>

ANNEX 5. ASSESSMENT BY THE FIFTY-FOURTH PANEL

A) Overall Assessment			
<p>The Panel recognized the importance of the project proposal to manage the Upper Baram Forest Area (UBFA) for biodiversity conservation and socio-economic development to benefit local communities in northern Sarawak Malaysia.</p> <p>Overall, the Panel noted that the project has been well formulated in line with the ITTO manual for Project Formulation. However, the Panel noted that further improvements are needed to enhance the design and formulation of the proposal. The weakness of the proposal includes: insufficient logical framework matrix; inconsistent and lack of measurable indicators for the development and specific objectives; unsolid presentation of three outputs and activities; and poor presentation of the project budget. Considering this, the Panel was of the view the proposal should be modified and revised so as to incorporate the recommendations detailed as below.</p>			
B) Specific Recommendations		Page	Sections
1	Provide a more detailed map clearly highlighting the core conservation areas, harvest licenses and community forests as appropriate;	v	
2	Further describe why the surrounding Transboundary Biodiversity Conservation Area (TBCA) national parks could not effectively conserve 79,000 ha of mixed dipterocarp forests;	12	1.2.2 (5)
3	Describe government policies on land tenure, gender and SDGs in rural areas of Malaysia in Section 1.2.2;	11	1.2.2 (1)
4	Improve Sections 2.1.2 and 2.1.3 by elaborating the analysis of unsustainable land conversions/deforestation or gender/inheritance issues;	15 – 17	2.1.2 & 2.1.3
5	Enhance the logical framework matrix by refining the indicators in a SMART (specific, measurable, appropriate, realistic and time-bound) way and including quantitative means of verifications;	20 – 21	2.1.4
6	Focus on socio-ecological productive landscapes and include SMART quantitative indicators in Section 2.2.1 (Development objective and impact indicators);	22	2.2.1
7	Include baseline studies of communities in Section 2.2.2 as an indicator;	22	2.2.2
8	Focus on the presentation of concrete deliverables in Section 3.1.1 (Outputs) and include the conduct of baseline studies on communities and gender as an activity in Section 3.1.2 (Activities);	23	3.1.1 & 3.1.2
9	Provide the methodologies to be applied in Section 3.2 (Implementation Approaches and Methods) and sub-activities required in Section 3.3 (Work Plan);	24 – 26	3.2 & 3.3
10	Include community and gender representatives in project management arrangements in Sections 4.1.1, 4.1.2 and 4.1.3;	37 – 38	4.1.1, 4.1.2 & 4.1.3
11	Amend the ITTO budget in the following way; <ul style="list-style-type: none"> a) Move Activity 3.5 (Development of Infrastructure) into the Executing Agency budget b) Check the price of a camera per unit c) Scale down the duty travel and monitoring costs d) Clarify the budget of sub-contracts e) Move the employees provident fund into the Executing Agency budget 	27 – 35	Under the Malaysian law, EPF is payable by ITTO as the employer, as in all previous ITTO projects
12	Strengthen the sustainability after project completion as the project will set the baseline for improvements.	37	3.5.2

ANNEX 6. ASSESSMENT BY THE FIFTY-FIFTH PANEL

A) Overall Assessment				
<p>The Panel recognized that the project aims at promoting the sustainable management of the Upper Baram Forest Area (UBFA) in northern Sarawak Malaysia with the engagement of four ethnic communities, including 18 Penan communities, for the conservation of biodiversity and socio-economic development. The Panel acknowledged that the revised proposal has properly incorporated the recommendations made by the Fifty-fourth Panel. However, the Panel noted that the revised proposal should be further enhanced in the presentation of the thematic maps, the logical framework matrix and Sections 3.1, 3.2, and 3.5 as well as in the presentation of ITTO Programme Support Costs.</p>				
B) Specific Recommendations	Pg.	Section	Comments by EA	
1	5 - 7	-	<ul style="list-style-type: none"> - Three maps were provided to show timber license areas, forest types and community settlements along rivers - Conservation area is indicated as the core area in Map 1. - All FMUs have been logged and subjected to varying degrees of damage, it's hard to pinpoint degraded sites as information is not available - Community lands cannot be mapped due to lack of proper boundaries, but are situated adjacent to settlements 	
2	20 - 22	2.1.4		
3	24 - 25	3.1		
4	26 - 27	3.2		
5	39	3.5.2		
6	30 - 38	3.4		