

# INTERNATIONAL TROPICAL TIMBER ORGANIZATION

## ITTO

### PROJECT DOCUMENT

TITLE	ACCELERATING THE RESTORATION OF CIBODAS BIOSPHERE RESERVE (CBR) FUNCTIONS THROUGH PROPER MANAGEMENT OF LANDSCAPES INVOLVING LOCAL STAKEHOLDERS
SERIAL NUMBER	PD 777/15 Rev.3 (F)
COMMITTEE	REFORESTATION AND FOREST MANAGEMENT
SUBMITTED BY	GOVERNMENT OF INDONESIA
ORIGINAL LANGUAGE	ENGLISH

#### SUMMARY

Cibodas Biosphere Reserve (CBR) in West Java province of Indonesia, with a total area of approximately 114,779 hectares, is one of the most important biosphere reserves of Indonesia due mainly to its rich and unique biodiversity. It is also a well-known tourist destination due to its relatively good accessibility and a vital source of water for lives of about thirty million people residing in the Capital City of Jakarta and other smaller cities as well as municipalities located around the reserve.

The reserve, however, has not been adequately managed; it has not fully fulfilled its conservation and development functions due to various management problems. The proposed project aims “to contribute to restoring the conservation and development functions of CBR”. Its specific objective, “to improve conservation and sustainable management of biodiversity and ecosystems in CBR through implementation of the Integrated Strategic Management Plan”, is to be achieved through delivery of three outputs, namely: i) threat on biodiversity in the core area significantly reduced, ii) land use best practices in CBR buffer and transition zones demonstrated and promoted, and iii) institutional arrangements for CBR management enhanced. The basic notion underlying the project design is that CBR can never fulfill its conservation and development functions unless the landscapes in the core area and buffer and transition zones are properly managed and utilized and the institutional arrangements for the reserve management are significantly enhanced.

EXECUTING AGENCY GUNUNG GEDE PANGRANGO NATIONAL PARK AUTHORITY (GGPNP), DIRECTORATE GENERAL OF NATURAL RESOURCES AND ECOSYSTEM CONSERVATION (KSDAE), MINISTRY OF ENVIRONMENT AND FORESTRY (MOEF)

COLLABORATING AGENCY

DURATION 36 MONTHS

APPROXIMATE STARTING DATE TO BE DETERMINED

BUDGET AND PROPOSED SOURCES OF FINANCE	Source	Contribution in US\$	Local Currency Equivalent
	<b>ITTO</b>	<b>515,590</b>	
	Gov't of Indonesia	128,026	
	<b>TOTAL</b>	<b>643,616</b>	

## Project Brief

Cibodas Biosphere Reserve (CBR) is one of Indonesia's biosphere reserve system that was designated by UNESCO in 1977 based on the proposal made by the Government of Indonesia (GOI). The extent of CBR is approximately 114,779 hectares. It is a favored tourist destination due to its strategic location that encompasses the districts of Bogor, Cianjur and Sukabumi with relatively good accessibility. The reserve also is an important source of water supply affecting lives of around 30 million people residing in the districts and surrounding such areas as the state capital of Jakarta and cities of Depok, Bekasi and Tangerang.

The Gunung Gede Pangrango National Park (GGPNP) is the core area of CBR; accordingly, the GGPNP Authority has been the leading institution in the reserve management. Indeed, the Authority has been striving to conduct appropriate management operations amidst its limited capacity in terms of financial, institutional and technical factors. In order to improve CBR management in view of realizing the intended functions of the reserve, the International Tropical Timber Organization (ITTO) has provided assistance to GGPNP Authority in the form of an assisted project that has been implemented for 28 months starting September 2011.

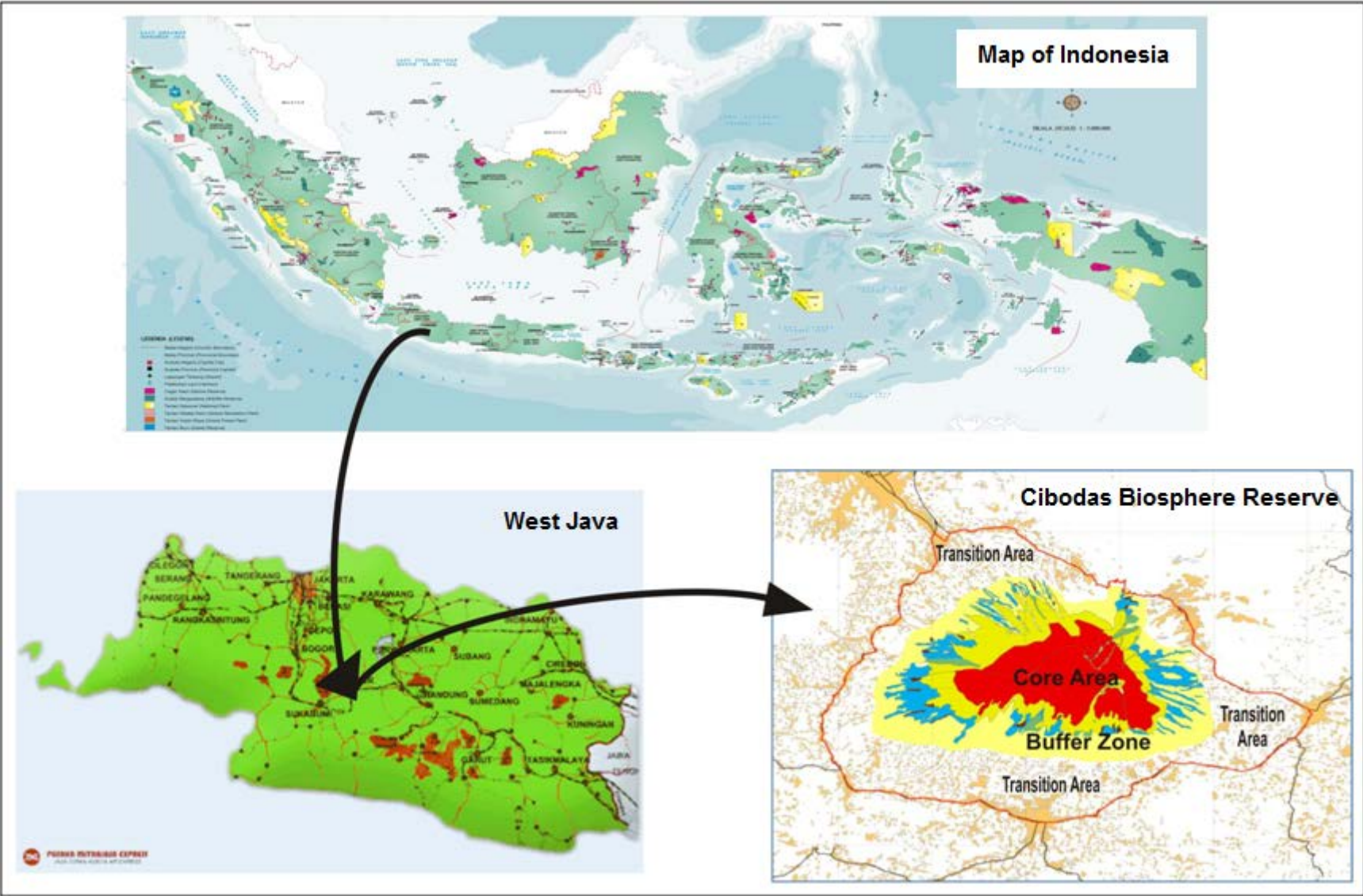
The specific objective of that project was "to strengthen forest law enforcement and governance for the conservation and sustainable use of biodiversity and environmental services of CBR" which has, to one extent, been achieved through delivery of three outputs, namely: i) commitment of stakeholders to an effective CBR management increased, ii) an integrated strategic management plan (ISMP) for CBR developed, and iii) community awareness on the conservation and sustainable use of biodiversity and environmental services as well as forest law enforcement and governance of CBR enhanced.

However, CBR has been inadequately managed as to date that its conservation and development functions are deteriorating over time. The ISMP developed under the previous project has not been implementable for political, institutional and financial reasons. This proposed project is, in fact, a partial implementation of the ISMP. Its overall objective is "to contribute to restoring the conservation and development functions of CBR" while its specific objective is "*to improve conservation and sustainable management of biodiversity and ecosystems in CBR through implementation of the Integrated Strategic Management Plan*" which is to be achieved through delivery of 3 outputs: i) threat on biodiversity in the core area significantly reduced, ii) land use best practices in CBR buffer and transition zones demonstrated and promoted, and iii) institutional arrangements for CBR management enhanced.

The proposed project will be implemented using a participatory approach wherein the Executing Agency (EA), the GGPNP Authority, will be working closely with the stakeholders including the three district governments, NGOs, national consultants, universities and National Academy of Sciences (NAS) in implementing the activities pertaining to the respective outputs. Each of the outputs will be delivered in an effective manner as the activities have been defined correspond to the causes of the main problems identified by the consultative meetings of stakeholders. Full execution of the relevant activities should deliver the outputs defined and, in turn, achieve the specific objective aspired.

The key assumptions made include: i) government authorities committed to CBR conservation and development, ii) cooperative farmers, iii) cooperative local communities and business firms, and iv) good coordination between MOEF and regional/district governments. The concomitant main risks are the weakening commitment of concerned authorities, uncooperative farmers as well as local communities and private firms. Accordingly, the envisaged mitigating measures are: i) project management to convince the government authorities on the advantages of operating a CC Forum at district level and to request for GGPNP Authority and district governments to allocate funds for sustaining project activities, ii) intensive dialogue with farmers by experienced professionals, iii) a win-win solution is to be defined based on local conditions, iv) intensive consultations with local communities, business firms and regional/local government authorities, and v) to convince local communities and business firms that current use of resources is not the best option.

The amount of project budget proposed is US\$ 643,616 in total comprising US\$ 515,590 of ITTO's contribution and US\$ 128,026 of GOI's contribution. The ITTO funds are allocated 28,65% (US\$ 147,700) as personnel component and 4.03 percent (US\$ 20,800) for procurement of capital items.



Source: Periodic Review on Cibodas Biosphere Reserve (Man and the Biosphere Programme, 2010)

## Table of Contents

Project Brief.....	ii
Map .....	iii
Table of Contents.....	iv
List of Abbreviations and Acronyms.....	v
PART 1. CONTEXT .....	1
1.1 Origin .....	1
1.2 Relevance.....	2
1.2.1 Conformity with ITTO's objectives and priorities .....	2
1.2.2 Relevance to Indonesia's policies.....	4
1.3 Target area .....	4
1.3.1 Geographic location.....	4
1.3.2 Socio-cultural, economic, and environmental aspects .....	4
1.4 Expected outcomes at project completion .....	6
PART 2. PROJECT RATIONALE AND OBJECTIVES .....	8
2.1 Rationale.....	8
2.1.1 Institutional setup and organizational issues .....	8
2.1.2 Stakeholder analysis.....	9
2.1.3 Problem analysis.....	11
2.1.4 Logical framework matrix.....	15
2.2 Objectives .....	17
2.2.1 Development objective and impact indicators .....	17
2.2.2 Specific objective and outcome indicators .....	17
PART 3. DESCRIPTION OF PROJECT INTERVENTIONS.....	18
3.1 Outputs and Activities .....	18
3.1.1 Outputs .....	18
3.1.2 Activities .....	18
3.2 Implementation approaches and method .....	18
3.3 Workplan .....	21
3.4 Budget .....	22
3.4.1 Master budget schedule .....	22
3.4.2 Yearly consolidated budget .....	26
3.4.3 ITTO yearly budget .....	28
3.4.4 Executing agency yearly budget (GOI).....	30
3.5 Assumptions, risks and sustainability .....	31
3.5.1 Assumptions and risks .....	31
3.5.2 Sustainability.....	31
PART 4. IMPLEMENTATION ARRANGEMENTS .....	33
4.1 Organization structure and stakeholder involvement mechanism.....	33
4.1.1 Executing agency and partners .....	33
4.1.2 Project management team.....	33
4.1.3 Project steering committee (PSC) .....	33
4.1.4 Stakeholder involvement mechanism.....	33
4.2 Reporting, review, monitoring and evaluation .....	34
4.3 Dissemination and mainstreaming of project learning.....	35
4.3.1 Dissemination .....	35
4.3.2 Mainstreaming .....	35
Selected References.....	36
ANNEX 1: Profiles of the executing agency.....	37
ANNEX 2: Project organizational structure .....	38
ANNEX 3: Tasks and responsibilities of the key experts provided by the executing agency.....	39
ANNEX 4: Outlines of the terms of reference of key personnel, consultants/experts and sub-contracts to be paid with ITTO funds .....	40

## List of Abbreviations and Acronyms

CBD	: Convention on Biological Diversity
CBR	: Cibodas Biosphere Reserve
CC	: Coordination and Communication
CL	: Community Leader
DG	: Directorate General
DGo	: District Government Officials
EA	: Executing Agency
GDP	: Gross Domestic Product
GGPNP	: Gunung Gede Pangrango National Park
HDI	: Human Development Index
HT	: Handy Talkie
ISMP	: Integrated Strategic Management Plan
ITTA	: International Tropical Timber Agreement
ITTO	: International Tropical Timber Organization
IUCN	: International Union for the Conservation of Nature
KSDAE	: <i>Direktorat Jenderal Konservasi Sumber Daya Alam dan Ekosistem</i> (Directorate General of Natural Resource and Ecosystem Conservation)
MAB	: Man and the Biosphere
MOEF	: Ministry of Environment and Forestry
MOI	: Ministry of Interior
NAS	: National Academy of Sciences
NC	: National Consultant
NE	: National Expert
NGO	: Non-governmental Organization
NTFP	: Non Timber Forest Product
PA	: Park Authority
PC	: Project Coordinator
PF	: Project Finance
PHBM	: <i>Pengelolaan Hutan Bersama Masyarakat</i> (Community Participatory Forest Management)
PS	: Project Secretary
PSC	: Project Steering Community
PT	: Project Technicians
TEK	: Traditional Ecological Knowledge
TOR	: Terms of Reference
UNESCO	: United Nations Educational, Scientific and Cultural Organization
YPO	: Yearly Plan of Operation

## PART 1. CONTEXT

### 1.1 Origin

ITTO Project TFL-PD 019/10 Rev. 2 (M) entitled “developing collaborative management of Cibodas Biosphere Reserve in West Java, Indonesia” had been implemented by the Gunung Gede Pangrango National Park (GGPNP) Authority since September 2011 and completed in March 2014. The key problem addressed by that project was “poor implementation of good governance practices and ineffective law enforcement in the conservation and sustainable use of biodiversity and environmental services” which was caused mainly by: i) lack of stakeholders commitment to an effective Cibodas Biosphere Reserve (CBR) management and law enforcement, ii) absence of an integrated strategic management plan, and iii) limited community awareness on sustainable use of biodiversity and environmental services.

Consistent with the key problem addressed, the specific objective of that project was “to strengthen forest law enforcement and governance on the conservation and sustainable use of biodiversity and environmental services of CBR” which had, to some extent, been achieved through delivery of three outputs, namely:

- Commitment of stakeholders to an effective CBR management increased
- An integrated strategic management plan for CBR developed
- Community awareness on the conservation and sustainable use of biodiversity and environmental services as well as forest law enforcement and governance enhanced

Indeed, the project has been successfully completed and, to some degree, achieved its planned specific objective. However, achieving the specific objective does not by itself resolve all the problems facing CBR management nor restore and promote the intended functions of CBR which, according to Seville Strategy, are:

- i. Conservation function to preserve genetic resources, species, ecosystems and landscapes
- ii. Development function to foster sustainable economic and human development
- iii. Logistic support function to support demonstration projects, environmental education and training and research and monitoring related to local, national and global issues of conservation and sustainable development

While commitment of stakeholders to CBR management and awareness of communities on conservation and sustainable use of forest resources have been increased through the previous project, several problems remain unresolved which are well documented in the integrated strategic management plan (ISMP) developed under completed project. Indeed, problems facing CBR management are numerous; one cannot expect to resolve all these problems by just implementing one single 28-month project. However, it should be noted that the enhanced commitment and increased awareness of stakeholders are an invaluable asset for achieving the CBR management objective, i.e. to restore and conserve the intended functions of CBR as previously mentioned that they shall be properly utilized under the proposed project.

This project proposal is the initiative of GGPNP Authority and is a follow up action to the findings of the previous project. Please note that ISMP produced under the previous project had been developed involving a panel of experts and representatives of the primary stakeholders. Prior to submission to MOEF, the ISMP must first obtain endorsement from the provincial/district government. This endorsed ISMP is then to be used as the main inputs to the formulation of a final version of ISMP by GGPNP for approval by MOEF in order to be eligible for state funding. This approval process may take years to complete while delaying implementation of ISMP may further jeopardize sustainability of the reserve. In addition, the awareness and commitment of local stakeholders, especially the local communities and government authorities, on biodiversity conservation and law enforcement that had been raised and enhanced through the completed project need to be promoted and utilized in order not to lose the momentum for CBR conservation. In fact, this proposed project is a partial implementation of ISMP; out of seven programmes of ISMP, the project only focuses on enhancing strategies for conservation of CBR core area, appropriate use of buffer and transition zones and strengthening of institutional arrangements.

The main purposes of proposed project are:

- i. To preserve and strengthen achievements of the previous project by properly utilizing the outputs and promoting sustainable livelihood activities that have been initiated under the completed project which will serve as a strong incentive for the local communities to support CBR conservation.
- ii. To partially implement the ISMP developed under completed project without delay in order not to lose the momentum that may aggravate existing problems.
- iii. To put in place adequate strategies for conservation and sustainable management of the CBR in view of restoring the conservation and development functions of the reserve by delivering 3 outputs, namely: i) threat on biodiversity in the core area significantly reduced, ii) land use best practices in CBR buffer and transition zones demonstrated and promoted, and iii) institutional arrangements for CBR management enhanced.

## **1.2 Relevance**

### **1.2.1 Conformity with ITTO's objectives and priorities**

#### **a. ITTA 2006**

The proposed project concerned with sustainable and proper functioning of the CBR through improved management of the core area as well as the buffer and transition zones involving primary stakeholders and strengthened institution governing the reserve management. This concern is consistent with the International Tropical Timber Agreement 2006 in the following manner:

- Article 1 (c): contributing to sustainable development and to poverty alleviation  
The project will introduce sustainable livelihood models and train beneficiaries on best practices thus support sustainable development and create job opportunities. These activities will surely be useful for poverty alleviation and, in turn, for CBR conservation.
- 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 enhance monitoring capacity by involving local communities in three districts in order to effectively improve forest law enforcement and combat illegal activities including illegal loggings and harvesting of NTFPs.
- 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 contribute to this ITTA objective by fairly resolving the land conflicts occurring in the reserve area and rehabilitating these lands with suitable species and by enhancing monitoring of forest operations with the involvement of local communities.

#### **b. ITTO Strategic Action Plan 2013-2018**

The proposed project deals with conservation of biodiversity and forest ecosystem of the CBR core area thus is in conformity 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 proposed project is also concerned with improving livelihood of local stakeholders by implementing best land use practices in the buffer and transition zones of the reserve thus is consistent with ITTO's Strategic Priority 2 "increase the contribution of tropical forests to national and local economies". In addition, the project also concerns with institutional strengthening by revising and enhancing the existing Coordination and Communication (CC) Forum of CBR thus 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".

### **c. Aichi Biodiversity Targets of CBD**

The proposed project concerns with the promotion of conservation function of the reserve including introduction of a sound biodiversity enrichment model, application of biodiversity monitoring system which is consistent with Target 7 “By 2020, areas under agriculture, aquaculture and forestry are managed sustainably, ensuring conservation of biodiversity”.

The proposed project will establish sustainable livelihood models that are ecologically friendly in the buffer and transition zones in close collaboration with stakeholders at all levels which is in conformity to Target 4 “By 2020, at the latest, Governments, business and stakeholders at all levels have taken steps to achieve or have implemented plans for sustainable production and consumption and have kept the impacts of use of natural resources well within safe ecological limits”.

The proposed project also deals with the rehabilitation of degraded forest inside the core area of the reserve, the national park, which supports achievement of Target 5 “By 2020, the rate of loss of all natural habitats, including forests, is at least halved and where feasible brought close to zero, and degradation and fragmentation is significantly reduced”.

The core area of the reserve contains important and unique biodiversity and ecosystem that need to be conserved. The proposed project deals with strengthening of institution and enhancing management capacity which correspond to Target 11 “By 2020, at least 17 per cent of terrestrial and inland water, and 10 per cent of coastal and marine areas, especially areas of particular importance for biodiversity and ecosystem services, are conserved through effectively and equitably managed, ecologically representative and well connected systems of protected areas and other effective area-based conservation measures, and integrated into the wider landscapes and seascapes”.

In addition, the proposed project also concerns with improving resilience of ecosystems and restoring of degraded ecosystems in the biosphere reserve which are in line with Target 15 “By 2020, ecosystem resilience and the contribution of biodiversity to carbon stocks has been enhanced, through conservation and restoration, including restoration of at least 15 per cent of degraded ecosystems, thereby contributing to climate change mitigation and adaptation and to combating desertification”.

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

The project interventions are generally consistent with the objectives of the Joint ITTO-CBD Initiative with objectives no. 2, 3, and 4 in particular:

- The project concerns with conservation and sustainable management of CBR in general, the core area in particular (Objective 2).
- The project deals with safeguarding forest biodiversity in the core area through enrichment planting and intensified monitoring (Objective 3).
- The project aims to improve welfare of local communities and awareness on nature conservation and sustainable development (Objective 4).

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

The project concerns with the enhancement of strategies for conservation and sustainable management of biodiversity and ecosystems in CBR in view of restoring the conservation and development functions of the reserve. 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 in protected areas which include, among others:

- **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 at the scale of the forest management unit as well as at the landscape and national levels.



- **Principle 6: Incentives**

Society gets large benefits from biodiversity conservation, but the costs of conservation fall mainly on local forest owners and managers. Incentives will often be required to encourage forest owners and managers to take special measures for biodiversity conservation and sustainable use.

- **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.

## **1.2.2 Relevance to Indonesia's policies**

The objectives, outputs and activities of proposed project are consistent with the national policies on sustainable forest conservation, especially with:

- i. Law No. 5/1990 concerning the Conservation of Biological Natural Resources and the Ecosystem mentioned that biosphere reserves should be protected and preserved for the purpose of research and education.
- ii. Government Regulation No. 68/1998 regarding KPA (Nature Protected Area) and KSA (Nature Reserve Area), mentioned that national park as a conservation area is managed by zoning system and there are 3 (three) principles of conservation, namely protection, preservation and sustainable use of natural resources.
- iii. Ministerial Regulation No. 174/Kpts-II/2003 regarding expanded area of GGPNP.
- iv. Government Regulation No. 6/2007 concerning Forest System and Forest Management Planning and Forest Utilization (the Republic of Indonesia's Government Official Gazette of 2007 No. 22, Annex to the Republic of Indonesia's Government Official Gazette Number 4696) as amended.
- v. Government Regulation No 26/2008 regarding National Spatial Planning.
- vi. Law No. 5/1994 regarding Ratification of Convention on Biological Diversity.

In addition, the proposed project has also been developed in close consultation with international policies on biosphere reserve development, such as:

- i. Declaration of UNESCO year 1977 regarding Cibodas Biosphere Reserve.
- ii. Seville Strategy on UNESCO Document 28C/Resolution 2.4 of the 28th UNESCO General Conference, November 1995.
- iii. Madrid Declaration on the Man and the Biosphere (MAB) Programme UNESCO 2008.

## **1.3 Target area**

### **1.3.1 Geographic location**

CBR area is located in West Java province and situated in three districts, namely Bogor, Cianjur and Sukabumi as depicted in the map. Extent of the area is approximately 114,779 hectares in total, comprising 22,851 hectares of core area, 12,700 hectares of buffer zone and 79,228 hectares of transition area (Purwanto, et al., 2013). The entire CBR core area, the national park, is located in the districts of Bogor (34.5%), Cianjur (20.2%) and Sukabumi (45.3%).

### **1.3.2 Socio-cultural, economic and environmental aspects**

#### **a. Socio-cultural aspects**

The population size of Bogor, Cianjur, and Sukabumi districts in 2012 was 9.63 million in total, dominated by Sundanese, the indigenous people of West Java region. In the past, Sundanese people had utilized natural resources in a sustainable manner based on traditional ecological knowledge (TEK) obtained from ancestors and practiced in a trial error manner. Based on the TEK for instance, zoning system was practiced wherein particular zones could be utilized while other zones were banned from livelihood activities.

The main land use systems practiced by the Sundanese people include *huma*, a form of shifting cultivation with a long rotation period, *talun-kebun* system wherein a mix of fruit and tree species was planted for livelihood and *pekarangan* system or an integrated agriculture-aquaculture combining tree planting with fish ponds. In irrigated lands, paddy of different varieties were used in combination with fish raising and cash cropping. The traditional systems practiced was proved able to survive climate change, natural disasters, pest and disease outbreaks and market dynamics (Iskandar, 2011).

In recent years, the traditional agriculture systems have undergone changes, due mainly to population growth and occurring changes in values and beliefs brought about by modernized lifestyle. However, the present form of agro-forestry is, in fact, a modified form of *talun-kebun* and *pekarangan* systems that had been practiced in the past. It appears that nature conservation, for Sundanese people, can be done sustainably hand in hand with livelihood development activities, which is the essence of practicing agro-forestry system.

## **b. Economic aspects**

### **Bogor district**

- The Human Development Index (HDI) that reflects level of education, health and income is increasing from 72.15 in 2010 to 73.08 in 2012 indicating slight improvement in well-being.
- During the 2010-2012 period, the annual economic growth was 5-6 % per annum with the highest growth experienced by construction sector (9%) and trade, hotel & restaurants (8%) whilst agriculture sector experienced a negative growth due mainly to significant conversion of agriculture lands and other uses.
- The per capita income in 2012 was estimated at app. USD 1,650 (current price), up from USD 1,345 in 2010.
- The main sources of Districts GDP are manufacturing (60%), trade & hotel including restaurants (19%) and construction (4%).

### **Cianjur district**

- The HDI grew up from 68.28 in 2007 to 70.02 in 2012 indicating a slight improvement in education, health and income of people residing in the district.
- During the 2010-2012 period, the district economy grew at about 5% per annum.
- The per capita income (at current price) in 2012 was about USD 900, up from about USD 750 in 2010 confirming the fact that the district is poorer than Bogor district.

### **Sukabumi district**

- The HDI increased from 70.66 in 2010 to 71.50 in 2012 indicating a slight improvement of education, health and income of people, slightly better than Cianjur district but lower than that of Bogor district.
- The district economy grew at about 4.6% per annum during the 2010-2012 period.
- The per capita income (at current price) in 2012 was about USD 800 up from USD 750 in 2010 indicating the fact that people of Sukabumi are poorer than those of Bogor and Cianjur.
- The main sources of GDP in 2012 were agriculture (28%), trade, hotel & restaurant (26%) and manufacturing (17%) indicating the fact that the economy is less industrialized compared to Bogor's.

## **c. Environmental aspects**

The CBR core area is rich in biodiversity both in terms of flora and fauna. Among the unique flora found in the area, include Edelweiss flower (*Anaphalis javanica*) that has been used as the symbol of successful wilderness adventuring and believed as the icon of eternity; Orchid (*Rafflesia rochussenii*) that exhibits interesting features; Nine-year flower (*Strobilanthus cernua*) that bears flower only once in nine years; Tropical pitcher plant (*Nepenthes gymnamphora*) that is widely known as the cold blood killer because of its ability to kill insects using the pitcher located at the tip of its leaves; Balanophora (*Belanophora spp.*); *Kiaksara*/Petiole Macodes (*Macodes petola*); *Pinang Jawa*/Pinanga (*Pinanga javana*) and Tree fern (*Diksonia blumei*).

The forest ecosystems that occupy the CBR core area can be distinguished based on elevation as follows:

- 500-1,000 m : forest plantation of fast growing species
- 700-1,000 m : lowland rain forest dominated by *Schima wallichii*, *Neesia altissima* and *Luvunga sarmentosa*
- 1,000-1,500 m : low mountain forest dominated by *Schima wallichii*, *Castanopsis javanica* and *Acronychia laurifolia*
- 1,500-2,400 m : high mountain forest dominated by *Schima wallichii*, *Acronodia punctata* and *Dacrycarpus imbricatus*
- 2,400-3,019 m : sub-alpine vegetation, dominated by *Leptospermum flavescens*, *Myrsine affinis* and *Eurya obovata* in association with *Anapholis javanica*, *Tripagone exiguus* and *Isactine pangerangensis*

The richness of CBR core area in wildlife can be illustrated by findings of the National Academy of Sciences (NAS) as follows:

- Out of 450 bird species in Java Island, 260 species can be found in CBR.
- Out of 25 endemic species of Java, 21 species exist in CBR area.
- 110 mammal species are found in CBR area including those ones categorized as endangered species, i.e. Leopard (*Panther pardus*), Wild dog (*Cuon alpinus*), Muntjac (*Muntiacus muntjak*), Javan Gibbon (*Hylobates moloch*) and Javan Surili (*Presbytis comata*).
- 75 reptile species are known to live in the core area including Pseudocalotes (*Pseudocalotes spp.*), Common Sun Skink (*Mabuya multifasciata*), Python (*Python reticulatus*), and Oriental Whipsnake (*Ahaetulla prasina*).
- 20 amphibian species have been found in the core area.
- CBR area is also a host for about 300 insect species.

The CBR landscape is also a very important source of water for the surrounding areas including the capital city of Jakarta; the core area is estimated to produce 231 billion liters of water per year which flows into around 1,075 rivers and tributaries (ITTO & GOI, 2010; Purwanto, et al., 2013). The CBR area comprises four water catchment areas, namely Ciliwung, Citarum, Cimandiri and Cisadane water catchment areas, which supply water for around twenty million people residing in Jakarta, Bogor, Depok, Tangerang and Bekasi areas.

In conclusion, CBR area is environmentally very important, not only because its richness in biodiversity but also due to its vital role in providing water for around twenty million people living inside and surrounding the biosphere. Therefore, protection and preservation of the biosphere, especially the core area, i.e. Gunung Gede Pangrango National Park (GGPNP) is, in fact, a matter of urgency.

#### 1.4 Expected outcomes at project completion

At project completion, a number of outcomes and desired changes expected to materialize in the following manner:

##### i. Threat on biodiversity in the core area significantly reduced

The intended main functions of GGPNP as CBR core area are to preserve biodiversity and sustain ecosystem. To restore these functions, threat to biodiversity must be reduced by closely monitoring the existing biodiversity using a sound monitoring system, enriching biodiversity on poorly managed forest land areas including the lands under monoculture silviculture system and under conflicts with farmers as well as increasing capacity in forest monitoring involving local communities. Results or outcome of the pertinent activities will be used by the GGPNP Authority to improve conservation of biodiversity and ecosystems in the reserve in general, and in the core area in particular. Therefore, use of the biodiversity enrichment model, land conflict resolution model, enhanced squads of forest patrolling and sound monitoring system are expected to improve sustainability of biodiversity.

##### ii. Land use best practices in CBR buffer and transition zones demonstrated and promoted

To achieve this output, the zones must be properly developed in accordance with nature conservation and sustainable development principles. Therefore, suitable development

projects in the buffer and transition zones must be first identified: what sustainable livelihood activities are appropriate to be implemented at what sites. These suitable projects then need to be demonstrated and replicated with the assistance of GGNP Authority and district governments.

The livelihood models developed under the projects are expected to be replicated by local communities and firms. To facilitate this replication process, training on needed skills will be carried out and technical manuals for each project will be produced and disseminated to be used by interested beneficiaries.

**iii. Institutional arrangements for CBR management enhanced**

The functioning of existing Coordination and Communication (CC) Forum will be enhanced through redefining the CC Forum's terms of reference and operational mechanisms. Formation of a CC Forum at the district level is envisaged. At the forum, stakeholders may need frequently to discuss on issues, challenges and opportunities as well as exchange information and experience relating to conservation and socio-economic development.

By delivering the planned project outputs, it is expected that the conservation and sustainable management of biodiversity and ecosystems in CBR will be improving and such improvement shall contribute to restoring the conservation and development functions of CBR.

## **PART 2. PROJECT RATIONALE AND OBJECTIVES**

### **2.1 Rationale**

#### **2.1.1 Institutional setup and organizational issues**

Cibodas Biosphere Reserve (CBR) was designated by UNESCO in 1977 based on the proposal made by the Government of Indonesia (GOI) with the main purpose to promote an inter-disciplinary approach to research, training and communication in ecosystem conservation and rational use of natural resources. The CBR covers conservation area, natural landscape and cultivation area with a total area of about 114,779 hectares in total, comprising 22,851 hectares of core area, 12,700 hectares of buffer zone and 79,228 hectares of transition area.

A number of institutions are involved in CBR management. The Ministry of Environment and Forestry (MOEF) through the Directorate General of Natural Resource and Ecosystem Conservation (KSDAE) is responsible for the management of the core area, i.e. the Gunung Gede Pangrango National Park (GGPNP); the District Governments of Bogor, Cianjur and Sukabumi are responsible for community development in the buffer zone and transition area; the West Java Provincial Government is responsible for supervision of regional development; the National Academy of Sciences (NAS) are responsible for R&D coordination at the national level; and Man and Biosphere Programme of the UNESCO is responsible for guiding and supervising the overall management of the reserve. The immediate problem that arises is that the MOEF does not have a line command relation with the provincial as well as district governments nor with NAS and MAB Programme due to the fact that the provincial and district governments are under the command of the Ministry of Interior (MOI) while NAS and MAB Programme are independent national bodies. Therefore, coordination and communication among the institutions involved in the CBR management are truly a big challenge.

To overcome the coordination and communication problem, the West Java Governor as the "host" of CBR has issued a decree No. 552.51/2010 on the formulation of Coordination and Communication (CC) Forum on Cibodas Biosphere Reserve with the main task to carry out coordination and communication amongst the government authorities and with other CBR stakeholders. The CC Forum is a huge organization as evidenced by the large number of institutions and officers included in the structure of the organization that it has not functioned as expected due mainly to the extremely high operational cost involved in organizing meetings. Therefore, the CC Forum will have to be revisited and its structure modified in order to be able to move effectively in handling coordination and communication issues.

#### **2.1.2 Stakeholder analysis**

A series of stakeholder meeting involving the main stakeholders of CBR has been organized by the project proponent, the GGPNP Authority, during August-September 2014 that culminated on 15 September 2014. The main purpose of these meetings were to exchange information and experience of the participants and to obtain inputs as well as insights from the stakeholders especially as regards the main problem to be addressed by the project, its cause-effect relationship as well as needed interventions and strategy for implementation. It was found during the last meeting that the main stakeholders were supportive of the proposed project in terms of its objectives and design by providing valuable information on CBR current conditions, expressing their interest in CBR development and indicating their potential for involvement in project implementation. Results of the stakeholder analysis are summarized in Table 2.1.

Table 2.1: Summary of stakeholder analysis through consultative meetings

Stakeholder	Characteristics	Problem/need/interest	Potential	Involvement in the project
<u>Primary stakeholders</u>				
i. Local communities				
• Landless farmers	Forest dependents reside in and around National Park	Need lands for livelihood; have traditional skills	Acquire local knowledge	Implementation of selected activities
• Land owners	Do farming practices as they wish; moderate income	Unproductive farming; need improved farming skills	Acquire experience in agriculture	Trainees
• Traders, workers, etc.	Uncertain income; live in buffer zone and transition area	Need source of income; have no specific skills	Workers; traders of agriculture products	Implementation of selected activities or trainees
ii. Local private firms	Run various business relating to tourism and agriculture	Large number of tourists; lack interest in conservation	Able to invest; as entrepreneurs	As partner in livelihood development activities; member of PSC
iii. GGNP Authority	Mandated to manage National Park; has professionals and resources	Degradation of National Park; protect the Park	Leading institution in CBR management	Executing Agency; Secretary of PSC
iv. District governments	Mandated for land use planning; responsible for community development; own professionals	Lack of accurate information on land use practices; biased towards economic development	May alter land use plan; have resources to undertake livelihood projects	Implement activities on buffer zone and transition area; member of PSC
<u>Secondary stakeholders</u>				
i. Provincial government				
	Has the influence on district governments; direct the CBR CC Forum	Lack of funding for CC Forum	Provide support to district government	Member of PSC
ii. Ministry of Environment and Forestry				
	Has the power to direct GGNP Authority	GGNP is sustainable	Budget allocation	Chairman of PSC
iii. Ministry of Interior				
	Has the power to direct district governments	Increased income of local communities	Budget allocation	Member of PSC

Stakeholder	Characteristics	Problem/need/interest	Potential	Involvement in the project
iv. NGOs	Familiar with local conditions; acquire skills for community development	Has no resources	To assist in rural development	Executor of selected activities; member of PSC
<u>Tertiary stakeholders</u>				
i. National Academy of Sciences	Pool of knowledge	Weak coordination with external scientists	Committed to conservation and development	Member of PSC
ii. MAB Programme	Political influence on international communities	Weak communication with CBR	Provides funding supervision	Member of PSC
iii. Universities	Pool of knowledge	Lack of financial resources	Monitoring and evaluation	Member of PSC
iv. Forestry R&D institutions	Pool of knowledge; has professionals	Lack of financial resources	Assessment of progress	Member of PSC

### 2.1.3 Problem analysis

The underlying notion of a biosphere reserve development is to harmonize conservation with sustainable economic development. Application of this concept to Cibodas Biosphere Reserve (CBR) is, therefore, to harmonize conservation of biodiversity with sustainable development by realizing a balanced relation between human and the nature. The concept of biosphere reserve development defines three complementary functions of CBR namely: i) conservation function to preserve genetic resources, species, ecosystems and landscapes, ii) development function to foster sustainable economic and human development, and iii) logistic support function to support demonstration projects, environmental education and training and research and monitoring related to local, national and global issues of conservation and sustainable development.

In order to deliver above defined functions, CBR has been designed to comprise three distinct areas, namely: i) the core area, i.e. the Gunung Gede Pangrango National Park (GGPNP) to be securely protected for conserving biodiversity, monitoring minimally disturbed ecosystems and undertaking non-destructive activities, ii) the buffer zone to be used for cooperative activities compatible with sound ecological practices including environmental education, recreation, ecotourism and research, and iii) the transition area or area of cooperation which may contain a variety of agricultural activities, settlements and other uses in which stakeholders work together to manage and sustainably develop the area's resources.

The consultative meetings of stakeholders found that CBR has not been functioning as intended to be as evidenced by the facts that forest and land degradation are occurring in the core area while utilization of landscapes in the buffer and transition zones is proceeding without due consideration on nature conservation but biased towards immediate economic gains. The consultative meeting, therefore, has defined the key problem to be addressed as *"Inadequate conservation and sustainable management of biodiversity and ecosystems in CBR"*. If this problem remains, the conservation and development functions of CBR core area will be deteriorating over time, which is inconsistent with the intended objectives of biosphere reserve development as defined in the Seville Strategy and Madrid Action Plan.

The direct and indirect causes of the key problem identified by the stakeholder meeting are highlighted below:

- i) Biodiversity in the core area is continuously under threat. This threat is attributable to four major forces:
  - Significant portion of the core area is inappropriately managed for biodiversity conservation
    - ✓ Indeed, significant portion of the core area is particularly poor in biodiversity; about 4,367 hectares or 18.96% of the core area are managed under a monoculture silviculture system, planted with either agathis, eucalypt, pine or coffee only.
    - ✓ The lands under monoculture system are obviously poor in biodiversity.
  - Land use conflicts continue
    - ✓ Approximately 1,222 hectares of land or 5.31% of the core area are occupied by local people and used for planting such cash crops as vegetables, carrot, tomato, etc.
    - ✓ These lands are part of the area previously managed by Perhutani State Company as the production forest under the so called "community participatory forest management (PHBM)" which had been formally included as part of the core area since 2003 thus must function as the conservation area.
  - Illegal forest activities prevail
    - ✓ Some illegal activities by local people like harvesting of NTFPs , e.g. orchids, ornamental species, resin, etc. and hunting of endangered fauna, e.g. wild boars and porcupines, are still taking place as to date which may jeopardize conservation of biodiversity due mainly to weak capacity in forest patrolling.
    - ✓ The fact is that the core area of GGPNP is still an attractive source of income for some local people living surrounding the areas, i.e. in the buffer and transition zones.



- Weak monitoring system of biodiversity and ecosystems
    - ✓ Currently, monitoring of status and conditions of biodiversity and ecosystems is somewhat weak as a sound monitoring system has not been put in place.
- ii) Land use best practices improperly adopted in the buffer and transition zones. This problem is the result of at least four drivers, namely:
- Existing land use plan is loosely implemented
    - ✓ Agriculture practices on sloping lands without land terracing, establishment of settlements and houses on disaster prone areas are not uncommon.
    - ✓ The basic notion is that the buffer and transition zones are to be utilized, to the extent possible, to protect the core area by preventing people from entering it. Therefore, the buffer and transition zones have to be utilized to provide strong incentive for local stakeholders to disregard the core area as a source of income.
    - ✓ The project needs to pilot suitable land use best practices for sustainable livelihood.
  - Lack of sustainable livelihood models
    - ✓ Examples of livelihood activities that are suitable for ecological conditions of the buffer and transition zones are insufficiently developed to promote sustainable development through improved understanding of local stakeholders on the link between conservation and sustainable development.
  - Lack of awareness of local stakeholders on conservation and sustainable development
    - ✓ Extension program on conservation and sustainable development is generally weak.
    - ✓ Communication between the GGNP Authority, district governments and local stakeholders seems to be lacking as to date due mainly to the weak functioning of CC Forum.
  - Local people and firms are not trained on sustainable livelihood skills
    - ✓ The scarcity or absence of sustainable livelihood models does not facilitate conduct of training on needed skills for sustainable livelihood.
- iii) Weak institutional arrangements to support CBR management. This weakness is closely related to three sub-problems:
- Existing CC Forum on CBR ineffectively functioning
    - ✓ The Forum is very costly to operate as it involves too many authorities at different levels of government.
    - ✓ Decision-making process is sluggish to deal with the dynamics of community lives.
  - Weak coordination among authorities in management planning
    - ✓ The management plan of CBR has been inadequately accommodated in district government development plans.
    - ✓ CBR management planning follows the policy of the Ministry of Environment and Forestry while district government planning follows the policy of the Ministry of Interior.
  - Lack of updated information to support decision-making
    - ✓ Authorities are not well informed of actual issues and progress in management operations.
    - ✓ The absence of updated information does not facilitate objective and effective decision-making process.

The cause effect relationship of the main problem addressed is summarized in Figure 1. The relevant and effective intervention should be derived from the Problem Tree by inverting it to become a Solution Tree, as shown in Figure 2, is to be used as the basis for defining the relevant project interventions.

Figure 1. Problem Tree

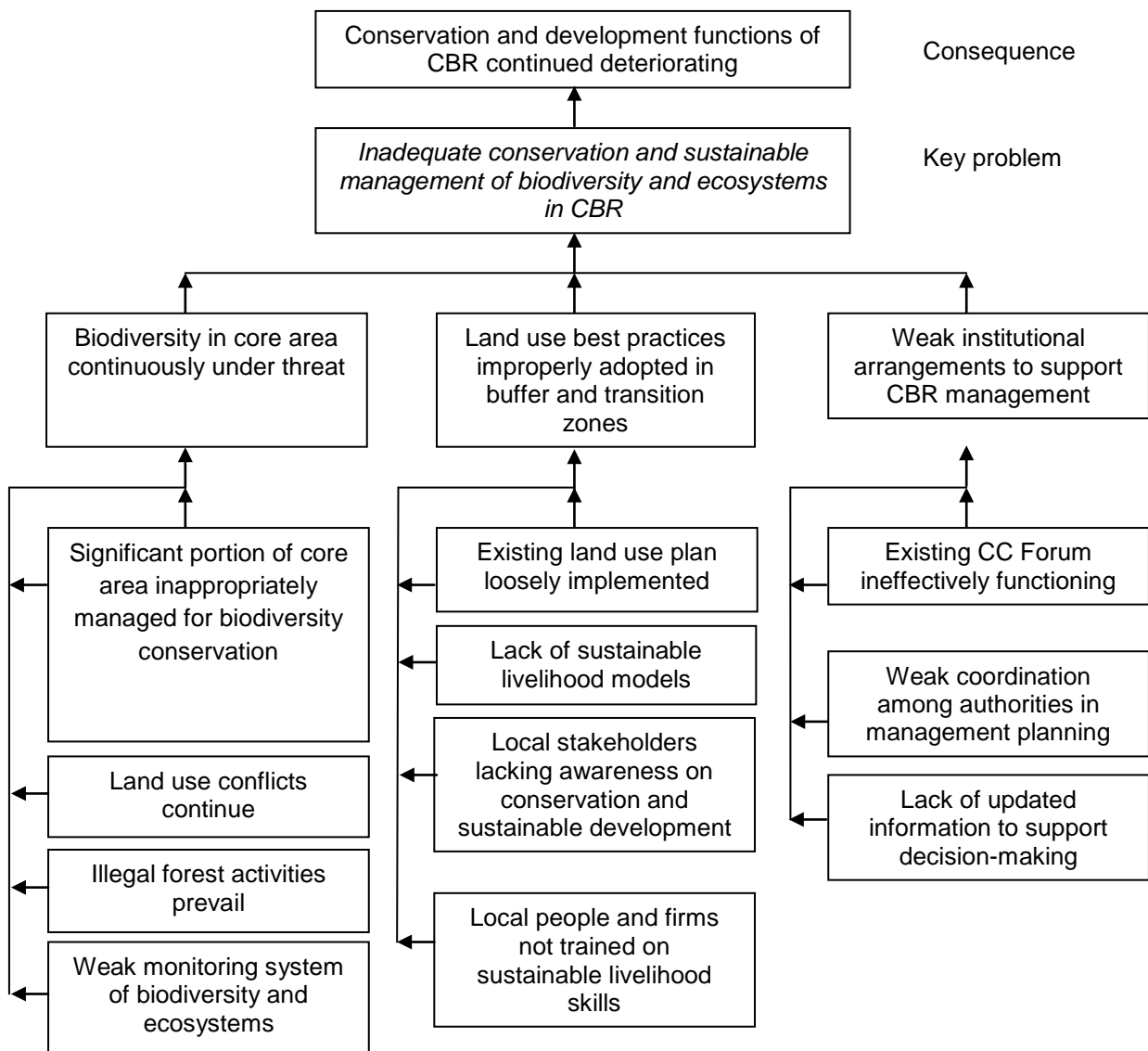
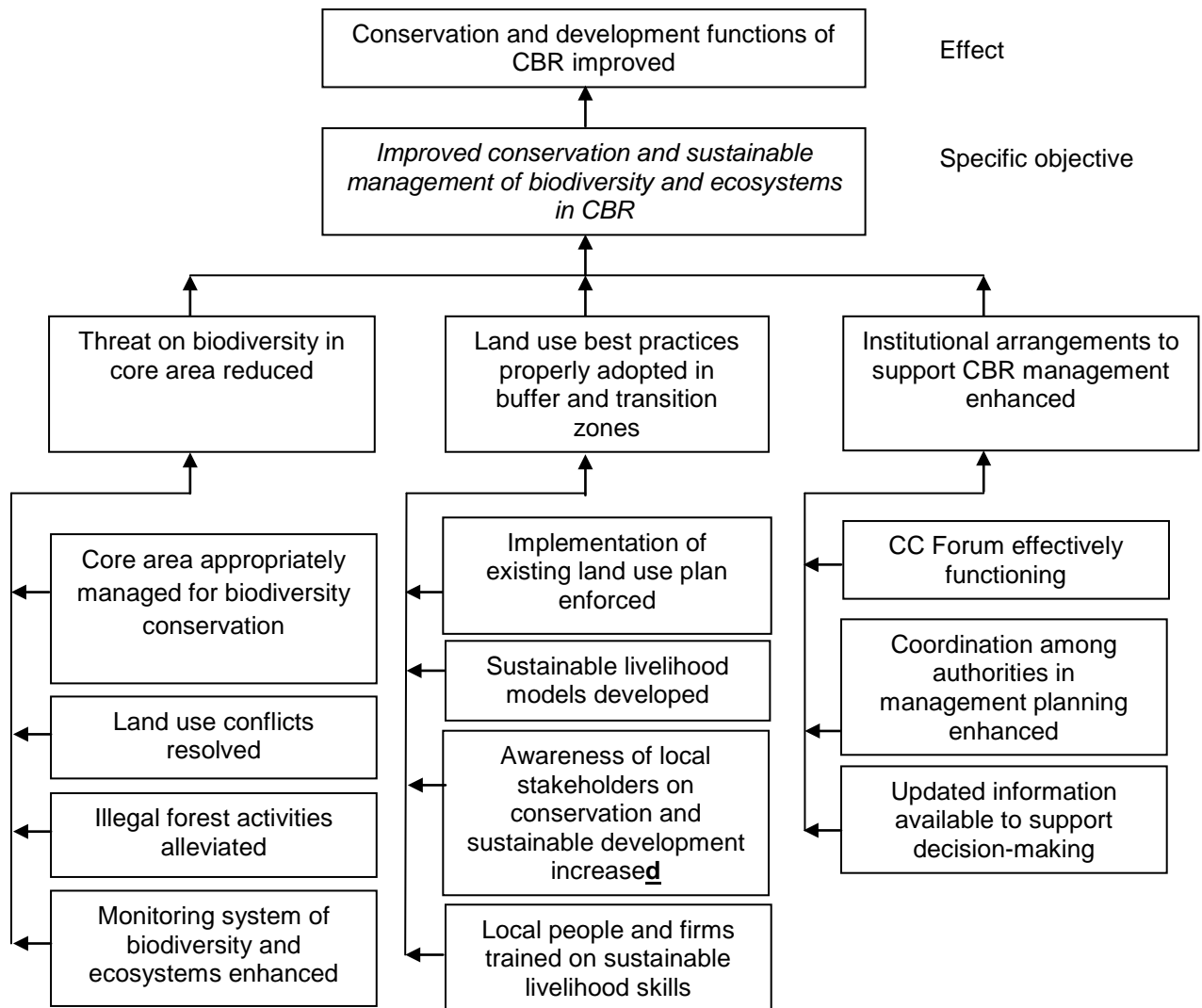


Figure 2. Objective Tree



## 2.1.4 Logical framework matrix

Table 2.2: The logical framework (LFM)

Strategy Intervention	Measurable indicators	Means of verification	Key assumptions
Development objective: To contribute to restoring the conservation and development functions of CBR	4 years after project completion <ul style="list-style-type: none"> <li>- 50% of poorly managed core area biologically enriched</li> <li>- Illegal forest activities in CBR core area abolished</li> <li>- 50% of lands occupied by farmers rehabilitated</li> <li>- Sustainable livelihood models replicated at at least 15 sites in 3 districts</li> </ul>	GGPNP report  GGPNP report  GGPNP report  Field check/GGPNP report	<ul style="list-style-type: none"> <li>• GGPNP Authority and district governments remain committed to CBR conservation and development</li> <li>• Good coordination between MOEF and regional/district governments</li> <li>• Cooperative farmers</li> <li>• Cooperative local communities and firms</li> </ul>
Specific objective: <i>To improve conservation and sustainable management of biodiversity and ecosystems in CBR through implementation of the Integrated Strategic Management Plan</i>	At project completion/end of year 3 <ul style="list-style-type: none"> <li>- 2 biodiversity enrichment models established</li> <li>- 1 land conflict resolution model agreed to by farmers and GGPNP Authority</li> <li>- A sound monitoring system for biodiversity and ecosystems operational</li> <li>- 200 reps of beneficiaries trained on skills for 6 types of sustainable livelihood projects</li> <li>- 3 CC Fora operational in 3 districts</li> </ul>	Consultants report  Consultants report  Consultants report  Training reports  Consultants report	Good coordination between MOEF and regional/district governments  Cooperative farmers  –  –  Supportive district governments
Output 1 Threat on biodiversity in the core area significantly reduced	<ul style="list-style-type: none"> <li>- 2 biodiversity enrichment models on 4 ha of land designed in Year 1 and established since Year 2</li> <li>- A win-win land conflict resolution model identified in</li> </ul>	Consultants' report	–

Strategy Intervention	Measurable indicators	Means of verification	Key assumptions
	<p>Year 1 and applied since Year 2</p> <ul style="list-style-type: none"> <li>- 60 community members trained on skills for monitoring of forest patrol operations</li> <li>- A sound monitoring system for biodiversity and ecosystem developed in Year 1 and applied since Year 2</li> </ul>	<p>Consultants' report</p> <p>Training report</p> <p>Consultants report</p>	<p>Cooperative farmers</p> <p>Cooperative farmers</p> <p>–</p>
<p>Output 2 Land use best practices in CBR buffer and transition zones demonstrated and promoted</p>	<ul style="list-style-type: none"> <li>- Actual land use practices in buffer and transition zones documented and evaluated in Year 1</li> <li>- 6 sustainable livelihood models identified in Year 1 and established in Years 2-3 in 3 districts</li> <li>- 12 dialogues organized at sub-district level in Years 2-3 each involving 3-4 villages</li> <li>- 200 reps of beneficiaries trained on sustainable livelihood skills in Years 2-3</li> </ul>	<p>Consultant's report</p> <p>Field check; Consultant's report</p> <p>Dialogue reports</p> <p>Training reports</p>	<p>Good coordination between MOEF and regional/district governments</p> <p>Cooperative local communities and firms</p> <p>Cooperative local communities</p> <p>Cooperative local communities and firms</p>
<p>Output 3 Institutional arrangements for CBR management enhanced</p>	<ul style="list-style-type: none"> <li>- CC Forum at 3 districts established in Year 1 and operational since Year 2</li> <li>- 3 district workshops on management planning organized in Years 1-3</li> <li>- CBR information system installed in Year 1 and operational since Year 2</li> <li>- Learning of lessons and experience from other reserves conducted in Years 1-3</li> </ul>	<p>Minutes of CC Forum meetings</p> <p>Workshop reports</p> <p>Consultant's report</p> <p>Report on workshop and participation in biosphere reserve events</p>	<p>Supportive province and district governments</p> <p>–</p> <p>–</p>

## **2.2. Objectives**

### **2.2.1 Development objective and impact indicators**

The development objective of the project is to contribute to restoring the conservation and development functions of CBR. The impact indicators are:

4 years after project completion

- 50% of poorly managed core area biologically enriched
- Illegal forest activities in CBR core area abolished
- 50% of lands occupied by farmers rehabilitated
- Sustainable livelihood models replicated at at least 15 sites in 3 districts

### **2.2.2 Specific objective and outcome indicators**

The specific objective of the project is *to improve conservation and sustainable management of biodiversity and ecosystems in CBR through implementation of the Integrated Strategic Management Plan*. The outcome indicators are:

At project completion/end of year 3

- 2 biodiversity enrichment models established
- 1 land conflict resolution model agreed to by farmers and GGNP Authority
- A sound monitoring system for biodiversity and ecosystems operational
- 200 reps of beneficiaries trained on skills for 6 types of sustainable livelihood projects
- CC Fora operational in 3 districts

## **PART 3. DESCRIPTION OF PROJECT INTERVENTIONS**

### **3.1. Outputs and Activities**

#### **3.1.1 Outputs**

Three outputs have been defined correspond to the main causes of the problem addressed by the project as follows:

Output 1 : Threat on biodiversity in the core area significantly reduced

Output 2 : Land use best practices in CBR buffer and transition zones demonstrated and promoted

Output 3 : Institutional arrangements for CBR management enhanced

#### **3.1.2 Activities**

Output 1

Activity 1.1 : To enrich biodiversity on lands managed under monoculture silviculture system through planting of suitable diverse plant and tree species

Activity 1.2 : To resolve land conflicts with farmers by employing a win-win solution and replant the lands with diverse species of plants and trees

Activity 1.3 : To enhance capacity in core area protection by involving local communities in forest patrol operations and providing essential facilities

Activity 1.4 : To put in place a sound monitoring system of biodiversity and ecosystems

Output 2

Activity 2.1 : To review implementation of existing land use plan and provide recommendations for repairing follow up actions

Activity 2.2 : To establish sustainable livelihood models for demonstration and training in collaboration with local communities and private firms

Activity 2.3 : To increase awareness on conservation and sustainable development through intensive dialogues with local stakeholders and dissemination of attractive, easy to read printed materials

Activity 2.4 : To train local people and stakeholders on skills needed to develop sustainable livelihood projects

Output 3

Activity 3.1 : To establish and operate CC Forum at district level

Activity 3.2 : To organize three district workshops on management/development planning

Activity 3.3 : To install and operate a publicly accessible CBR information system

Activity 3.4 : To learn lessons and experience from other biosphere reserves

### **3.2. Implementation approaches and methods**

Experience shows that any unilaterally implemented project proved fail to achieve the planned objectives in an efficient manner. Therefore, the project will be implemented using participatory approach, i.e. planned activities shall be executed, as appropriate, in close consultation, cooperation and collaboration with stakeholders at different levels.

The specific objective of the project is "to implement adequate strategies for conservation and sustainable management of biodiversity and ecosystems in CBR" which will be achieved by delivering three outputs. Under the defined individual outputs, sufficient and the relevant activities have been identified; these activities will be implemented in the following fashion:

#### Output 1

- This output will be delivered through execution of four pertinent activities. Activity 1.1 concerns with enrichment of biodiversity on poorly managed lands, i.e. the lands currently used under a monoculture silviculture system. The project will initiate a restoring process by introducing an appropriate model in collaboration with competent professionals. A

technical manual will be produced to guide GGPNP Authority in carrying out biological restoration on the poorly managed lands after project completion.

- Activity 1.2 deals with land use conflict resolution. Currently, about 1,222 hectares of land or 5.31% of the core area are used by local people involving 2,763 households for planting of cash crops, which is inconsistent with biodiversity conservation. The project will identify a win-win land conflict solution through intensive consultation with the farmers involved. It is believed that biodiversity restoration can be successfully undertaken only on conflict-free landscapes for which a conflict resolution model will be developed. This activity is best to be implemented with the assistance of an experienced local NGO in working with similar issues in West Java. The GGPNP Authority does not have experienced professional staff(s) on social issues thus, it may focus only on supervision of operations. It must be noted, that a large number of farmer households have to be intensively consulted with patience and suitable communication techniques which will consume considerable time and efforts.
- Activity 1.3 concerns with forest patrolling. As to date, illegal activities are still going on in the core area which include harvest of NTFPs and illegal logging. Therefore, there is a need to enhance capacity in forest patrolling by involving local communities in the activity for which recruitment and training on needed skills are required. This activity also includes provision of basic facilities such as handy talkies and motor cycles.
- Activity 1.4 deals with monitoring of biodiversity of flora and fauna focusing on endangered species and unique ecosystems in the core area. A user friendly and scientifically sound monitoring system as well as monitoring plan will be developed and made operational in collaboration with the National Academy of Sciences (NAS).

#### Output 2

- To realize this output, four pertinent activities have to be implemented. Activity 2.1 deals with documentation of existing land use practices. Results of this work will be used as the basis for taking the necessary actions to repair irregularities of land use practices.
- Under activity 2.2, the most promising livelihood projects will be identified and demonstrated. Three areas of livelihood will be demonstrated:
  - ✓ Ecotourism: village-based or firm-based
  - ✓ Garbage utilization for different handicraft products depending on local conditions
  - ✓ Ecofarming for production of fruits, vegetables, fertilizers or livestock.

Two project under each business area will be developed in each district; that is, 6 livelihood projects will be developed in collaboration with local communities or firms for purposes of demonstration and training. Operation of these projects will be closely monitored by the GGPNP Authority and host district government and results disseminated through the information system or website yet to be installed.

This activity is best to be implemented with the assistance of a eco-friendly business consulting firm (BCF) in the form of sub-contract for at least two reasons: i) to ensure sound profitability and sustainability aspects of the projects and ii) the EA has no competence to properly undertake such ventures thus better to focus on monitoring of implementation processes. *Involvement of women in this activity will be given priority.*

- Activity 2.3 deals with awareness raising on nature conservation which has been initiated under the previous project. Under this proposed project, dialogues with local communities will be continued in the three districts. There now exist 59 villages in the buffer zone and 78 villages in transition area. The project will not be able to directly reach all these villages therefore only 12 dialogues will be organized at sub-district level, each involving 3-4 villages. An experienced senior staff(s) of GGPNP will be assigned temporarily to implement the activity. *Participation of women in the dialogues must be strongly encouraged by the project.*
- Activity 2.4 concerns with training on skills for livelihood activities. The primary target is community leaders and women, *especially wives*, as well as private firms in the three districts. Experience from the previous project indicates that it is best to focus on those three groups of stakeholders for an effective technology transfer. This activity is best to



be implemented with the assistance of BCF having experience in conducting training on different livelihood projects. In addition, the Park Authority has insufficient experience in carrying out such activity.

### Output 3

- Activity 3.1 is an attempt to make existing CBR CC Forum functions well. Experience from the previous project shows that existing CBR CC Forum is very difficult and costly to operate. It is thought timely to evaluate the functioning of the existing CBR CC Forum and introduce its modified format. To form an operational forum at the district level is one of the options strongly considered.
- Activity 3.2 deals with management planning problem. Coordination problem between some ministries is not uncommon. The GGPNP is a subordinate of MOEF responsible for managing the national parks and the CBR that, in many instances, may place less priority to livelihood. The district governments on the other hand are subordinates of MOI responsible for promoting community development that, in many instances, pay less attention to conservation. This coordination problem could be minimized through coordinated planning process and shared real time information.
- Activity 3.3 is meant to developed a supporting system for decision-making by providing real time accessible data to GGPNP Authority and district government authorities as well as other stakeholders. The website developed will also serve as a tool for documenting and disseminating all information on CBR including lessons learned and experiences. The activity is an effective strategy for developing a CBR conservation knowledge center.
- Activity 3.4 will take the forms of international workshop on CBR and participation of CBR decision-makers in world biosphere reserve events. *Today, the World Biosphere Reserve System comprises 377 reserves in 120 countries and CBR is member of the System. Organization of an international workshop on CBR and participation of decision makers in world biosphere reserve events will facilitate effective exchanging of information and learning of experience as regards biosphere reserve sustainable management of biodiversity and ecosystems.*

### 3.3. Workplan

Table 3.1: Workplan for the entire project duration

Output/Activity	Responsible party	Year 1				Year 2				Year 3			
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Output 1 Activity 1.1 : To enrich biodiversity on lands managed under monoculture silviculture system through planting of suitable diverse plant and tree species	PC, NC	X	X	X	X	X	X	X	X	X	X	X	X
Activity 1.2 : To resolve land conflicts with farmers by employing a win-win solution and replant the lands with diverse species of plants and trees	PC, NGO	X	X	X	X	X	X	X	X	X	X	X	X
Activity 1.3 : To enhance capacity in core area protection by involving local communities in forest patrol operations and providing essential facilities	PC, PA			X	X			X	X				
Activity 1.4 : To put in place a sound monitoring system of biodiversity and ecosystems	PC, NC, PA	X	X	X	X	X	X	X	X	X	X	X	X
Output 2 Activity 2.1 : To review implementation of existing land use plan and provide recommendations for repairing follow up actions	PC, NC, DGo	X	X	X	X								
Activity 2.2 : To establish sustainable livelihood models for demonstration and training in collaboration with local communities and private firms	PC, BCF, CL, BF			X	X	X	X	X	X	X	X		
Activity 2.3 : To increase awareness on conservation and sustainable development through intensive dialogues with local stakeholders and dissemination of attractive, easy to read printed materials	PC, NE, DGo,					X	X	X	X	X	X		
Activity 2.4 : To train local people and stakeholders on skills needed to develop sustainable livelihood projects	PC, BCF, CL, BF					X	X	X	X	X	X		
Output 3 Activity 3.1 : To establish and operate CC Forum at the district level	PC, NE, DGo	X	X	X	X	X	X	X	X	X	X	X	X
Activity 3.2 : To organize three district workshops on management/development planning	PC, NE, DGo	X	X			X	X			X	X		
Activity 3.3 : To install and operate a publicly accessible CBR information system	PC, NC			X	X	X	X	X	X	X	X	X	X
Activity 3.4 : To learn lessons and experience from other biosphere reserves	PC, EA			X	X			X	X				

**3.4 Budget**  
**3.4.1 Master budget schedule**

Output/Activity	Timing	Budget Component	Inputs	Unit	Quantity						Unit Cost	ITTO Contribution				Gol Contribution				Grand Total						
					ITTO			GOI				Total	Year 1	Year 2	Year 3	Total	Year 1	Year 2	Year 3		Total					
					Year 1	Year 2	Year 3	Year 1	Year 2	Year 3																
1	2	3	4	5	6	7	8	9	10	11		12	13	14	15	16	17	18	19	20	21					
Activity 1.1 : To enrich biodiversity on lands managed under monoculture silviculture system through planting of suitable diverse plant and tree species	Q1 - Q4, Y1	15	a	National Expert	MM	-	-	-	2	2	2	6	600	-	-	-	-	-	-	-	-	-	-	3.600	3.600	
	Q1 - Q4, Y2	31.2	b	DSA, NE	MD	30	15	15	-	-	-	60	80	2.400	1.200	1.200	4.800	-	-	-	-	-	-	4.800	4.800	
	Q1 - Q4, Y3	33	c	Local transport	TD	-	-	-	15	15	15	45	60	-	-	-	-	-	900	900	900	2.700	2.700	2.700	2.700	
		65	d	2 Demoplots	Ha	4	-	-	2	-	-	6	1.500	6.000	-	-	-	6.000	3.000	-	-	-	3.000	9.000	9.000	
		64.1	e	Technical Meeting	Meeting	-	-	-	1	1	1	3	500	-	-	-	-	-	500	500	500	1.500	1.500	1.500	1.500	
		63.2	f	Publication, manual	Copy	-	-	100	-	-	-	100	15	-	-	-	1.500	1.500	-	-	-	-	-	-	1.500	1.500
<b>Sub total</b>														<b>8.400</b>	<b>1.200</b>	<b>2.700</b>	<b>12.300</b>	<b>5.600</b>	<b>2.600</b>	<b>2.600</b>	<b>10.800</b>	<b>23.100</b>	<b>23.100</b>	<b>23.100</b>		
Activity 1.2 : To resolve land conflicts with farmers by employing a win-win solution and replant the lands with diverse species of plants and trees	Q1 - Q4, Y1	21	a	Sub-contract 1:	contract	0,7		0,3	-	-	1	12.000	8.400	-	-	-	8.400	3.600	-	-	-	-	-	3.600	12.000	
	Q1 - Q4, Y2	64.1	b	Technical meetings	Meeting	1	1	1	1	1	1	6	500	500	500	500	1.500	500	500	500	1.500	1.500	3.000	3.000	3.000	
	Q1 - Q4, Y3	65	c	2 Demoplots land rehabilitation	Ha			3		2		5	1.500	-	4.500	-	4.500	-	3.000	-	-	-	3.000	7.500	7.500	
		63.3	d	Publication, manual	copy			200				200	15	-	-	3.000	3.000	-	-	-	-	-	-	-	3.000	3.000
<b>Sub total</b>													<b>8.900</b>	<b>5.000</b>	<b>3.500</b>	<b>17.400</b>	<b>4.100</b>	<b>3.500</b>	<b>500</b>	<b>8.100</b>	<b>25.500</b>	<b>25.500</b>	<b>25.500</b>	<b>25.500</b>		
Activity 1.3 : To enhance capacity in core area protection by involving local communities in forest patrol operations and providing essential facilities	Q3 - Q4, Y1	66	a	2 Trainings, @ 20	MD	60	120	-	-	-	180	30	1.800	3.600	-	5.400	-	-	-	-	-	-	-	5.400	5.400	
	Q1 - Q4, Y2	16	b	Trainers	MD	10	10	-	-	-	-	20	125	1.250	1.250	-	2.500	-	-	-	-	-	-	-	2.500	2.500
		64.1	c	Technical Meetings	Meeting	1	1	-	1	1	-	4	500	500	500	-	1.000	500	500	-	1.000	-	1.000	2.000	2.000	
	44	d	Purchase 6 motor cycles	Unit	2	2	-	1	1	-	6	2.000	4.000	4.000	-	8.000	2.000	2.000	-	4.000	-	4.000	12.000	12.000		
<b>Sub total</b>													<b>7.550</b>	<b>9.350</b>	<b>-</b>	<b>16.900</b>	<b>2.500</b>	<b>2.500</b>	<b>-</b>	<b>5.000</b>	<b>21.900</b>	<b>21.900</b>	<b>21.900</b>	<b>21.900</b>		
Activity 1.4 : To put in place a sound monitoring system of biodiversity and ecosystems	Q1 - Q4, Y1	14	a	National Consultant	MM	3	1	1	-	-	-	5	2.500	7.500	2.500	2.500	12.500	-	-	-	-	-	-	12.500	12.500	
	Q1 - Q4, Y2	31.2	b	DSA, NC	MD	10	10	10	-	-	-	30	80	800	800	800	2.400	-	-	-	-	-	-	2.400	2.400	
	Q1 - Q4, Y3	67	c	Monitoring equipment	Package	1	-	-	-	-	-	1	15.001	15.001	-	-	15.001	-	-	-	-	-	-	15.001	15.001	
		33	d	local transport	TD	-	-	-	10	10	10	30	60	-	-	-	-	-	600	600	600	1.800	1.800	1.800	1.800	
		64.1	e	Technical meetings	Meeting	1	1	1	1	1	1	6	500	500	500	500	1.500	500	500	500	1.500	1.500	1.500	3.000	3.000	
		63.3	f	Publication, manual	copy	100	-	-	-	-	-	100	20	2.000	-	-	2.000	-	-	-	-	-	-	-	2.000	2.000
<b>Sub total</b>													<b>25.801</b>	<b>3.800</b>	<b>3.800</b>	<b>33.401</b>	<b>1.100</b>	<b>1.100</b>	<b>1.100</b>	<b>3.300</b>	<b>36.701</b>	<b>36.701</b>	<b>36.701</b>	<b>36.701</b>		
<b>Total Output1</b>													<b>50.651</b>	<b>19.350</b>	<b>10.000</b>	<b>80.001</b>	<b>13.300</b>	<b>9.700</b>	<b>4.200</b>	<b>27.200</b>	<b>107.201</b>	<b>107.201</b>	<b>107.201</b>	<b>107.201</b>		

Activity 2.1 : To review implementation of existing land use plan and provide recommendations for repairing follow up actions	Q1 - Q4, Y1	14	a	National Consultant	MM	4	-	-	-	-	4	2.500	10.000	-	-	10.000	-	-	-	-	10.000	
		31.2	b	DSA National Consultant	MD	30	-	-	-	-	30	80	2.400	-	-	2.400	-	-	-	-	2.400	
		64.1	c	Technical Meetings	Meeting	2	-	-	1	-	-	3	756	1.512	-	-	1.512	756	-	-	756	2.268
		33	d	Local transport	Trip	10	-	-	-	-	-	10	60	600	-	-	600	-	-	-	-	600
<b>Sub total</b>													<b>14.512</b>	<b>-</b>	<b>-</b>	<b>14.512</b>	<b>756</b>	<b>-</b>	<b>-</b>	<b>756</b>	<b>15.268</b>	
Activity 2.2 : To establish sustainable livelihood models for demonstration and training in collaboration with local communities and private firms	Q3 - Q4, Y1	23	a	Sub-contract 2: to	Model	1	2	3	-	-	6	8.000	8.000	16.000	24.000	48.000	-	-	-	-	48.000	
	Q1 - Q4, Y2	64.1	b	Technical meetings	Meeting	1	1	1	2	2	2	9	750	750	750	750	2.250	1.500	1.500	1.500	4.500	6.750
	Q1 - Q2, Y3																					
<b>Sub total</b>													<b>8.750</b>	<b>16.750</b>	<b>24.750</b>	<b>50.250</b>	<b>1.500</b>	<b>1.500</b>	<b>1.500</b>	<b>4.500</b>	<b>54.750</b>	
Activity 2.3 : To increase awareness on conservation and sustainable development through intensive dialogues with local stakeholders and dissemination of attractive, easy to read printed materials	Q1 - Q4, Y2	15	a	National experts, salary	MM	-	-	-	2	2	2	6	600	-	-	-	-	1.200	1.200	1.200	3.600	3.600
		64.4	b	12 Dialogues with local community at 36 villages	session	3	6	3	-	-	-	12	900	2.700	5.400	2.700	10.800	-	-	-	-	10.800
	Q1 - Q2, Y3	31.3	c	DSA, NE	MD	9	18	9	-	-	-	36	80	720	1.440	720	2.880	-	-	-	-	2.880
		64.1	d	Technical meetings	Meeting	1	1	1	1	1	1	6	750	750	750	750	2.250	750	750	750	2.250	4.500
		33	e	local transport	TD	-	-	-	9	18	9	36	60	-	-	-	-	540	1.080	540	2.160	2.160
		63.4	f	Publications	Copy	-	500	500	-	500	500	2.000	5	-	2.500	2.500	5.000	-	2.500	2.500	5.000	10.000
<b>Sub total</b>													<b>4.170</b>	<b>10.090</b>	<b>6.670</b>	<b>20.930</b>	<b>2.490</b>	<b>5.530</b>	<b>4.990</b>	<b>13.010</b>	<b>33.940</b>	
Activity 2.4 : To train local people and stakeholders on skills needed to develop sustainable livelihood projects	Q1 - Q4, Y2	24	a	Sub contract 3: To	Session	-	3	3	-	-	-	6	8.000	-	24.000	24.000	48.000	-	-	-	-	48.000
	Q1 - Q2, Y3	64.1	b	Technical meetings	Meeting	-	1	1	-	2	2	6	750	-	750	750	1.500	-	1.500	1.500	3.000	4.500
<b>Sub total</b>													<b>-</b>	<b>24.750</b>	<b>24.750</b>	<b>49.500</b>	<b>-</b>	<b>1.500</b>	<b>1.500</b>	<b>3.000</b>	<b>52.500</b>	
<b>Total Output 2</b>													<b>27.432</b>	<b>51.590</b>	<b>56.170</b>	<b>135.192</b>	<b>4.746</b>	<b>8.530</b>	<b>7.990</b>	<b>21.266</b>	<b>156.458</b>	

Activity 3.1 : To establish and operate CC Forum at the district level	Q1 - Q4, Y1	15	a	National Experts	MM	-	-	-	2	2	2	6	600	-	-	-	-	1.200	1.200	1.200	3.600	3.600
	Q1 - Q4, Y2	64.2	b	Coordination meetings	Meeting	2	-	-	-	1	1	4	1.000	2.000	-	-	2.000	-	1.000	1.000	2.000	4.000
	Q1 - Q4, Y3	31.3	c	DSA, National Experts	MD	10	10	10	-	-	-	30	80	800	800	800	2.400	-	-	-	-	2.400
		63.4	d	Publication	Copy	150	-	-	-	-	-	150	15	2.250	-	-	2.250	-	-	-	-	2.250
		33	e	Local transport	TD	-	-	-	10	10	10	30	60	-	-	-	-	600	600	600	1.800	1.800
<b>Sub total</b>													<b>5.050</b>	<b>800</b>	<b>800</b>	<b>6.650</b>	<b>1.800</b>	<b>2.800</b>	<b>2.800</b>	<b>7.400</b>	<b>14.050</b>	
Activity 3.2 : To organize three district workshops on management/development planning	Q1 - Q2, Y1	15	a	National Expert, salary	MM	-	-	-	2	2	2	6	600	-	-	-	-	1.200	1.200	1.200	3.600	3.600
	Q1 - Q2, Y2	31.2	b	DSA, National Expert	MD	10	10	10	-	-	-	30	80	800	800	800	2.400	-	-	-	-	2.400
	Q1 - Q2, Y3	33	c	Local transport	TD	-	-	-	10	10	10	30	60	-	-	-	-	600	600	600	1.800	1.800
		64.1	d	Technical meetings	Meeting	1	1	1	-	-	-	3	500	500	500	500	1.500	-	-	-	-	1.500
		64.3	e	Workshop 3 training @ 15 persons	Meeting	1	1	1	-	-	-	3	1.500	1.500	1.500	1.500	4.500	-	-	-	-	4.500
		63.4	f	Publication, Manuals	Copy	-	-	100	-	-	-	100	15	-	-	1.500	1.500	-	-	-	-	1.500
<b>Sub total</b>													<b>2.800</b>	<b>2.800</b>	<b>4.300</b>	<b>9.900</b>	<b>1.800</b>	<b>1.800</b>	<b>1.800</b>	<b>5.400</b>	<b>15.300</b>	
Activity 3.3 : To install and operate a publicly accessible CBR information system	Q3 - Q4, Y1	14	a	National Consultant	MM	1	1	1	-	-	-	3	2.500	2.500	2.500	2.500	7.500	-	-	-	-	7.500
	Q1 - Q4, Y2	31.2	b	DSA, NC	MD	5	5	5	-	-	-	15	80	400	400	400	1.200	-	-	-	-	1.200
	Q1 - Q4, Y3	33	c	Local transport	TD	-	-	-	5	5	5	15	60	-	-	-	-	300	300	300	900	900
		45	d	Equipment	unit	1	1	-	-	-	-	2	6.000	6.000	6.000	-	12.000	-	-	-	-	12.000
		64.1	e	Technical meetings	Meeting	-	-	-	1	1	1	3	300	-	-	-	-	300	300	300	900	900
		63.4	f	Publication	Copy	150	-	-	-	-	-	150	17	2.475	-	-	2.475	-	-	-	-	2.475
<b>Sub total</b>													<b>11.375</b>	<b>8.900</b>	<b>2.900</b>	<b>23.175</b>	<b>600</b>	<b>600</b>	<b>600</b>	<b>1.800</b>	<b>24.975</b>	
Activity 3.4: To learn lessons and experience from other biosphere reserves	Q3 - Q4, Y1	68	a	International Workshop on CBR	Package	-	-	0,7	-	-	0,3	1	30.000	-	-	21.000	21.000	-	-	9.000	9.000	30.000
	Q3 - Q4, Y2	69	b	International Event	Trip	1	1	-	-	-	-	2	5.000	5.000	5.000	-	10.000	-	-	-	-	10.000
	Q3 - Q4, Y3					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
<b>Sub total</b>													<b>5.000</b>	<b>5.000</b>	<b>21.000</b>	<b>31.000</b>	<b>-</b>	<b>-</b>	<b>9.000</b>	<b>9.000</b>	<b>40.000</b>	
<b>Total Output 3</b>													<b>24.225</b>	<b>17.500</b>	<b>29.000</b>	<b>70.725</b>	<b>4.200</b>	<b>5.200</b>	<b>14.200</b>	<b>23.600</b>	<b>94.325</b>	
<b>Total Project</b>													<b>102.308</b>	<b>88.440</b>	<b>95.170</b>	<b>285.918</b>	<b>22.246</b>	<b>23.430</b>	<b>26.390</b>	<b>72.066</b>	<b>357.984</b>	

<b>Non Based Activities</b>																					
			<b>Key Personal</b>																		
	11		Project Coordinator	MM	12	12	12			36	2,200	26,400	26,400	26,400	79,200	-	-	-	-	79,200	
	12		Project Treasurer	MM	12	12	12			36	500	6,000	6,000	6,000	18,000	-	-	-	-	18,000	
	13		Project Secretary	MM	12	12	12	12	12	72	500	6,000	6,000	6,000	18,000	6,000	6,000	6,000	18,000	36,000	
			<b>Office</b>																		
	51		Space 40 M2	Month	-	-	-	12	12	36	500	-	-	-	-	6,000	6,000	6,000	18,000	18,000	
	52		Facilities	Set	-	-	-	1		1	5,000	-	-	-	-	5,000	-	-	5,000	5,000	
	53		Consumable	Month	-	-	-	12	12	36	250	-	-	-	-	3,000	3,000	3,000	9,000	9,000	
			<b>Office Equipment</b>																		
	41		Personal Computer	Set	1	-	-	1		2	800	800	-	-	800	800	-	-	800	1,600	
			<b>Duty Travel</b>																		
	32		Air tickets	Trip	3	3	3			9	200	600	600	600	1,800	-	-	-	-	1,800	
	31.1		DSA, 12 trip @ 2 days	MD	12	12	12			36	80	960	960	960	2,880	-	-	-	-	2,880	
	33		local transport	TD	-	-	-	12	12	36	60	-	-	-	-	720	720	720	2,160	2,160	
			<b>Miscellaneous</b>																		
	61		PSC Meeting	Meeting	1	1	-		2	4	1,500	1,500	1,500	-	3,000	-	-	3,000	3,000	6,000	
	62		Financial Auditing	Year	1	1	1			3	1,750	1,750	1,750	1,750	5,250	-	-	-	-	5,250	
	63.1		Publication, 4 reports @ 100 copies	Copy	-	200	200			400	20	-	4,000	4,000	8,000	-	-	-	-	8,000	
	54		sundries	Year	1	1	1			3	1,500	1,500	1,500	1,500	4,500	-	-	-	-	4,500	
<b>Total Non-activity based</b>											<b>45,510</b>	<b>48,710</b>	<b>47,210</b>	<b>141,430</b>	<b>21,520</b>	<b>15,720</b>	<b>18,720</b>	<b>55,960</b>	<b>197,390</b>		
<b>Grand Total Project Costs</b>											<b>147,818</b>	<b>137,150</b>	<b>142,380</b>	<b>427,348</b>	<b>43,766</b>	<b>39,150</b>	<b>45,110</b>	<b>128,026</b>	<b>555,374</b>		
ITTO Monitoring and Review																				18,000	18,000
ITTO Ex-post Evaluation																				15,000	15,000
ITTO Programme Support																				55,242	55,242
National Management Cost																					
											<b>-</b>	<b>515,590</b>	<b>128,026</b>	<b>643,616</b>							

**Notes:**

Y1 = Year 1; Y2 = Year 2; Y3 = Year 3.

### 3.4.2 Yearly consolidated budget

Category	Description	Total	Year 1	Year 2	Year 3
<b>10</b>	<b>Personnel</b>				
11	Project Coordinator	79.200,00	26.400,00	26.400,00	26.400,00
12	Project Treasurer	18.000,00	6.000,00	6.000,00	6.000,00
13	Project Secretary	36.000,00	12.000,00	12.000,00	12.000,00
14	National Consultants	30.000,00	20.000,00	5.000,00	5.000,00
15	National Experts	14.400,00	4.800,00	4.800,00	4.800,00
16	Trainer	2.500,00	1.250,00	1.250,00	-
<b>19</b>	<b>Sub total</b>	<b>180.100,00</b>	<b>70.450,00</b>	<b>55.450,00</b>	<b>54.200,00</b>
<b>20</b>	<b>Sub contracts</b>				
21	Sub contract No. 1 NGO (Land use conflict	12.000,00	12.000,00	-	-
22	Sub contract No. 2: Bussiness Consulting Firm a	48.000,00	8.000,00	16.000,00	24.000,00
24	Sub contract No. 3: Bussiness Consulting Firm b	48.000,00	-	24.000,00	24.000,00
<b>29</b>	<b>Sub total</b>	<b>108.000,00</b>	<b>20.000,00</b>	<b>40.000,00</b>	<b>48.000,00</b>
<b>30</b>	<b>Duty Travel</b>				
31	Daily Subsistance Allowance				
	31.1. DSA Project Management Unit	2.880,00	960,00	960,00	960,00
	31.2. DSA National Consultant	10.800,00	6.000,00	2.400,00	2.400,00
	31.3. DSA National expert	7.680,00	2.320,00	3.040,00	2.320,00
32	Air ticket				
	32.1. Air Ticket	1.800,00	600,00	600,00	600,00
33	Local Transport	13.920,00	4.860,00	4.800,00	4.260,00
<b>39</b>	<b>Sub total</b>	<b>37.080,00</b>	<b>14.740,00</b>	<b>11.800,00</b>	<b>10.540,00</b>
<b>40</b>	<b>Capital Items</b>				
41	Personal Computer	1.600,00	1.600,00	-	-
42	Handy Talkies	-	-	-	-
43	Repeater	-	-	-	-
44	Motor cycles (6 units)	12.000,00	6.000,00	6.000,00	-
45	Equipment	12.000,00	6.000,00	6.000,00	-
<b>49</b>	<b>Sub total</b>	<b>25.600,00</b>	<b>13.600,00</b>	<b>12.000,00</b>	<b>-</b>
<b>50</b>	<b>Consumables items</b>				
51	Space 40 M2	18.000,00	6.000,00	6.000,00	6.000,00
52	Facilities	5.000,00	5.000,00	-	-
53	Consumables	9.000,00	3.000,00	3.000,00	3.000,00
54	Sundries	4.500,00	1.500,00	1.500,00	1.500,00
<b>59</b>	<b>Sub total</b>	<b>36.500,00</b>	<b>15.500,00</b>	<b>10.500,00</b>	<b>10.500,00</b>

60	Miscellaneous				
61	PSC meetings	6.000,00	1.500,00	1.500,00	3.000,00
62	Financial Audit	5.250,00	1.750,00	1.750,00	1.750,00
63	Publication				
	63.1. 5 Report @100 copies	8.000,00	-	4.000,00	4.000,00
	63.2. Technical Manual	3.000,00	-	-	3.000,00
	63.3. SOP	3.000,00	-	-	3.000,00
	63.4. Publicaton	18.225,00	6.725,00	5.000,00	6.500,00
64	Meeting				
	64.1. Technical Meeting	28.418,00	10.318,00	10.300,00	7.800,00
	64.2. Coordinating Meeting	4.000,00	2.000,00	1.000,00	1.000,00
	64.3. Workshop	4.500,00	1.500,00	1.500,00	1.500,00
	64.4. Dialogue with local community	10.800,00	2.700,00	5.400,00	2.700,00
65	Demoplot	16.500,00	9.000,00	7.500,00	-
66	Training	5.400,00	1.800,00	3.600,00	-
67	Monitoring and Tool	15.001,00	15.001,00	-	-
68	International Workshop on CBR	30.000,00	-	-	30.000,00
69	International Event	10.000,00	5.000,00	5.000,00	-
69	<b>Sub total</b>	<b>168.094,00</b>	<b>57.294,00</b>	<b>46.550,00</b>	<b>64.250,00</b>
70	<b>Total Project</b>	<b>555.374,00</b>	<b>191.584,00</b>	<b>176.300,00</b>	<b>187.490,00</b>
80	National management cost	-	(See executing agency budget)		
90	Project monitoring and administration				
91	ITTO monitoring & review	18.000,00			
92	ITTO ex-post evaluation	15.000,00			
95	ITTO Programme support (70 + 91 +92) x 12%	55.241,76			
100	<b>Total Project Monitoring and Administration</b>	<b>88.241,76</b>			
	<b>GRAND TOTAL (70 + 100)</b>	<b>643.615,76</b>			



### 3.4.3 ITTO yearly budget

Category	Description	Total	Year 1	Year 2	Year 3
<b>10</b>	<b>Personnel</b>				
11	Project Coordinator	79.200,00	26.400,00	26.400,00	26.400,00
12	Project Treasurer	18.000,00	6.000,00	6.000,00	6.000,00
13	Project Secretary	18.000,00	6.000,00	6.000,00	6.000,00
14	National Consultants	30.000,00	20.000,00	5.000,00	5.000,00
15	National Experts	-	-	-	-
16	Trainer	2.500,00	1.250,00	1.250,00	-
<b>19</b>	<b>Sub total</b>	<b>147.700,00</b>	<b>59.650,00</b>	<b>44.650,00</b>	<b>43.400,00</b>
<b>20</b>	<b>Sub contracts</b>				
21	Sub contract No. 1 NGO (Land use conflict	8.400,00	8.400,00	-	-
22	Sub contract No. 2: Bussiness Consultant	48.000,00	8.000,00	16.000,00	24.000,00
24	Sub contract No. 3: Bussiness Consultant	48.000,00	-	24.000,00	24.000,00
<b>29</b>	<b>Sub total</b>	<b>104.400,00</b>	<b>16.400,00</b>	<b>40.000,00</b>	<b>48.000,00</b>
<b>30</b>	<b>Duty Travel</b>				
31	Daily Subsistance Allowance				
	31.1. DSA Project Management Unit	2.880,00	960,00	960,00	960,00
	31.2. DSA National Consultant	6.000,00	3.600,00	1.200,00	1.200,00
	31.3. DSA National expert	12.480,00	4.720,00	4.240,00	3.520,00
32	Air ticket				
	32.1. Air Ticket	1.800,00	600,00	600,00	600,00
33	Local Transport	600,00	600,00	-	-
<b>39</b>	<b>Sub total</b>	<b>23.760,00</b>	<b>10.480,00</b>	<b>7.000,00</b>	<b>6.280,00</b>
<b>40</b>	<b>Capital Items</b>				
41	Personal Computer	800,00	800,00	-	-
42	Handy Talkies	-	-	-	-
43	Repeater	-	-	-	-
44	Motor cycles (6 units)	8.000,00	4.000,00	4.000,00	-
45	Equipment	12.000,00	6.000,00	6.000,00	-
<b>49</b>	<b>Sub total</b>	<b>20.800,00</b>	<b>10.800,00</b>	<b>10.000,00</b>	<b>-</b>
<b>50</b>	<b>Consumables items</b>				
54	Sundries	4.500,00	1.500,00	1.500,00	1.500,00
<b>59</b>	<b>Sub total</b>	<b>4.500,00</b>	<b>1.500,00</b>	<b>1.500,00</b>	<b>1.500,00</b>

60	Miscellaneous				
61	PSC meetings	3.000,00	1.500,00	1.500,00	-
62	Financial Audit	5.250,00	1.750,00	1.750,00	1.750,00
63	Publication				
	63.1. 5 Report @100 copies	8.000,00	-	4.000,00	4.000,00
	63.2. Technical Manual	1.500,00	-	-	1.500,00
	63.3. SOP	3.000,00	-	-	3.000,00
	63.4. Publicaton	13.225,00	6.725,00	2.500,00	4.000,00
64	Meeting				
	64.1. Technical Meeting	13.012,00	5.012,00	4.250,00	3.750,00
	64.2. Coordinating Meeting	2.000,00	2.000,00	-	-
	64.3. Workshop	4.500,00	1.500,00	1.500,00	1.500,00
	64.4. Dialogue with local community	10.800,00	2.700,00	5.400,00	2.700,00
65	Demoplot	10.500,00	6.000,00	4.500,00	-
66	Training	5.400,00	1.800,00	3.600,00	-
67	Monitoring and Tool	15.001,00	15.001,00	-	-
68	International Workshop on CBR	21.000,00	-	-	21.000,00
69	International Event	10.000,00	5.000,00	5.000,00	-
69	<b>Sub total</b>	<b>126.188,00</b>	<b>48.988,00</b>	<b>34.000,00</b>	<b>43.200,00</b>
70	<b>Total Project</b>	<b>427.348,00</b>	<b>147.818,00</b>	<b>137.150,00</b>	<b>142.380,00</b>
80	National management cost	-	(See executing agency budget)		
90	Project monitoring and administration				
91	ITTO monitoring & review	18.000,00			
92	ITTO ex-post evaluation	15.000,00			
95	ITTO Programme support (70 + 91 +92) x 12%	55.241,76			
100	<b>Total Project Monitoring and Administration</b>	<b>88.241,76</b>			
	<b>GRAND TOTAL (70 + 100)</b>	<b>515.589,76</b>			

### 3.4.4 Executing agency yearly budget (GOI)

Category	Description	Total	Year 1	Year 2	Year 3
10	Personnel				
12	Project Treasurer	18.000,00	6.000,00	6.000,00	6.000,00
14	National Consultants	-	-	-	-
15	National Experts	14.400,00	4.800,00	4.800,00	4.800,00
19	<b>Sub total</b>	<b>32.400,00</b>	<b>10.800,00</b>	<b>10.800,00</b>	<b>10.800,00</b>
20	Sub contracts				
21	Sub contract No. 1 NGO (Land use conflict	3.600,00	3.600,00	-	-
29	<b>Sub total</b>	<b>3.600,00</b>	<b>3.600,00</b>	<b>-</b>	<b>-</b>
30	Duty Travel				
33	Local Transport	13.320,00	4.260,00	4.800,00	4.260,00
39	<b>Sub total</b>	<b>13.320,00</b>	<b>4.260,00</b>	<b>4.800,00</b>	<b>4.260,00</b>
40	Capital Items				
41	Personal Computer	800,00	800,00	-	-
44	Motor cycles (6 units)	4.000,00	2.000,00	2.000,00	-
49	<b>Sub total</b>	<b>4.800,00</b>	<b>2.800,00</b>	<b>2.000,00</b>	<b>-</b>
50	Consumables items				
51	Space 40 M2	18.000,00	6.000,00	6.000,00	6.000,00
52	Facilities	5.000,00	5.000,00	-	-
53	Consumables	9.000,00	3.000,00	3.000,00	3.000,00
54	Sundries	-	-	-	-
59	<b>Sub total</b>	<b>32.000,00</b>	<b>14.000,00</b>	<b>9.000,00</b>	<b>9.000,00</b>
60	Miscellaneous				
61	PSC meetings	3.000,00	-	-	3.000,00
63	Publication				
	63.4. Publicaton	5.000,00	-	2.500,00	2.500,00
64	Meeting				
	64.1. Technical Meeting	16.906,00	5.306,00	6.050,00	5.550,00
	64.2. Coordinating Meeting	2.000,00	-	1.000,00	1.000,00
65	Demoplot	6.000,00	3.000,00	3.000,00	-
68	International workshop	9.000,00	-	-	9.000,00
69	<b>Sub total</b>	<b>41.906,00</b>	<b>8.306,00</b>	<b>12.550,00</b>	<b>21.050,00</b>
70	<b>Total Project</b>	<b>128.026,00</b>	<b>43.766,00</b>	<b>39.150,00</b>	<b>45.110,00</b>
80	National management cost	-	(See executing agency budget)		
	<b>GRAND TOTAL (70 + 100)</b>	<b>128.026,00</b>			

### 3.5 Assumptions, risks and sustainability

#### 3.5.1 Assumptions and risks

The key assumptions made as regards achievements of the outputs and objectives of the project are closely related to commitment/support of government authorities to CBR conservation and development, cooperativeness of farmers, local communities as well as the private sector, which are all beyond the control of the project. If these assumptions do not hold, potential risks may materialized thus jeopardized achievement of planned outputs and objectives. The key assumptions, potential risks and mitigating measures are presented in Table 3.2.

Table 3.2: Key assumptions, potential risks and mitigating measures

Key assumptions	Potential risks	Mitigating measures
Government authorities committed to CBR conservation and development	<ul style="list-style-type: none"> <li>Existing CC Forum will continue ineffectively functioning; output 3 not fully delivered</li> <li>Development objective not achieved</li> </ul>	<ul style="list-style-type: none"> <li>Project management to convince the government authorities on the advantages of operating a CC Forum at district level</li> <li>Project management to request for GGPNP Authority and district governments to allocate sufficient funds for sustaining project activities</li> </ul>
Cooperative farmers	<ul style="list-style-type: none"> <li>Land conflicts in the core area will prevail and delayed rehabilitation of farmers' occupied lands</li> </ul>	<ul style="list-style-type: none"> <li>Intensive dialogue with farmers by experienced professionals</li> <li>A win-win solution is to be defined based on local conditions</li> </ul>
Cooperative local communities and business firms	<ul style="list-style-type: none"> <li>Sustainable livelihood models cannot be developed efficiently</li> </ul>	<ul style="list-style-type: none"> <li>Intensive consultations with local communities and firms by experienced business professionals</li> <li>To convince local communities and business firms that current use of resources is not the best option</li> </ul>
Good coordination between MOEF and regional/district governments	<ul style="list-style-type: none"> <li>Inefficient implementation operations</li> </ul>	<ul style="list-style-type: none"> <li>Intensive consultation and communication amongst the parties</li> </ul>

It should be noted that land conflict is recognized as a national issue as it takes place in nearly all over the country. Effective resolution to any land conflict, however, is to be site specifically designed based on local socio-cultural, economic and environmental conditions. Otherwise, the land conflicts resolution arrived at would not be successful in achieving its intended purpose.

#### 3.5.2 Sustainability

Sustainability of the project rests very much with its primary beneficiaries, namely GGPNP Authority, local communities, private sector and district governments. Full execution of Activities 1.1 through 1.4 should improve the well functioning and sustainability of the core area thus improves performance of the authority mandated to conserve the national park. Therefore, there is a strong incentive for the GGPNP Authority to sustain the project.

The local communities and private firms in the buffer and transition zones will be benefited from the development activities demonstrated under the project and replicated at later stage; the benefits accruable to these beneficiaries will serve as a strong incentive to sustain the project.

The district governments are responsible for community development in the buffer and transition zones. The development activities implemented in the areas will surely generate job opportunities and additional income to local communities and firms which in turn generate larger tax revenues for the governments. Therefore, there is the very reason for the district governments to support sustainability of the project.

Most importantly, an effective and realistic exit strategy will be defined prior to the project completion to ensure its sustainability. Such a strategy should establish what project activities should be continued or expanded, identify the institutions responsible for implementing these activities and indicate sources of inputs to implementing the activities.

The institutional arrangements for continuing implementation of the activities initiated under the project are highlighted below:

- Implementation of the activities relating to conservation of biodiversity and ecosystems in the core area will be the full responsibility of the GGNP Authority.
- Implementation of the activities relating to land use and livelihood in the buffer and transition zones will be the full responsibility of the district governments with the supervision and assistance of the GGNP Authority. This must be so to ensure coordinated planning of CBR management as well as synergized monitoring of management operations.
- Operation of the district CC Forum will be led by the respective district governments with GGNP Authority providing technical and financial assistance.
- The CBR database system will be operated by GGNP and to be made accessible by the district government authorities and other interested parties.

## PART 4. IMPLEMENTATION ARRANGEMENTS

### 4.1. Organization structure and stakeholder involvement mechanism

#### 4.1.1 Executing agency and partners

The executing agency (EA) of the project is the GGNP Authority of DG KSDAE of the MOEF. This authority has acquired experience in implementing ITTO-assisted project. The primary tasks of the EA include planning of project operations, selection and appointment of key project personnel and other professionals, provision of office space and facilities, and allocation of state counter budget. The profile of GGNP Authority appears in Annex 1.

Partners of the EA in implementing the project include: national consultants, university, NGOs, and NAS. A full timer Project Coordinator will be appointed by the EA to manage operations of the project on a day-to-day basis with the prior approval of ITTO. The organizational chart of the project is depicted in Annex 2.

#### 4.1.2 Project management team

A project management team (PMT) will be established by the EA and will consist of a Project Coordinator (PC), Project Secretary (PS), Project Finance (PF), and Project Technicians (PT). As appropriate, planned project activities will be executed with the assistance of partners, mainly Consultants, NGOs, University, NAS, and District government authorities.

The curricula vitae of the professionals to be appointed by the EA along with their terms of reference appear in Annex 3. The TOR of PC, PS, PF, and PT are presented in Annex 4.

#### 4.1.3 Project steering committee (PSC)

A PSC shall be established prior to commencement of project operations, with the main tasks to oversee progress in project implementation in light of the logical framework, review and approve work plans and associated budgets as well as progress reports and review any changes to the project design, endorse or otherwise such proposed changes. Membership of the PSC will be:

- A chairperson appointed by DG KSDAE
- Rep. of Directorate of Conservation Areas KSDAE
- Rep. of NAS/MAB Programme
- Rep. of Provincial Government of West Java
- Reps. of District Government of Cianjur, Sukabumi and Bogor
- *Reps. of Local Universities*
- *Community representatives*
- ITTO representative
- Donor representatives

The PSC shall meet at least once a year; a special meeting may be called forth by the EA at any time as need arises. The official language of the PSC is English.

#### 4.1.4 Stakeholder involvement mechanism

A stakeholder forum is built in to the organizational structure as shown in Annex 2. The forum takes the forms as the PSC and CBR CC Forum to be established at the district level. The CC Forum, to be established under Activity 3.1, will serve as a mechanism to effectively involve stakeholders in CBR management process. At this forum, stakeholders including government officials, *community representatives*, business executives, NGOs, scientists and conservationists may frequently meet to exchange information and experience as well as discuss on CBR management issues, constraints and challenges. Therefore, it will not be necessary to install and operate a separate stakeholder involvement mechanism other than a PSC which normally convene only once in a year.

A PSC shall be established pursuant to project agreement and with the terms of reference and membership as presented in Section 4.1.3 above.

## **4.2 Reporting, review, monitoring and evaluation**

A project monitoring system will be developed prior to commencing with project operations. Prerequisite to delivering planned outputs on time in accordance with the LFM is proper execution of individual activities pertaining to each of the outputs. Therefore, progress in implementation of individual activities should be closely monitored. The monitoring system to be developed defines pre-project situation, indicators of progress to be employed, measuring techniques, frequency of monitoring and the party responsible for conducting the monitoring. Results of the monitoring should be reviewed, first internally by the project management team and then by the PSC.

The monitoring system will be used by the project management as the guide to conduct activities on monitoring of the progress in implementation of activities. Monitoring activities may be conducted by the Project Coordinator or by any other authorized parties including NGOs, universities and R&D institutions on his/her behalf. Monitoring results will be documented as a progress report to be reviewed and assessed by the PSC wherein main stakeholders are adequately represented.

A number of reports will be produced in accordance with the ITTO Manual on Standard Operating Procedures as follows:

- Inception report
  - To be submitted after the signing of agreement between ITTO, Executing Agency and GOI.
  - Contains such matters as confirmation of the availability of office space and facilities, opening of a separate bank account in internationally recognized bank, proposed key project personnel and any changes that might have occurred since the project formulation stage.
- Yearly Plan of Operation (YPO)
  - To be submitted yearly prior to commencing with operations for endorsement by PSC, as appropriate, and by ITTO.
  - The first year YPO shall be attached to the inception report; the subsequent ones shall be submitted, at the latest ten weeks before the beginning of the planned year.
  - ITTO approves the YPO upon recommendation of the PSC.
- Progress report
  - Present information on executed activities during the period covered by the report, achieved output(s) as appropriate, and inputs applied.
  - The report is to be submitted bi-annually or as requested by ITTO.
- Technical report
  - Contains technical and scientific data, analysis of data and the project results.
  - A technical report may pertain to one single activity, two or more activities or one output depending on the weighted importance of the activities; the report must present procedure and methodologies adopted, the data generated, the results achieved and the conclusions reached.
  - The project plans to produce at least three technical reports.
- Financial report
  - Annual report is to be submitted to ITTO within three months after the end of the current financial year.
  - A final report is to be submitted within four months after the completion of planned activities.
  - The project's financial statement will be audited by registered independent public accountant to be appointed by the Executing Agency with the prior endorsement of ITTO.
- Completion report
  - To be submitted within three months of project completion.
  - The report summarizes the activities, inputs and expenditures, achieved outputs and objectives during the entire implementation phase.

- The report highlights the most critical differences between planned and realized project elements using the original project document as reference, and lessons learned from implementation of the project.

### **4.3 Dissemination and mainstreaming of project learning**

#### **4.3.1 Dissemination**

Project learning and results will be disseminated through the various means and channels during the implementation phase and after project completion.

- **Technical reports**  
Will be published and widely distributed in stages depending on the completion of such reports.
- **Brochures/technical documents**  
Are to be published quarterly and distributed nationwide. The brochures present findings, results of individual activities in a popular fashion that they are attractive in appearance and easy to digest even by common people.
- **TV broadcasting**  
Delivery of speeches by the Minister of Forestry and other high-rank officials will be arranged through television channels with nation-wide coverage. While such speeches focus on campaigning CBR development, they also will include project learning and results.
- **Completion report**  
Will be published and distributed nationwide; interested ITTO member countries may also obtain the report from the Executing Agency upon request or through ITTO.

#### **4.3.2 Mainstreaming**

All information on management operations, land use best practices, lessons learned as well as experiences will be documented in the database system or website to be installed under Activity 3.3. The website will be accessible by decision makers and other stakeholders. In this manner, the information can be widely disseminated and used for policy making, business development and livelihood promotion. Therefore, operating a website is a vital mainstreaming process and it is a tool for developing a center for CBR conservation knowledge. Mainstreaming of lessons and experiences learned can rely not only on the website but also on direct dialogues at different fora and distribution of project technical reports and documents. More importantly, the information documented in the website and other project documents could be utilized by concerned authorities in policy making and by managers of protected areas in developing their operational management plans as well as needed technical guidelines. In addition, the information documented in the website can be shared with the biosphere reserve system situated not only in Indonesia but also in other countries, especially those ones in the tropics in view of exchanging lessons learned and experience between biosphere reserves.



## **SELECTED REFERENCES**

- Iskandar, Johan. 2011. Upaya Pelestarian Ekologi Tatar Sunda. Paper presented to International Conference of Sundanese Culture II, Bandung 19-22 Desember 2011.
- ITTO & GOI, 2010. Developing Collaborative Management of Cibodas Biosphere Reserve in West Java, Indonesia. Project Proposal submitted to ITTO.
- Purwanto, Y., Ade B. Hidayat and Herry Subagiadi, 2013. Aspek Biofisik dan Potensi Kawasan Cagar Biosfer Cibodas. In *Manajemen Hulu: Pengelolaan Kawasan Cagar Biosfer Cibodas*. Purwanto, Y., Eds. Lembaga Ilmu Pengetahuan Indonesia.
- Man and the Biosphere Programme, 2010. Periodic Review on Cibodas Biosphere Reserve (Year 2010). United Nations Educational, Scientific and Cultural Organization Division of Ecological and Earth Sciences.

## ANNEX 1. PROFILES OF THE EXECUTING AGENCY

**The Directorate General of Natural Resources and Ecosystem Conservation (KSDAE) and the Gunung Gede Pangrango National Park (GGPNP), the Ministry of Environment and Forestry of the Republic of Indonesia.**

The Project will be implemented by the Gunung Gede Pangrango National Park (GGPNP), one of the Agencies under the Directorate General of Natural Resources and Ecosystem Conservation (KSDAE) within the Ministry of Environment and Forestry (MOEF).

The main task of GGPNP is to provide rules and regulations, policy, planning, standard operation and technical assistance for management and development of conservation forest.

### **Vision of GGPNP**

Conserving Indonesia's biodiversity for the well-being of the present and future generations.

### **Mission:**

Conserving biodiversity and reducing human impact through:

1. Strengthening the management of conservation areas in Indonesia
2. Promoting strong conservation ethics, awareness and actions in Indonesia society.
3. Increasing participation of multi-stakeholders efforts to preserve biodiversity and ecological processes on eco-regional scale.
4. Formulating policies, law and strengthening law enforcement that support conservation.
5. Promoting conservation for the people's well-being through sustainable use of natural resources.

### **Infrastructure**

In terms of the infrastructure, the GGPNP is prepared to carry the project. The office is already connected to a 5 Mbps bandwidth of Internet connection and all of the staff have personal computers on its own.

### **Budget**

Within the last three years, the budget that has been allocated to support conservation activities in the GGPNP is as follows:

Activities	2012 (USD)	2013 (USD)	2014 (USD)
Personnel	546,662.31	565,122.00	595,317.08
Duty Travel	187,270.77	114,281.54	141,147.69
Capital assets	342,525.77	477,376.92	151,068.46
Consumable items	418,771.77	586,108.00	258,956.92
Miscellaneous	95,076.15	142,011.54	126,804.62
Total	1,590,306.77	1,891,823.08	1,273,294.77

### **Personnel**

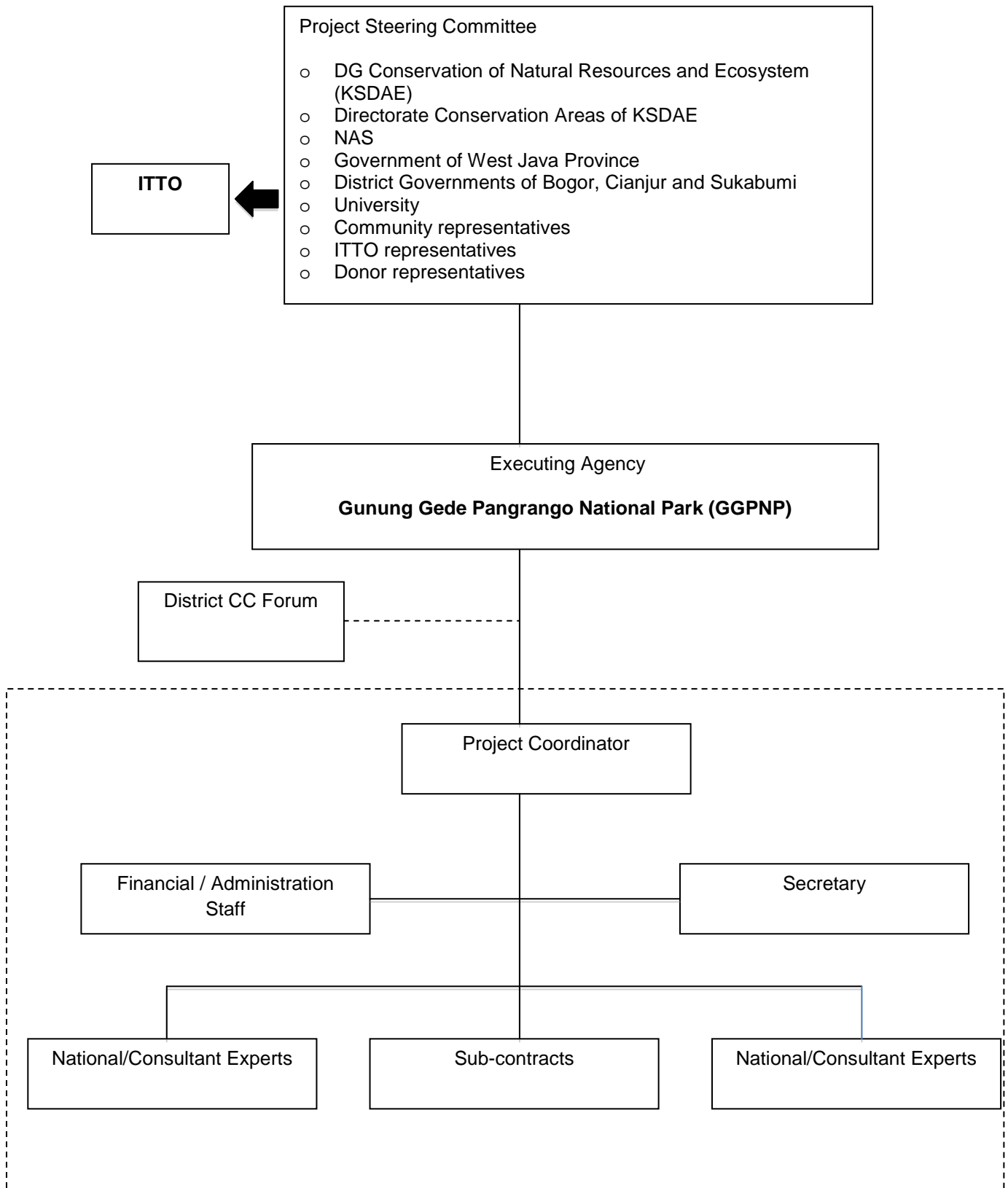
The personnel of GGPNP are described below:

Description	Number
PhD Degree	0
Master Degree	12
University Graduate degree (S1, D4)	37
Middle level technicians and administrative staffs	95
TOTAL	144

### **Experience in implementing ITTO Project**

Project TFL-PD 019/10 Rev. 2 (M) "developing collaborative management of Cibodas Biosphere Reserve in West Java, Indonesia"

## ANNEX 2. PROJECT ORGANIZATIONAL STRUCTURE



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

No	Name	Professional education	Position in present organization	Experience relevant to the project	Involvement in the project
1.	Ir. Herry Subagiadi, M.Sc	Master degree	Head of GGPNP	International experience in forest conservation	Member of PSC
2.	Sondang R Situmorang, S.Hut, M.Appl.Sc	Master degree	Head of division for Conservation management and Protection	Involved in international/national projects on forest conservation programme in Indonesia	Counterpart
3.	Aden Mahyar, SH, M.Hum	Master degree	Head of Section For Forest Protection and Mapping	Facilitation of various activities related to conservation programme and community forestry; forest conservation management	Counterpart
4	Heri Suheri, S.Hut, M.Sc	Master degree	Head of Section for Planning and Technical Cooperation	Facilitation of various activities related to stakeholders cooperation, human relation activities	Counterpart
5.	Ade Bagja Hidayat, S.Hut	University Graduate Degree	Staf of Service Utilization	Facilitation of various activities in conservation management, community development and Environmental Education Program	Counterpart

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

Position	Main tasks
<b>A. Project Key Personnel</b>	
Project Coordinator	<ul style="list-style-type: none"> <li>• To manage project operations on a day-to-day basis</li> <li>• To prepare plans of operation, monitoring and evaluation</li> <li>• To prepare and submit documents and reports to EA and ITTO in accordance with the project agreement</li> <li>• To select consultants and other professionals to assist in project implementation</li> <li>• To organize meetings of PSC and PTC on progress in implementation</li> </ul>
Project Secretary	<ul style="list-style-type: none"> <li>• To assist PC in managing project operations</li> <li>• To manage project office, maintain office facilities</li> <li>• To organize meetings and travels</li> <li>• To do other tasks as requested by PC</li> </ul>
Project Finance	<ul style="list-style-type: none"> <li>• To assist PC in financial management</li> <li>• To undertake book keeping and banking works</li> <li>• To assist in the selection of auditor and in conduct of financial auditing</li> </ul>
Project Technicians	<ul style="list-style-type: none"> <li>• To input data on information system</li> <li>• To provide data and information for PC and Consultants as requested</li> <li>• To assist in preparing various project documents</li> </ul>
<b>B. National Consultants/Experts, Trainers and Sub-contracts</b>	
National Consultant for Activity 1.1	<ul style="list-style-type: none"> <li>• To develop a biodiversity enrichment model for the area currently managed under mono-culture system</li> <li>• To develop monitoring plan for progress in application of the model</li> <li>• To assess applicability of the model by end of the project</li> <li>• To develop technical manual for application of the model by GGPNP staffs after project completion</li> </ul>
NGO for Activity 1.2 (Sub-contract 1)	<ul style="list-style-type: none"> <li>• To hold intensive dialogue with farmers and Park Authority</li> <li>• To develop alternative solutions for the land conflict</li> <li>• To discuss on the alternative solutions with farmers and Park Authority</li> <li>• To select the best alternative and develop a win-win solution</li> <li>• To prepare agreements on the win-win solution to be signed by conflicting parties</li> <li>• To implement the agreements</li> <li>• To rehabilitate degraded lands in collaboration with farmers</li> </ul>
Professional Trainer for Activity 1.3	<ul style="list-style-type: none"> <li>• To recruit community members to assist forest rangers in monitoring of forest operations</li> <li>• To train the community members on needed technical skills for forest monitoring</li> <li>• To develop SOP for monitoring of forest operations</li> </ul>

National Consultant for Activity 1.4	<ul style="list-style-type: none"> <li>• To develop scientifically sound monitoring system for biodiversity and ecosystems</li> <li>• To pilot test application of the system</li> <li>• To develop SOP for using the system by GGNP staffs</li> <li>• To develop monitoring plan</li> </ul>
National Consultant for Activity 2.1	<ul style="list-style-type: none"> <li>• To study the existing land use plan for buffer and transition zone</li> <li>• To conduct field check on the ongoing land use practices</li> <li>• To assess on occurring irregularities on land use practices</li> <li>• To develop needed follow up actions to repair the irregularities</li> </ul>
BCF(s) for Activity 2.2 (Sub-contract 2)	<ul style="list-style-type: none"> <li>• To identify prospective livelihood projects in 3 (three) districts comprising 2 (two) projects in each district.</li> <li>• To hold intensive consultation with local communities and/or business firms on development of identified livelihood projects</li> <li>• To assess profitability and sustainability of the livelihood projects favored by local communities/firms</li> <li>• To develop project designs in collaboration with local communities/firms owning resources</li> <li>• To pilot selected livelihood projects</li> <li>• To assist in monitoring of the projects</li> </ul>
National Experts for Activity 2.3	<ul style="list-style-type: none"> <li>• To identify participants of dialogues on nature conservations and sustainable development</li> <li>• To organize dialogues in 3 districts involving 149 village reps., private firms, NGOs and government officials</li> <li>• To report on findings of the dialogues</li> </ul>
BCF(s) for Activity 2.4 (Sub-contract 3)	<ul style="list-style-type: none"> <li>• To prepare training materials</li> <li>• To identify training participants in collaboration with GGNP and district government authorities</li> <li>• To organize training on livelihood skills involving 300 reps of 149 villages focusing on community leaders and women, private firms, NGOs and government officials</li> <li>• To report on implementation of the training</li> </ul>
National Expert for Activity 3.1	<ul style="list-style-type: none"> <li>• To review current functioning of CBR-CC Forum and recommend an effective format of CC Forum</li> <li>• To assess advantages of operating a CC Forum at district level</li> <li>• To install a CC Forum at each district</li> <li>• To develop an operational plan for the district CC Forum</li> </ul>
National Expert for Activity 3.2	<ul style="list-style-type: none"> <li>• To hold consultations on management planning issues</li> <li>• To organize 3 (three) district workshops on management planning</li> <li>• To report on implementation of the workshops</li> </ul>
National Consultant for Activity 3.3	<ul style="list-style-type: none"> <li>• To hold consultation with GGNP and district government authorities on the need for installment of a website</li> <li>• To prepare design of the website and discuss with main users on its completeness</li> <li>• To identify and procure needed IT equipment and facilities</li> <li>• To install the website and test on its operation</li> <li>• To validate operation of the website</li> <li>• To prepare SOP for the system</li> </ul>

	<ul style="list-style-type: none"><li>• To train system operators</li></ul>
--	---

**Notes:**

Detailed TORs will be provided in the respective YPOs as appropriate prior to implementation.

**ANNEX 5. RECOMMENDATIONS OF THE 49<sup>TH</sup> EXPERT PANEL AND THE RESPECTIVE MODIFICATIONS MADE**

No.	Recommendations	Modifications made
1.	Provide a better map showing the location of the project site and Indonesia. Refine the presentation of the Table of Contents (page iii) by arranging all contents in the left side. Include the Ministry of Environment and Forestry in the list of abbreviations and acronyms;	<ul style="list-style-type: none"> <li>• Map has been improved and now clearly shows Indonesia, West Java, and CBR; see page iii</li> <li>• Presentation of Table of Contents has been revised; see page iv</li> <li>• MOEF is now included in the list of abbreviations; see page v</li> </ul>
2.	Refine the main purposes of the project in Section 1.1 (Origin) by describing the intended outputs while eliminating the descriptions of implementing activities;	The main purposes of the project have been revised on pp 1-2
3.	Improve Section 1.2.1 (Conformity with ITTO's objectives and priorities) by elaborating the expected contributions of the project to the specified paragraphs of Article 1 of ITTA, 2006. Elaboration should include the project's relevance to the ITTO/IUCN guidelines for the conservation and sustainable use of biodiversity in tropical timber production forests and the ITTO/CBD Collaborative Initiative for Tropical Forest Biodiversity;	<p>Conformity of the project has been elaborated with respect to:</p> <ul style="list-style-type: none"> <li>• ITTA 2006, Article 1 (c), 1 (n), and 1 (r); see page 2</li> <li>• ITTO/IUCN Guidelines for the conservation and sustainable use of biodiversity in tropical timber production forests; page 3-4</li> <li>• ITTO-CBD Collaborative Initiative for Tropical Forest Biodiversity; page 3</li> </ul>
4.	Refine Section 1.3.1 (Geographic location) by removing descriptions relating to the attention to GGPNP to another place as they are not related to geographic location information;	Section 1.3.1 has been revised by removing the less relevant information; see page 4
5.	Refine Section 1.4 (Expected outcomes at project completion) by describing intended outcomes including envisaged use of the output by beneficiaries, after the completion of the project.	Section 1.4 has been improved by elaborating the expected favorable changes and usage of the Outputs; pp 6-7
6.	Improve the identification of the key problem to be addressed by the project. It should be related to the problems of implementing the integrated management plan of Cibodas Biosphere Reserve which has been developed by TFL-PD 019/10 Rev. 2 (M). Refine the effects of the key problem by focusing the immediate effects of the key problem in the problem tree.	<ul style="list-style-type: none"> <li>• The key problem has been redefined as "inadequate strategies for conservation and sustainable management of biodiversity and ecosystem in CBR"</li> <li>• The key problem is relating closely to problematic implementation of the ISMP developed under the previous project; pp 1,11</li> </ul>
7.	Based on the refined problem analysis, the statements of the development and specific objectives should be improved in a logical way. The development objective should be a higher level aim describing the effects of the achievement of the specific objective. The Panel questioned the inclusion of CBR core conservation area alone in the development	<ul style="list-style-type: none"> <li>• The cause-effect relationship of the key problem has been re-visited; see problem tree and Section 2.1.3 (pp 11-14)</li> <li>• Consequent to this redefined key problem and analysis, there have been changes in the project elements (objectives, outputs, and activities)</li> </ul>



	objective and pointed out that it should be related to the conservation and sustainable management of CBR as a whole management unit;	including numbering and titles); pp 15, 18-19  <ul style="list-style-type: none"> <li>• The project now concerns with the entire CBR</li> </ul>
8.	Improve the logical framework matrix by refining the indicators. Specify precisely the targeted 300 community leaders and women who will receive training on livelihood development which is one of the indicators for the Specific Objective and Output 2. Remove the third indicator (15HTs and 4 motorcycles made available for forest rangers in Year 2-3) for Output 1;	<ul style="list-style-type: none"> <li>• The LFM has been improved consistent with the newly defined project interventions/</li> <li>• The 300 trainees are reps of 139 villages focusing on leaders and women, private firms, NGOs and government officials</li> <li>• The HTs and motorcycles have been removed</li> <li>• See pp 16-17</li> </ul>
9.	In the budget table (3.4.1. Master budget schedule), check the budget component number in accordance with the standard presentation of ITTO Manual for Project Formulation;	<ul style="list-style-type: none"> <li>• The numbering of budget components and items has been done in adherence with the ITTO Manual for Project Formulation, especially the examples in Table 7 on page 47 of the manual.</li> </ul>
10.	Justify the engagement of the three sub-contracts for the implementation of Activity 1.2, Activity 2.2, and Activity 2.4 and improve their terms of reference in Annex 4. Provide more information the proposed establishment of a website;	<ul style="list-style-type: none"> <li>• Implementation of Activities 1.2, 2.2, and 2.4 are best under sub-contract for reasons elaborated in Section 3.2; p. 20-21</li> <li>• TORs of these activities have been improved in Annex 4.</li> </ul>
11.	Further improve Section 3.5.1 (Assumptions and risk) by fully describing the specific risks beyond the control of project management together with the improvement of the assumptions of the logical framework matrix. Review the inclusion of expected risks relating to the problem of coordination between relevant Ministries and application of a mechanism for land acquisition in the core area which would be a national issue. The risk mitigation measures should be further detailed to ensure the achievement of objectives and outputs;	<ul style="list-style-type: none"> <li>• Section 3.5.1 has been improved by referring to the key assumptions defined in the LFM and potential risks if the assumptions do not hold; p. 34</li> <li>• The issues on land use conflicts are clarified on p. 34</li> </ul>
12.	Specify institutional arrangements to ensure the further development of the activities initiated by the project in Section 3.5.2 (Sustainability);	<ul style="list-style-type: none"> <li>• Section 3.5.2 has been elaborated on page 34-35</li> </ul>
13.	Improve Section 4.1.4 (Stakeholder involvement mechanism) by specifying collaborating partners and mechanism for stakeholder participation;	<ul style="list-style-type: none"> <li>• Section 4.1.4 has been improved on pages 36-37</li> </ul>
14.	Improve Section 4.3.2 (Mainstreaming) by elaborating activities to synthesize the lessons and experiences learned from the implementation of the project and widely disseminate such lessons as a Cibodas Biosphere Reserve	<ul style="list-style-type: none"> <li>• Section 4.3.2 has been elaborated on page 38</li> </ul>

	biodiversity conservation knowledge management strategy;	
15.	Provide updated information on the budget of the executing agency in Annex 1;	<ul style="list-style-type: none"> <li>Annex 1, budget of the EA has been updated</li> </ul>
16.	Further elaborate TORs for each of the national consultants/experts in Annex 4;	<ul style="list-style-type: none"> <li>At this stage, TORs of the National Consultants have been, to some extent, improved noting that the TORs are to be fully detailed when applying for NOLs to the employment of the respective consultants.</li> </ul>

**Annex 6. Recommendations of the 50th expert panel and the respective modifications made**

No.	Recommendations	Modifications made
1.	Further improve the problem analysis by refining the key problem to fully reflect the three causes specified in the problem tree. The Panel observed that there is no clear linkage between the current key problem and the specific objective, the outputs and activities as the current key problem statement is merely related to "Inadequate strategies". In this connection, the Panel pointed out that the key problem can be refined with "Inadequate conservation and sustainable management of biodiversity and ecosystems in CBR" in the context of implementing the integrated management plan of Cibodas Biosphere Reserve;	The problem analysis has been improved by redefining the key problem as "inadequate conservation and sustainable management of biodiversity and ecosystems in CBR". In accordance with the wording proposed by the Expert Panel. (see pages 11 and 14)
2.	Based on the refined key problem, the specific objective and logical framework matrix should be amended accordingly;	The logical framework matrix and other relevant parts of the proposal have been amended by defining the specific objective as "to improve conservation and sustainable management of biodiversity and ecosystems in CBR through implementation of the Integrated Strategic Management Plan". (see pages: i, ii, 15, 16 and 18)
3.	Review the budget provisions allocated for "International Workshop on CBR" and "International Event" in the ITTO Budget (Items 68 and 69), reconsider its relevance and adjust accordingly, if needed;	Today, the World Biosphere Reserve System consists of 377 units of reserve situated in 120 countries and CBR is part of the system. Inclusion of "International Workshop on CBR" and "International Event" is among the effects to facilitate effective exchanging of information and learning of experience with the other reserves. Adjustment to budget provision is not necessary at this stage. The Executing Agency will be seeking for additional funding from other donor(s) during the course of project implementation in order to allow for organizing an international workshop of an appropriate size. (see page 21)
4.	Further improve Section 4.1.4 (Stakeholder involvement mechanisms) to ensure the full and effective participation of key stakeholders during the implementation of the project. Engagement of a representative(s) from the concerned local communities in the PSC meeting is encouraged. More involvement of local stakeholders in the CC Forum to be established at the district level is essential. These include local academic society and local community organizations for enhancing the participation of women in CBR ecosystems planning and management;	Section 4.1.4 has been improved: Reps of local communities are engaged in the PSC meeting; main local stakeholders are involved in the District CC Fora including local universities and NGOs; and women participation is enhanced through involvement in execution of particular activities, e.g., Activities 2.2, 2,3 and 2.4.  (see pages: 20, 21, and 36 (Sections 4.1.3 and 4.1.4))

Notes: the amendments made are in italics and underlined in order to distinguish them from the amendments of the 49th EP Meeting.