United Nations Development Programme
Country: Indonesia

PROJECT DOCUMENT

Project Title: PIMS No. 4392 Enhancing the Protected Area System in Sulawesi (E-PASS) for Biodiversity Conservation
UNPDF Outcome(s): Outcome 5: Strengthened climate change mitigation and adaptation and environmental sustainability measures in targeted vulnerable provinces, sectors and communities.
UNDP Strategic Plan Outputs:
1.3 Solutions developed at national and sub-national levels for sustainable management of natural resources, ecosystem services, chemicals and waste.
Expected CPAP Outcome:
2.1 Responsible national institutions and relevant stakeholders are more effective in managing environmental resources and addressing environmental pollution
Expected CPAP Output:
2.1.1 Government, private sector and CBO partners have coherent and effective policy frameworks, action plans, implementing arrangement and funding arrangement to sustainably manage terrestrial ecosystems.
Implementing Agency: United Nations Development Programme (UNDP)
Implementing Partner: Ministry of Forestry
Responsible Parties: Directorate of Biodiversity Conservation, DG of Forest Protection & Nature Conservation, Ministry of Forestry; Directorate Forestry and Water Resources, BAPPENAS

Brief Description

Sulawesi (17.46 million ha) is the world's 11th largest island that has a remarkable globally significant diversity of terrestrial flora and fauna with an impressive variety of forest ecosystems, and supports high rates of endemism and species-level biodiversity. Despite such efforts, Sulawesi's biodiversity remains severely threatened and fast degrading due to a number of human-induced threats. Protection and management of existing PAs has not been adequate to prevent extensive encroachment and damage within PA boundaries, whilst natural areas beyond PA boundaries have been even more rapidly degraded as a result of logging, conversion, mining, fire and hunting. The long-term solution to conserving Sulawesi's biodiversity is an improved PA system that is well integrated into its surrounding landscape, with the capacities and financial resources to safeguard biodiversity from existing and future threats. Baseline activities, although significant, are deemed insufficient to achieve the above solution. The project objective is to strengthen the effectiveness and financial sustainability of Sulawesi's PA system to respond to existing threats to globally significant biodiversity. This objective will be achieved through three interconnected components: 1. Enhanced systemic and institutional capacity for planning and management of Sulawesi PA system; 2. Financial sustainability of the Sulawesi PA system; 3. Threat reduction and collaborative governance in the target PAs and buffer zones. The project will be implemented by the Ministry of Forestry under National Implementation Modality (NIM).

Country Programme Period	: 2011-2015
Strategic Plan Outputs (2014-2017)	: Output 1.3
Atlas Award ID	: 00077733
Project ID	: 00088356
PIMS #	: 4392
Start date	: April 2015
End Date	: April 2020
PAC Meeting Date	: Oct 21, 2014
Management Arrangements	: NIM

Total allocated resources	: USD	**6,465,000**
• Regular (TRAC)	: USD	200,000
• Donor (GEF)	: USD	6,265,000
Parallel funding:	: **USD**	**43,700,000**
• Government of Indonesia	: USD	41,500,000
• UNDP	: USD	2,000,000
• Selamatkan Yaki (NGO)	: USD	200,000

Agreed by (Implementing Partner):

Hadi Daryanto

Secretary General, Ministry of Forestry — Date/Month/Year

Agreed by (Ministry of Finance):

Robert Pakpahan

Director General of Budget Financing & Risk Management, Ministry of Finance — Date/Month/Year

Agreed by (UNDP):

Beate Trankmann — 12/03/2015

Country Director, UNDP Indonesia — Date/Month/Year

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Acronyms and Abbreviations

APR/PIR	Annual Project Review/ Project Implementation Reports
BI	Birdlife International / Burung Indonesia
BKSDA	Natural Resources Conservation Agency
BPDAS	Agency for Watershed Management
CDM	Clean Development Mechanism
CBD	Convention on Biological Diversity
CHM	CBD Clearing House Mechanism
CI	Conservation International
CITES	Convention on International Trade in Endangered Species
CIFOR	Centre for International Forestry Research
DNS	Debt for Nature Swap
EBA	Endemic Bird Area
ERC	Evaluation Resource Center (of UNDP Evaluation Office)
EAAFP	East Asian Australasian Flyway Partnership
E-PASS	Enhancing the Protected Area System in Sulawesi
FAO	Food and Agriculture Organization of United Nations
GDP	Gross Domestic Product
GEF	Global Environment Facility
Ha	Hectare
IAS	Invasive Alien Species
IDR	Indonesian Rupiah
IBSAP	Indonesian Biodiversity Strategy and Action Plan
IBA	Important Bird Area
IW	(Project) Inception Workshop
IUCN	International Union for Conservation of Nature
KKMP	Maros Karst Regions Pangkep
LBN	National Biological Institute
LIPI	Indonesian Institute of Science
LULUCF	Land Use, Land-Use Change and Forestry
M&E	Monitoring and Evaluation
METT	Management Effectiveness Tracking Tool
MIS	Management Information System
MOE	Ministry of Environment
MoF	Ministry of Finance
MoFoR	Ministry of Forestry
MoMAF	Ministry of Marine Affairs and Fisheries
NISP	National Implementation Support Partnership
MMP	Community of Forestry Police Partners
MRV	Measurement, Reporting and Verification
NGO	Non-Government Organization
NAMA	Nationally Appropriate Mitigation Actions
NR	Nature Reserve
NWFP	Non-wood Forest Products
PA	Protected Area
PIF	Project Identification Form (for GEF)
PIMS	Project Information Management System
PPG	Project Preparation Grant (for GEF)
PPR	Project Progress Report
PHKA	Forest Protection and Nature Conservation under MoFoR
PoWPA	Programme of Work on Protected Areas

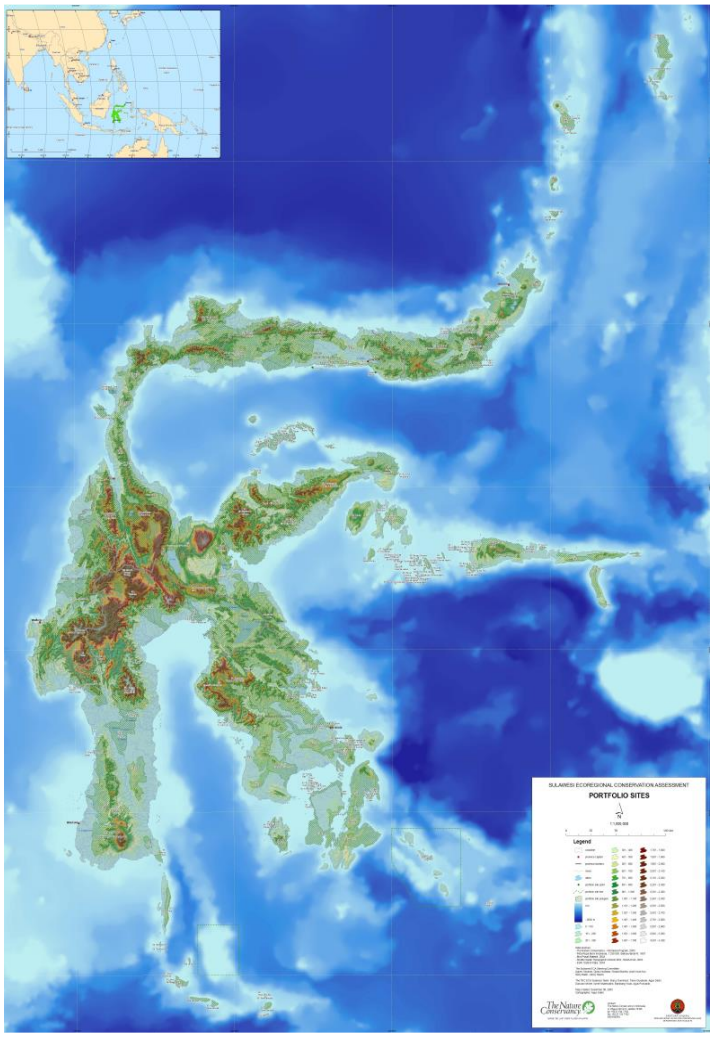
PoWPA	Programme of Work on Protected Areas (of CBD)
RAMSAR	Ramsar Convention on Wetlands of International Importance
REDD+	Reducing Emissions from Deforestation and Forest Degradation
RKTP	Provincial workplan
RKTK	Regional workplan
RCU	(UNDP-GEF) Regional Coordinating Unit
RBM	Resort Based Management
RPJMN	National Medium-term Development Plan
RPJMD	Sub-national Medium-term Development Plan
RPJMDes	Village Medium-term Development Plan
RTA	Regional Technical Advisor (of UNDP)
SFM	Sustainable Forest Management
SRF	Strategic Results Framework
TNC	The Nature Conservancy
UN	United Nations
UNDP	United Nations Development Programme
UNDP-CO	UNDP Country Office
UNDP EEG	UNDP Environment and Energy Group
UNFCC	United Nations Framework Convention on Climate Change
UNDAF	United Nations Development Assistance Framework
UNEP	United Nations Environment Programme
UN-REDD	United Nations Collaborative Programme on Reducing Emissions from Deforestation and Forest Degradation in Developing Countries
UNESCO	United Nations Educational, Scientific and Cultural Organization
UPT	Technical Operation Unit
USD	United States Dollar
WCS	Wildlife Conservation Society
WWF	World Wide Fund for Nature

PART I: Situation Analysis

INTRODUCTION

1. Despite a relatively extensive system of protected areas covering over 1.6 million ha, Sulawesi's biodiversity is heavily threatened and fast degrading. Between 1980 and 2008, some 3.5 million ha of forest were lost, representing a roughly 30% decline in forest area. Key anthropogenic threats include smallholder agriculture, which too often involves encroachment into PAs. Fragmentation of remaining habitat further undermines both biodiversity the provision of ecosystem services.
2. A range of barriers undermines efforts to conserve the island's biodiversity. These include: weak systemic and institutional capacities for PA management; inadequate PA system financial sustainability, and; persisting threats and incomplete systems for collaborative management in PAs and buffer zones.
3. An encouraging set of recent and ongoing efforts to strengthen PA management provides an encouraging baseline for GEF project support. This includes a dramatic and bottom up shift in management philosophy known as resort-based management, which breaks down larger PAs into smaller management units in order to enhance accountability, field presence, etc. Other notable aspects of the baseline include steps to develop REDD+ in Central Sulawesi which, together with ecotourism potential, is creating encouraging opportunities for enhanced financial sustainability and extensive experience with the creation of Community Conservation Areas (CCAs) as a tool for reducing conflict with local communities and developing sustainable livelihoods in areas ordering PAs.

Map 1: Sulawesi



4. The project builds on the above baseline with efforts focused at several geographic levels. First, at the level of individual site-level landscapes, the project will support threat reduction and collaborative governance. This is expected to substantially improve prospects for key endemic species for whom these areas are among the last refuges. Second, the project will help to build the capacity of provincial-level agencies subsidiary to the national level Ministry of

Forestry. Third, the project will develop the first integrated, island-level approach to key issues such as PA financial sustainability, biodiversity monitoring and data management, PA system expansion and surveillance and control of poaching and the wildlife trade. Finally, close involvement of the Jakarta-level headquarters of the Ministry of Forestry's Directorate General of Forest Protection and Nature Conservation (PHKA) will ensure both effective implementation as well as national-level uptake, dissemination and eventual replication of project results.

CONTEXT AND GLOBAL SIGNIFICANCE

Environmental and biodiversity context

5. Sulawesi (17.46 million ha) is the world's 11th largest island. Its highest peak is 3,478 metres (see **Map 1**). It is the 4th largest and 3rd most populated island in Indonesia, with a population of approximately 17 million.
6. Sulawesi is part of Wallacea, which means that it contains a mix of both Asian and Australasian species. As a result, it supports a remarkable, globally significant diversity of terrestrial flora and fauna, as well as extremely rich coastal and marine life. The unique "k"-like shape of the island means that it boasts 6,000 km of coastline, which nurture large areas of seagrass and coral reefs. These habitats are home to a variety of sea turtle species, dugongs and six of the world's giant clam species.
7. Sulawesi has been highlighted by various authors and across multiple evaluation criteria—as a globally important conservation area[1]. As outlined by Cannon et. al.[2], its global significance owes to a combination of factors, including: (i) a long history as a large oceanic island[3]; (ii) a position at the biogeographic crossroads between East Asia and Australasia[4], and; (iii) a complex geology, including the largest mafic outcrops in the world[5]. These characteristics have resulted in high levels of endemism, particularly of the fauna, at both the continental and local scales[6].
8. Sulawesi retains large areas of tropical forest, together with an impressive variety of forest ecosystems. As of 2011, 11.58 million ha. were classified as forest based on Forestry Ministerial Decrees.[7] According to a 2012 report,[8] Sulawesi's forest ecosystems may be broken down into two broad eco-regions: (i) Sulawesi lowland rainforest and (ii) Sulawesi montane rainforest. However, a more fine-grained analysis breaks down the island's forests into a remarkable 18 distinct ecosystems.[9]
9. This wide range of forest types is a key reason for the island's high rates of endemism and species-level biodiversity; for example, at least 5,076 species of vascular plants occur on the island. The percentage of Sulawesi's species that is endemic is exceptionally high; for example, of the island's 127 known mammal species, 72 are endemic (62%). These include two wild cattle species, lowland and mountain anoa (*Bubalus depressicomis, Bubalus quarlessi*), babirusa (*Babyrusa babyrousa*),

[1] Dinerstein & Wikramanayake 1993, Olson & Dinerstein 2002, Rodrigues et al. 2004, Shi et al. 2005, Wilson et al. 2006.
[2] Cannon et. al. 2007
[3] Hall & Holloway 1998, Wilson & Moss 1999
[4] Wallace 1869, Whitmore 1982
[5] Hamilton 1979, Proctor 2003
[6] Olson et al. 2001, Evans et al. 2003, Eken et al. 2004,Orme et al. 2005
[7] 2012. Ministry of Forestry. Forestry Statistics of Indonesia 2011.
[8] 2012. Analysis on gaps of ecological representativeness and management of protected areas in Indonesia. Jakarta: Ministry of Forestry and Ministry of Marine Affairs and Fisheries, Indonesia.
[9] The Nature Conservancy. 2010. Sulawesi Ecoregional Conservation Assessment.

Sulawesi palm civet (*Macrogalidia musschenbroeckii*) and crested black macaque (*Macaca tonkeana*). If bats are excluded, the rate of endemism rises to 98%. In addition, 34% of the nearly 1,500 bird species recorded on the island are endemic. Given how poorly the island's biodiversity has been studied, it seems highly likely that many species remain to be discovered.

10. Regardless of whether a broader or more fine-tuned classification system is used, forest ecosystems across the island have been lost and/or degraded at an alarming rate. In terms of eco-regions, as shown in **Figure 1** below, an estimated 59.2% of the island's lowland rainforests had suffered from severe degradation, due to intensive development activities. In the case of the montane rainforest ecoregion, the percentage of disturbed ecosystems was estimated at 28.2%.

11. Similarly, a TNC ecoregional assessment for Sulawesi found that only 30% of the island's forests overall remained in 'good condition' as of 2008. Within the 18 ecosystem types identified in the report, the percentages varied sharply. In certain montane ecosystems—montane mafic, montane limestone, upland mafic and tropalpine—80-90% of forest remained in good condition. At the other end of the scale, forest ecosystem types such as mangrove, hill alluvium, lowland limestone and lowland intermediate each retained less than 15% of forest in 'good condition'.

12. Despite large-scale degradation, Sulawesi's remaining forests continue to provide a variety of valuable ecosystem "goods" and "services", including both timber as well as non-timber goods and services. The latter include important services related to carbon sequestration and thus mitigation of climate change. The forests and their biodiversity play an important role in the economic, social and cultural life of many local communities across the island.

Socio-economic context

13. Sulawesi's economy depends to an important extent on small-scale agriculture and seafood / fishing. Key crops include coconuts, cacao, nutmeg, soy, coffee, cloves and rice. In Central Sulawesi, agricultural households still earn about 60% of their income from farming and overall some 40-50% of the province's GDP is generated by the sector. [10]

14. The economic activities of communities surrounding many protected areas also revolve mainly around agriculture, with a large proportion of the land designated for agricultural purposes. Much of the farming remains at a subsistence or semi-commercial level. Incomes within these communities tend to be fairly low. For example, in areas surrounding Lore Lindu National Park (LLNP), average income levels were estimated at between Indonesian Rupiah (IDR) 450,000 and 500,000, or only $50 per household per month.

[10] UN.REDD Indonesia. 2012. Social-economic analysis and REDD+ locations at Sub-sitrict level in Central Sulawesi, Indonesia.

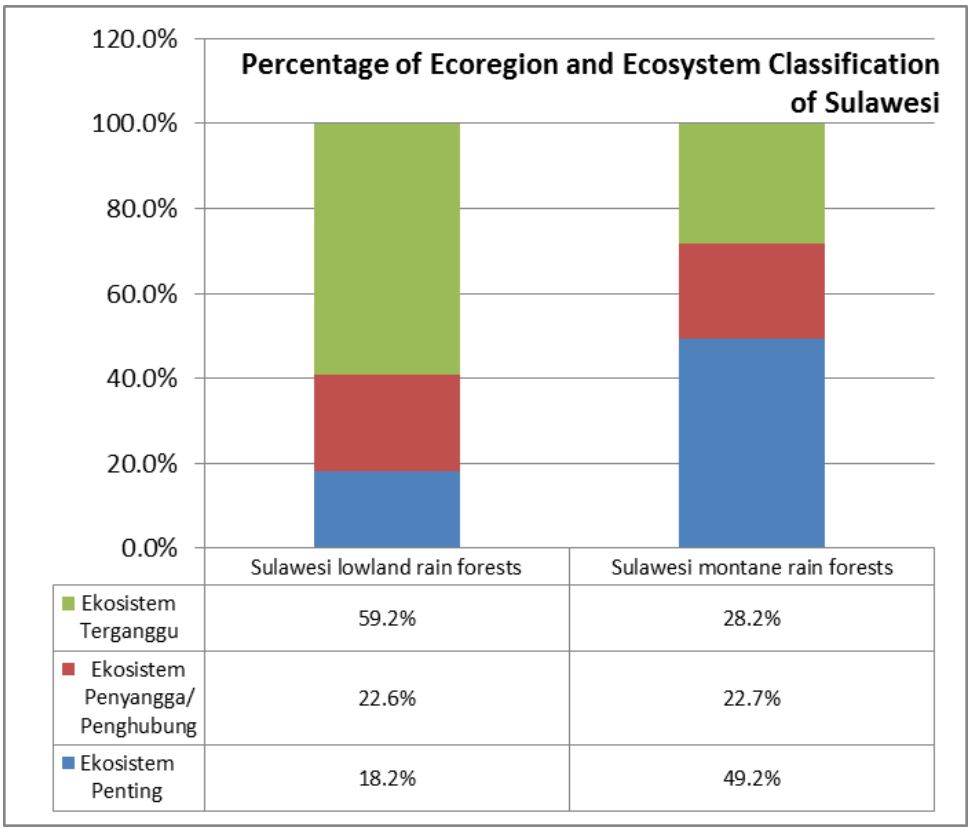


Figure 1: Percentage of Ecoregion and Ecosystem Classification of Sulawesi

Source: 2012. Analysis on gaps of ecological representativeness and management of protected areas in Indonesia. Jakarta: Ministry of Forestry and Ministry of Marine Affairs and Fisheries, Indonesia.

15. While some improvements have been made in terms of general production and product marketing, farming, for the most part, has remained at the subsistence level partly due to a lack of public facilities for post-harvest processing and handling. Local farmers have limited bargaining power and frequently lack secure land tenure.

16. In the context of persisting poverty, it is not surprising that many people residing on the outskirts of the protected areas depend, at least in part, on the forest for their livelihoods. Many perceive it as their heritage, an important resource that they are expected to manage wisely and sustainably as previous generations have done. Non-timber forest products (NTFP), including honey, rattan, bamboo collection and handicrafts, serve as alternate sources of local income. In the future, through better park management, communities may be able to generate additional income through home stay, restaurants, transportation and tourism.

17. Many communities surrounding PAs thus depend on forest resources to satisfy basic needs such as food, fuelwood and timber for housing. Examples include collecting resin from agathis trees and tapping of palm trees (*Arenga pinnata*) for liquid sap to produce palm sugar, both of which are undertaken inside LLNP. In North Sulawesi province, hunting of wild animals for food is particularly extensive.

18. Without well-developed and well-managed park buffer zones, more extensive removals of PA natural resources are likely, as local communities attempt to expand their already existing NTFP activities to more profitable commercial levels. In addition, all across the island, ongoing expansion and improvement of the road system tends to increase access to the park, with corresponding increases in potential threats.

19. Gender is also an important factor to take into account in the above analysis, particularly when attempting to identify community's livelihood options and develop strategies to improve them. A recent study which focused on community livelihood systems in forestry and agroforestry in South and Southeast Sulawesi,[11] identified mixed-gardens, irrigated paddy field and horticulture as the most important land-based livelihood sources for women.

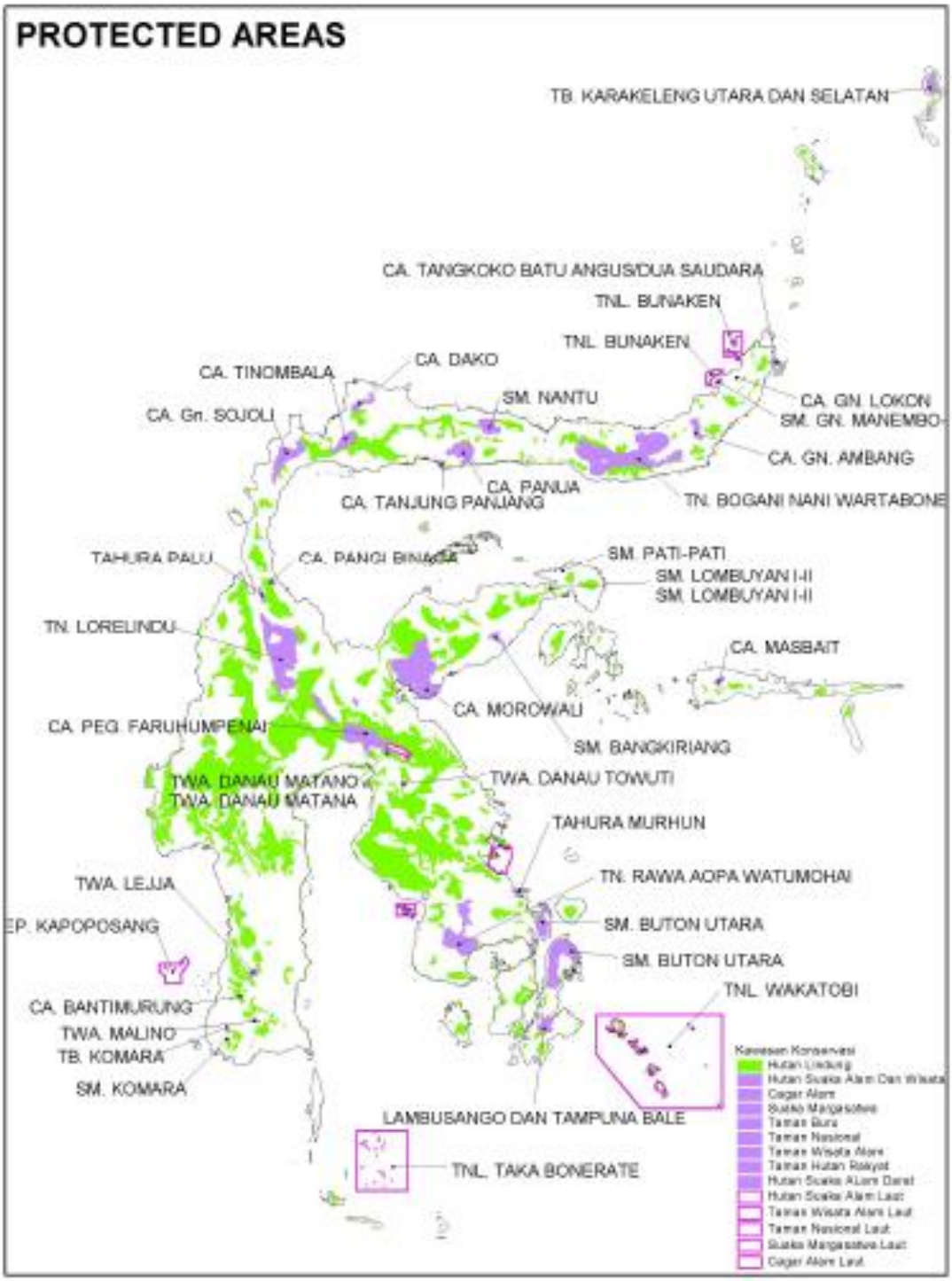
Protected area system: Current status and coverage

20. Indonesia's protected area (PA) system (see **Map 1** below) consists of the following PA types:

    - *National parks* are nature conservation areas with generally pristine ecosystems. They are managed using a zonation approach covering themes such as research, education, cultural support, tourism and recreation.
    - *Strict nature reserves (Cagar Alam)* are sanctuary reserve areas established with the aim of protecting specific flora, fauna and/or ecosystems.
    - *Wildlife sanctuaries* (*Suaka Margasatwa*) are sanctuary reserve areas characterized by their biodiversity and/or designed to protect critical species of fauna.
    - *Nature recreation parks* are nature conservation areas mainly used for tourism and nature recreation.
    - *Game hunting parks* are nature conservation areas established as a venue for regular hunting events.
    - *Grand forest parks* are nature conservation areas intended for the collection of fauna and flora for the purpose of research, science, education, support of culture, tourism and/or nature recreation. This is the only category of PA managed by provincial, as opposed to national authorities (see below).

21. In order to conserve Sulawesi's globally significant biodiversity, the government has established a network of 63 terrestrial PAs and six marine PAs on the island, most of them since 1982. These PAs cover a total area of 1,601,109 ha—representing 9.2% of the island's total land area and 14.2% of total forest area.

[11] Mulyoutami, Elok, Endri Martini, Noviana Khusiyah, Isnurdiansyah and Suyanto. 2012. Agroforestry and Forestry in Sulawesi Series: gender, livelihoods and land in South and Southeast Sulawesi. Working paper 158. Bogor Indonesia: World Agroforestry Centre (ICRAF) Southeast Asia Regional Program.



Map 1: Sulawesi's protected areas

Table 1: Protected areas of Sulawesi by province and type

	North Sulawesi (Sulawesi Utara)		Gorontalo		Central Sulawesi (Sulawesi Tengah)		West Sulawesi (Sulawesi Barat)		South Sulawesi (Sulawesi Selatan)		South-East Sulawesi (Sulawesi Tenggara)		Sulawesi (all)	
Type of PA	Number of PAs	Total Area	Number of PAs	Total Area	Number of PAs	Total Area	Number of PAs	Total Area	Number of PAs	Total Area	Number of PAs	Total Area	Number of PAs	Total Area
Taman Nasional / National Park	1	285,105	1	2,010	1	217,991	0	0	1	43,750	1	105,194	5	654,050
Cagar Alam / Nature Reserve	4	41,233	4	48,847	7	366,758	3	1,454	0	0	3	90,187	21	548,479
Wildlife Sanctuary	2	31,169	1	31,215	6	22,250	1	2,000	1	2,972	5	153,302	16	242,908
Nature Recreation Park	2	1,250	0	0	2	5,250	0	0	8	106,189	2	1,093	14	113,782
Hunting Park (Game reserve)	0	0	0	0	1	5,000	0	0	1	9,780	1	8,000	3	22,780
Grand Forest Park[12]	0	0	0	0	1	7,128	0	0	2	4,195	1	7,877	4	18,480
Totals	**9**	**358,757**	**6**	**82,072**	**18**	**624,377**	**4**	**3,454**	**13**	**166,886**	**13**	**365,653**	63	**1,601,199**

Source: 2012. Ministry of Forestry. Forestry Statistics of Indonesia 2011, p. 73.

[12] This category of PAs is directly managed by the provinces.

22. **Table 1** above provides a breakdown by PA type and province. The breakdown among PA types is as follows: 21 nature reserves, 16 wildlife sanctuaries, 14 nature recreation parks, five national parks, three hunting parks and four forest parks. As shown in **Table 2**, in terms of provinces, Central Sulawesi supports 18 PAs covering over 600,000 ha, or 39% of the total PA area for the island as a whole. This represents some 10% of the province's land area. In percentage terms, however, North Sulawesi maintains the largest share of land as PAs, with nine PAs covering 25.9% of its land area.

Table 2: Percentage of total area of Sulawesi provinces covered under protected areas

Province	Total Area (ha)	Total PAs (ha)	Percent Protected
North Sulawesi	1,385,164	358,757	25.9
Central Sulawesi	6,184,129	624,377	10.1
South-East Sulawesi	3,814,000	365,653	9.6
Gorontalo	1,221,544	82,072	6.7
South Sulawesi	4,671,748	166,886	3.6
West Sulawesi	1,679,619	3,454	0.1

23. Despite the above, large percentages of Sulawesi's critical ecosystems remain unprotected. **Figure 2** below breaks down land area into three types: important ecosystems, buffer/connecting ecosystems and disturbed ecosystems. Each type is then broken down into two categories: outside of protected areas and within existing protected areas. As seen in the table, protected areas covering important ecosystems currently cover about 10% of Sulawesi's land area. However, more than twice that figure, or 22.2% of total land area, consists of important ecosystems that are not currently protected. In the case of buffer or connecting ecosystems, less than one per cent of land area is currently protected, while an additional 29.5% remains unprotected.

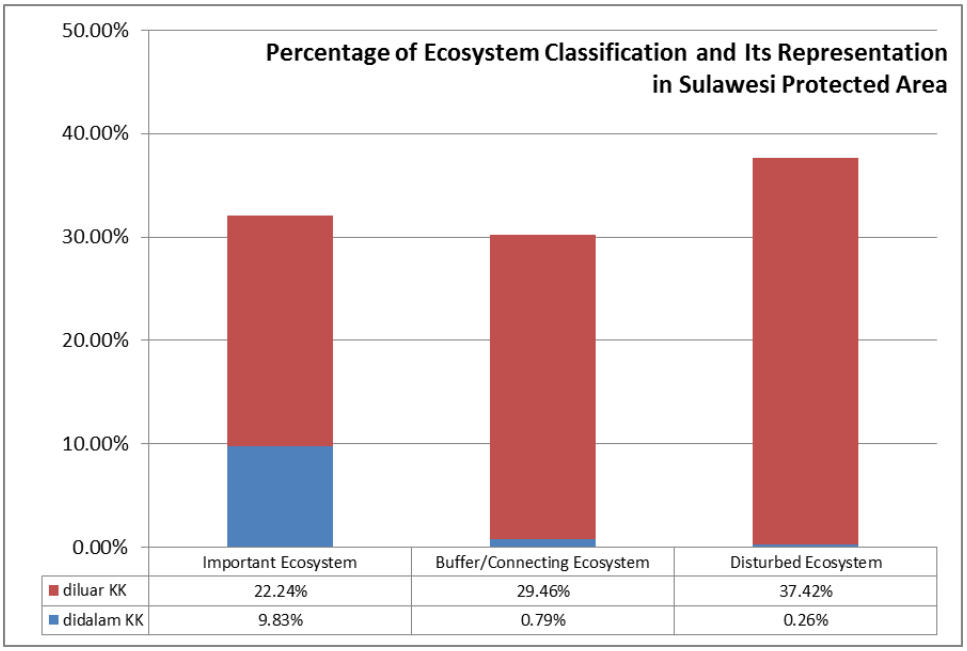


Figure 2. Percentage of Ecosystem Classes Represented in Protected Area

Source: 2012. Analysis on gaps of ecological representativeness and management of protected areas in Indonesia. Jakarta: Ministry of Forestry and Ministry of Marine Affairs and Fisheries, Indonesia.

24. Sulawesi's PA system coverage also varies sharply according to ecoregion: only 5.96% of the island's lowland rain forests are currently protected, while 11.10% of its montane rain forests are protected.

Institutional context

25. The Ministry of Forestry's (MoFor) Directorate General of Forest Protection and Nature Conservation (*Direktorat Jenderal Perlindungan Hutan dan Konservasi Alam - PHKA*) is responsible for planning and implementation of policy related to forest protection and nature conservation, including forest protection, forest fire control, protected area management, biodiversity conservation, nature recreation and environment. The following elements of PHKA's headquarters institutional structure are directly implicated by the present project:

- Directorate for Conservation Areas and Management of Protected Forests develops norms, standards, criteria and procedures for PAs, including Nature Preservation Area and Nature Reserves Area. It has responsibility on PA alignment, wetland monitoring and development of buffer zones surrounding national parks.
- Directorate of Biodiversity Conservation, which has 70 staff, is charged with safeguarding biodiversity. The Directorate also develop norms, standards, criteria and procedure for implementing of biodiversity conservation including species and genetics.
- Directorate of Forest Protection and Investigation is charged with law enforcement and forest crime prevention. The Directorate, comprising 70 staff at HQ, collates reports on illegal logging, poaching, forest arson, encroachment and illegal mining cases, provides training for forest rangers and manuals for wildlife identification. Around 1,000 forest rangers work in Sulawesi, about half of whom are protected area rangers.
- Directorate of Forest Fire Control is charged with controlling forest fires, particularly within conservation areas. The Directorate develops norms, standards, criteria and procedures for fire management for National Parks and Natural Resources Conservation Agencies. To control forest fires, the Directorate emphasizes prevention, suppression and post-fire activities.
- Directorate of Nature Recreation and Environmental Service is charged with development of norms, standards and criteria in nature recreation park and procedures related to environmental services within PAs. They are also responsible for planning and implementing policy related to ecotourism in PAs.
- Secretariat of PHKA is charged with supporting all the Directorates as well as Natural Resources Conservation Agencies and National Parks. This division is responsible for administration, including budgeting, human resources, monitoring and evaluation and regulation. All technical implementation units–including this project's three target demonstration sites—work closely with the Secretariat, which manages their budgets and human resources.

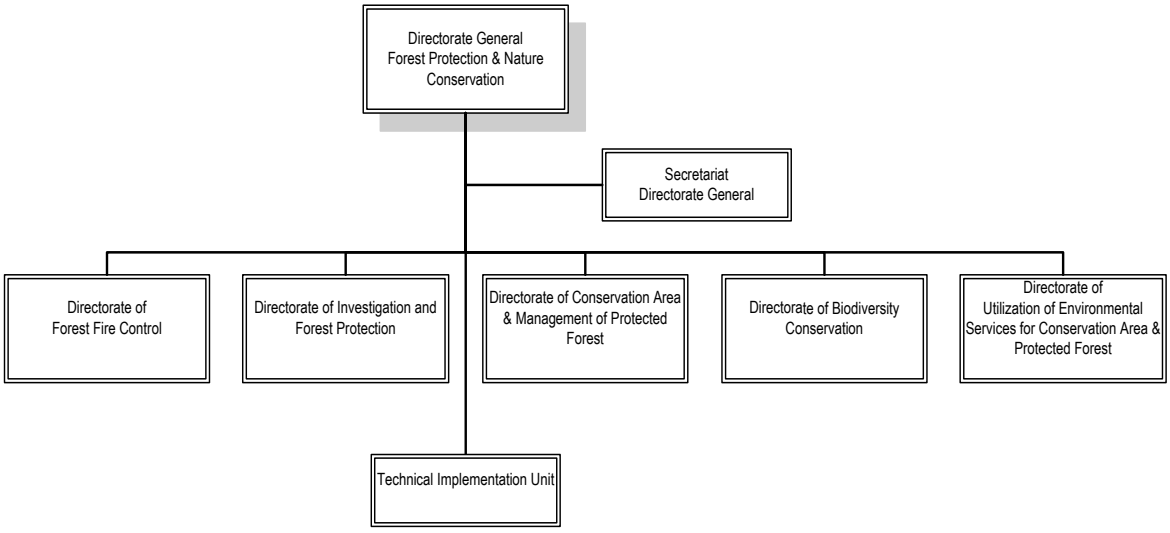


Figure _: Organisational Structure of DG PHKA (Ref: Ministerial Decree P.40/Menhut-II/2010 & P.33/Menhut-II/2012).

26. In Sulawesi, the following institutions are directly involved in managing PAs:

- Each national park is managed by a national park management agency, which reports directly to DG PHKA through Directorate for Conservation Areas and Management of Protected Forests in Jakarta. There are two types of national park management agency: (i) Grand Agency for National Park (Balai Besar Taman Nasional – BBTN) and (ii) Agency for National Park (Balai Taman Nasional – BTN). BBTN is headed by a Director (echelon II) and BTN head by an Agency Head (echelon III). Bogani Nani Wartabone NP at Gorontalo Province is a BTN while Lore Lindu NP is a BBTN. There are various implications associated with the types involving management, human resources and budgeting.
- Other types of PAs—namely nature reserves, wildlife sanctuaries and hunting parks—are managed by provincial-level Agencies for Natural Resource Conservation (*Balai Konservasi Sumber Daya Alam – BKSDA*), which are also branches of the PHKA. Here again, there are two types of agencies: (i) Grand Agency for Natural Resources Conservation (Balai Besar Konservasi Sumber Daya Alam – BBKSDA), and (ii) Agency for Natural Resources Conservation (Balai Konservasi Sumber Daya Alam – BKSDA). Their main responsibilities are management of wildlife, nature and game reserves, as well as management of threatened species located within the broader landscape. Of the three provinces having target sites, only two–North Sulawesi and Central Sulawesi—have a BKSDA.
- Grand forest parks are the only PA category managed directly by provincial governments. In the case of Sulawesi (see **Table 1**), this means that 59 out of 63 protected areas, covering 98.8% of total PA area, is managed by PHKA rather than by the provincial governments.

27. PA system sustainability depends not only on effective management of PAs themselves, but also on the management of surrounding areas, including buffer zones and beyond. For example, unlike nearly all protected areas, protection forests set aside for watershed management and erosion control, as well as production forests, are managed by the Forest Agencies of the Provincial Governments, which report to the respective Provincial Governors. Expansion of the PA system typically therefore involves

both a shift in status, e.g. from production forest to nature reserve, as well as a shift in management responsibility from provincial to Federal level. Both landscape-level management as well as the process of PA expansion therefore depend on close co-operation among PHKA, national subsidiary organizations (e.g., National Park agencies) and provincial forest agencies.

Policy and legislative context

28. Law No. 5/1990, known as the Natural Resources Conservation and Ecosystem Law, was the first law put in place following Indonesia's independence to cover ecosystem and species-level conservation. The law provides for two types of protection. The first of these is area protection, covering the establishment and management of two broad categories of protected areas: (1a) Nature Reserves and Wildlife Sanctuaries *(Kawasan Suaka Alam)*, and (1b) Natural Conservation Areas *(Kawasan Pelestarian Alam)*, including Natural Parks, Recreation Parks and Grand Forest Park[13].
29. Law 5/1990 also extends protection to individual species, by regulating the identification of endangered status, while enforcing sanctions for endangered species-related crimes.
30. One important aspect of the legal and policy context relates to the collaborative management of natural resources, including partnerships and other forms of co-operation between local communities and government. Three policy areas may be identified:

    - Policy facilitating the development of collaboration/partnership by providing legal instruments for co-operation within national parks.
    - Forestry Ministry Regulation No. P.19/Menhut-II/2004 regulates collaboration/partnership within PAs other than national parks, i.e. nature reserves and conservation areas.
    - Policy regulating community participation in natural resource management, such as forestry regulations, including Forestry Law No. 41 / 1999, PP No. 32 /2002, as well as regulations on environmental management, spatial planning, water resource management, fisheries, etc.

31. Activities such as mining are prohibited since intact ecosystems are required in conservation forest area management.
32. Regarding ecosystem management, authority remains under national or central government despite the fact that Indonesia has declared an era of autonomy (see Law 32 of 2004 and Law 12 of 2008).
33. Under the Local Government Law, which also regulates issues related to regional autonomy, forestry is unfortunately not awarded a high priority. For example, local governments are able to choose whether or not to have a Forest Service or Forestry District/Region Office in their district/region. Many local governments remain unenthusiastic about the concept of protected areas because: (i) they generate no funds for local revenue and local expenditure budgets, and (ii) they are under national-level control by the MoFor.

[13] Under the Act No. 5 of 1990, there are six categories of PAs; i) National Park – IUCN Category; ii) Nature Reserve – IUCN Category 1; iii) Wildlife Reserve – IUCN Category 4; iv) Hunting Park – IUCN Category 5; v) Forest Park – IUCN Category 5; vi) Nature Recreation Park – IUCN Category 5.

34. To empower legal enforcement at PAs, MoFor initiated Government Regulation No 45/2004 on Forest Protection. This regulation provides forest rangers with a legal umbrella to protect PAs from encroachment, illegal logging, forest fire, etc.

35. Government Regulation No. 36/2010 concerning ecotourism at National Park, Grand Forest Park and Nature Recreation Park provides clarified procedures for developing ecotourism at PA. The regulation is designed to encourage third party investment in ecotourism at PAs while contributing to lcoal economies without sacrificing nature.

36. Finally, in order to manage conservation areas, the Government issued Government Regulation No 28/2011 concerning nature preservation area and nature reserves area as a replacement for No. 68/1998. This regulation is designed to encourage PA management in ways that both conserve biodiversity and help to increase the welfare of local communities.

THREATS, ROOT CAUSES AND IMPACTS

37. Despite the above-described system of protected areas, legal efforts, strategies, etc., much of which has been established since the 1970s, Sulawesi's biodiversity remains severely threatened and fast degrading due to a number of anthropogenic threats. Protection and management of existing PAs has not been adequate to prevent extensive encroachment and damage within PA boundaries, whilst natural areas beyond PA boundaries have been even more rapidly degraded as a result of logging, conversion, mining, fire and hunting. This latter process only serves further to degrade the PAs themselves, as they become isolated and lose connectivity with adjacent formerly natural areas. Rural populations have grown rapidly. Poverty levels remain high and there is substantial pressure on resources of wood and other forest products or land for extension of agriculture—originally coconuts but increasingly also cloves, coffee and cacao.

38. Such developments have led to the fragmentation and degradation of natural areas and the isolation of PAs within landscapes. Only the largest PAs contain viable representative ecosystems and some of the smaller yet important reserves will only survive with strong protection and specific management focused on target species and landscape-level connectivity.

39. Key threats, drivers and associated causes are described in greater detail below. Table 3 below summarizes the threats facing Sulawesi PAs as a whole, while Table 6 presents specific information related to threats facing project target sites.

Habitat / land use change

40. As noted above, approximately 11.58 million ha, or around 67% of Sulawesi, is classified as forested. However, the majority of the forest is considered severely degraded. Since the 1980s, the island's natural habitat has been destroyed and degraded on a large scale, primarily due to logging and agricultural conversion. As much as 95% of Sulawesi's mangrove forests and lowland forests were disturbed in the span of less than 10 years up to the early 1990s. Between 1980 and 2008, 3.49 million ha of forests were lost, accounting for nearly a 30% reduction in the forest area.

41. The key driver for deforestation in Sulawesi is smallholder agriculture, in particular the spread of cash crops, mostly cacao. Smallholder cacao has generated major agrarian change over the last two decades, as rapid expansion of cacao under the so-called "chocolate revolution" has replaced subsistence-based

local economies with market-integrated and cash-driven mechanisms. Encroachment into PAs by local communities for smallholder agriculture is very common on the island.

42. Logging has also been an important factor in deforestation. Forest fragmentation severely undermines not only biodiversity health but also the quality and quantities of ecosystem services such as water provision and regulation, soil conservation and carbon sequestration. Residential and commercial developments represent additional drivers of habitat conversion, particular when they occur along PA boundaries close to villages. Development of infrastructure, such as roads and hydroelectric dams, has also led to habitat conversion and fragmentation.

Overexploitation

43. There is widespread disregard for PA boundaries and many natural resources are overexploited. Illegal logging—mainly small scale timber removal for housing, boats and fishing equipment—and illegal harvest of forest products such as rattan, bamboo, and sugar palm sap is extremely common. These illegal activities remain a serious threat to the integrity of remaining forest ecosystems.

44. Wildlife trade poses a serious threat to the preservation of wildlife in Indonesia. It is estimated that some 95% of animals sold in markets are caught from nature, rather than coming from captive breeding. More than 20% of animals sold in the market died due to improper transport. About 40% of captured wildlife die from the process of capture, inadequate transport, cramped cages and lack of food.

45. Bushmeat hunting / poaching is a major issue threatening a number of Sulawesi's endangered species, including anoa, babirusa and black crested macaques. In a single market in North Sulawesi, up to 90,000 mammals are sold per year. A significant portion of captured wildlife is related to consumption for ritual or religious purposes. In Central Sulawesi, the largely Christian local population has a strong taste for bushmeat, as evidenced by its high prices in the Langowan and Tomohon bushmeat markets). One of the greatest delicacies—its consumption representing a symbol of status and affluence—is the black crested macaque, a primate endemic to Sulawesi whose population has declined by an estimated 80% in the past three-four decades. In addition to its highly prized meat, macaque fur is used in traditional dancing to signify bravery and their skulls adorn masks and costumes.

46. The endemic megapode Maleo (Macrocephalon maleo) is also under heavy pressure, since its eggs are poached.

47. Details regarding the level of threat and the specific species being impacted at target project sites are shown in Table 6 below (see rows on hunting and trapping). It should be noted that, unlike in some areas of Indonesia, the majority of the illegal trade in wildlife is associated with local consumption, i.e. it is not traded internationally. This has implications for the kinds of enforcement measures needed to address the problem.

Invasive Alien Species (IAS)

48. While IAS is a potential threat to any island in Indonesia, the seriousness of the threat to agriculture, forestry and biodiversity in Sulawesi is still not well understood. Nevertheless, it does appear that in some cases, land rehabilitation patterns are dominated by the introduction of alien species rather than endemic or other local species. This may be due in part to the fact that certain alien species may be

faster growing and thus more profitable. However, such species may be of limited value to biodiversity, particularly to key threatened species such as anoa and babirusa. Several invasive species are believed to threaten project demonstration sites (see Table 6 below)

Pollution

49. Pollution and habitat destruction from mining (gold, copper, nickel etc.) pose a threat to biodiversity and ecosystem health. Gold mining in and around PAs in Gorontalo and North Sulawesi provinces poses a growing threat, increasing encroachment and contaminating water. Reports from project demonstration sites indicate problems such as lake siltation, agricultural chemical pollution and mining.

Table 3: Summary of threats, drivers and causes facing Sulawesi's PAs

Threats	Drivers	Causes
Habitat conversion and degradation	• Regional expansion (village/ district) • Local migration: buying and selling of land by local communities to the newcomers. • Conversion to agricultural land, e.g. for corn production. • The continuing impact of transmigration program	• PAs become primary target of resources to generate local revenue. • Local people's understanding of natural resources and the ownership of biodiversity resources as common property); • Poorly enforced regulations, e.g. related to ban on leasing of protection and production forestland to mining operations. • Rising prices of plantation commodities (coconut, nutmeg, coffee, cocoa, palm oil). Income from cocoa provides much higher economic benefits. South Sulawesi is the best cocoa producer in the world. • No clear/direct benefits of the forest for the community in and around PAs, most of whom live under poverty line.
Overexploi-tation of biological resources	• Hunting wildlife for subsistence purposes • Hunting wildlife for commercial purposes.	• Cultural factors, e.g. related to consumption of endangered species • Commoditization of wildlife • Reduced wildlife supply in landscape leading to increased consumption of some endangered species found within PAs
Invasive alien species	• Land rehabilitation pattern dominated by certain alien species eliminates endemic species and diversity • National programmes • Target setting of land rehabilitation is not proper, such as the reed as the habitat of anoa, babirusa.	• Some alien species are faster growing or more profitable and thus encouraged
Pollution	• Solid waste by households and businesses • Traditional mining • Mass tourism activity	• Inadequate facilities for proper disposal • Poor regulation and governance, e.g. of prohibited activities (mining)

INTRODUCTION TO PROJECT SITES

50. While Components 1 and 2 of the project (see below) will be of general relevance to Sulawesi's PA system as a whole, Component 3 will focus specifically on three demonstration sites, where it will

demonstrate and/or upscale approaches to threat removal and collaborative governance. The sites are as follows:

- LORE LINDU NATIONAL PARK (217,992 ha): The PA is the 2nd largest terrestrial national park in Sulawesi and contains a good representation of the island's unique biota and harbours numerous rare species, including 77 bird species endemic to Sulawesi. 40 species of mammals have been recorded, 31 of which are endemic. Globally significant species include the mountain anoa, babirusa, two species of Tarsier, the Tonkean Macaque and two species of marsupial Cuscus, knobbed hornbill (r*hyticeros cassidix*), and Sulawesi hawk- eagle (*spizaetus lanceolatus*). The Park is listed by IUCN as a centre of Plant Diversity, by Birdlife International as an Endemic Bird Area, and by WWF as a Global 200 eco-region. The PA includes Important Bird Areas and was declared a UNESCO Biosphere Reserve in 1978.
- BOGANI NANI WARTABONE NATIONAL PARK (287,115 ha): The PA is the largest terrestrial national park in Sulawesi and has 24 species of mammal, 125 species of bird, 11 species of reptile, 2 species of amphibian, 38 species of butterfly, 200 species of beetle and 19 species of fish. A species endemic to this Park is the Bone bat (*Bonea bidens*). Cinnabar Hawk Owl (*Ninox ios*), which was only described scientifically in 1999 from a specimen collected from the park. Almost all of Sulawesi's endemic mammals and birds are found within the PA. Important Maleo nesting sites.
- GREATER TANGKOKO CONSERVATION AREA (8,665 ha): The area is made up of several protected areas and surrounding landscape, including nature reserves, protection forests and recreation forests. The landscape is significant due to the support it provides for high densities of some of Sulawesi's most iconic endemic species, including lowland anoa, maleo bird, tarsier, giant civet and others, as well as nearly the entire world population of crested black macaque *macaca nigra*.

51. Preliminary habitat intactness scores for each site are shown in Table 4 below. Table 5 shows threats and ecosystem health indices per site while Table 6 provides additional details regarding threats by site. Further details about the above sites are found in the following locations: (i) discussion of barriers and associated baseline activities at the sites; (ii) Site landscape profiles: Annex 7; (iii) Management Effectiveness Tracking Tools for each site: See Annex 6, Tracking Tool.

Table 4: Preliminary Habitat intactness scores for 4 landscapes East Minahasa, Bolaang Mongondow, Gorontalo, and Lore Lindu

Indicator of habitat intactness[14]	Landscape name			
	East Minahasa	Bolaang Mongondow	Gorontalo	Lore Lindu
Gross habitat loss (ghl)	0.6	0.9	0.9	0.9
Altitudianl bias (ab)	0.8	0.95	0.95	0.95
Diversity loss (dl)	0.75	0.9	0.9	0.9
Fragmentation effect (fe)	0.85	0.95	0.95	0.95
Corridor effect (ce)	0.75	0.9	0.9	0.9
Degree of protection (dp)	0.8	0.85	0.85	0.85
Habitat intactness index (hii) = Total product of above	18.5%	55.9%	55.9%	55.9%

Table 5: Threats and ecosystem health indices for project sites

Site name	Lore Lindu NP	Bogani Nani Wartabone NP	Tangkoko complex
Threats score	23	28	31
EHI score	0.68	0.55	0.48

[14] For additional details and breakdowns of these indicators, see MacKinnon, John. June 2013. Consultancy report of biodiversity monitoring consultant for Enhancing the protected area ssystem in Sulawesi (E-PASS) for Biodiversity Conservation.

Table 6: Threats facing project demonstration sites

Threat type	Lore Lindu NP	Bogani Nani – Wartabone NP	Gn Tangkoko NR complex
Habitat loss and/or fragmentation	1 (5% loss in 5 years)	2 (4,172 ha dalam 16 tahun)	3 small size, very isolated and encroached by ladangs
Encroachment	1 (4% loss in 5 years	2 ditto	2 encroached from four desa
Conversion to permanent agriculture	1 (2% in 5 years)	1 (small area, most encroachment revert to belukar)	2 coconuts, cloves, nutmeg
Illegal logging	1 small scale illegal cutting	2 (small scale illegal action planks and poles drawn out by cows) especially in Gorontalo southern sections	2 Cutting large trees for boats and some timber. Timber scarce and expensive in Minahasa
Settlements	1 encroachment near Lake Lindu and most boundaries	0 no permanent settlements	1 Pinangunian and Casuari
Infrastructure development	1 Road across northern sectors	1 Roads from Dumoga to south coast and from Pinogu to Tulabolo.	1 Road improvement increases pressure
Rattan collection	2 widespread and serious	2 widespread illegal collecting of several species and wild stock reduced	0 very little rattan in forest
Bamboo collection	1 Minor extraction of small species villages grow enough large species	1 Less serious as extensive bamboo planted in villages	1 Collection of wild bamboo for cooking in at feasts
Palm leaves/trunks collection	2 woka leaves. Trunks of Livistona and Pigafetta used for timber	1 Heavy collecting but only take leaves used for bunkus food and red sugar	1 Woka leaves
Saguir harvesting	2 widespread for saguir and red sugar	1 Small scale but mostly outside boundaries and plenty of trees in villages (mostly for red sugar)	1 saguir for red sugar and drink
Egg collecting (maleo, turtles)	2 maleo eggs harvested from most known nesting areas	2 Three sites well protected but other sites undefended and population now reduced	2 maleo getting rare, scrubfowl and turtles (too many biawak also problem)
Hunting	1 locally serious but area is very big	2 Serious problem of shooting (air guns) and spearing at night with dogs. – babi, bairusa, anoa, monkeys,rangkong,pigeons etc.	3 All kinds of hunting and close to Manado markets
Trapping	2 snares and traps set for birds and mammals	2 Snares set in long lines (anoa, rusa, babi hutan, babirusa, rats, squirreal, junglefowl, monkeys, snakes, cuscus, kalong!	3 trapping monkeys and snares for ungulates etc.
Mining in PA	1 (small scale illegal)	3 – Gold in Toraot and Motomboto.	0
Pollution from mining	0 not significant	2 use mercury but pollution mostly outside kawasan	0
Forest fires	1 rare as forest rather wet	1 small occasional fires mostly outside boundary	3 Extensive forest loss due to fires in 1999 and 2003 and 2011
Tourism impacts	1 little control in place. Current developments not well planned	1 small because numbers not high	2 litter, disturb tarsiers, taming of monkeys, noise and little control
Alien Invasive species	1 Lantana, Eupatorium and Piper common but only at edges of forest	1 Some plants (Pinus, Casuarina, Caliandra), and bulbuls around edges of park	2 Jati, coconuts, lantana, Piper aduncum, alang-alang, Flame of forest trees.bulbul
Oil exploration	0	0	0
Climate change	0 not yet evident	1	1 some data
Zoonoses	1		1 interaction between man and monkeys
Total threats	23	28	31

Note: Threat severity: 0 = none, 1=slight, 2=serious, 3=severe.

LONG-TERM SOLUTION, BARRIERS AND ASSOCIATED BASELINE ACTIVITIES

52. The long-term solution to conserving Sulawesi's biodiversity is an improved PA system that is well integrated into its surrounding landscape, with the capacities and financial resources to safeguard biodiversity from existing and future threats. Baseline activities, although significant, are deemed insufficient to achieve the above solution. These activities are described below, together with barriers to achieving the solution that are likely to persist despite these actions. Additional details regarding baseline activities and barriers at project demonstration sites are presented in the site landscape profiles (see Annex 2).

53. This section presents the barriers and associated baseline activities in three thematic areas that directly underpin the ability to achieve the long-term objective defined above. The barriers are:

    (i) Insufficient systemic and institutional capacities for planning and managing Sulawesi's PA system

    (ii) Inadequate financial sustainability of Sulawesi's PA system

    (iii) Persisting threats and incomplete systems for collaborative governance in PAs and buffer zones

1. Insufficient systemic and institutional capacities for planning and managing Sulawesi's PA system

54. Although the Indonesian Government has established an impressive system of national PAs, which includes the 63 terrestrial PAs in Sulawesi, management of the PA network as a coherent system geared towards biodiversity conservation remains weak. In 2010, all 50 national parks (NPs), including all five terrestrial NPs in Sulawesi, were assessed using the Management Effectiveness Tracking Tool (METT). This review found that even relatively well-staffed and funded national parks had serious deficiencies in terms of the effectiveness of PA management, which were enabling constant encroachment and other illegal activities associated with high rates of deforestation and degradation.

55. The remainder of this section describes baseline areas of activities aimed at increasing PA management capacities, together with associated barriers.

RESORT-BASED MANAGEMENT

56. In 2011, PHKA initiated a major reform in management of national parks, known as the Resort Based Management (RBM) system. 15 RBM constitutes PHKA's core strategy for enhancing the management effectiveness of the PA system. It reflects a widespread recognition that the PA management system is fundamentally weak and in need of a thorough overhaul, and that this can best be achieved through a bottom-up approach.

57. The RBM system focuses on improving the working of the smallest field operational units based within national parks, which are defined and designated as "resorts". Resorts represent the smallest units of each National Park and resort staff—typically including a ranger and a forest technician—are

[15] See the Letter of General Director of Protection and Nature Conservation Number S. N 295/ IV-KKBHL/2011 issued on 27 June 2011, Annex 13.

directly responsible for this defined area. Resort-level performance can be assessed based on various factors, including field monitoring, law enforcement activities, leadership and work ethics on the ground. However, the ability to effectively assess resort performance depends on having in place a robust and effective reporting and evaluation system between the resort and the regional and national headquarters—which in most cases has not yet been established.

58. In April 2011, PHKA issued draft RBM guidelines. These outlined an RBM management planning system, local-level operating mechanisms and a monitoring and evaluation system. PHKA plans to extend the implementation of the RBM system to 50 national parks across Indonesia by 2014, along with expansion over time to other PA categories. As far as Sulawesi is concerned, the plan includes all four of the island's national parks and at several additional PAs.

59. Key tasks related to the establishment and operation of individual resorts include the following:

- Establish each resort through organizational development, human resource enhancement, infrastructure provision, and adequate operational funds;
- Carry out mapping and assessment of the bio-physical condition of the national park area, the condition of social, economy, and culture of the community, and the condition of the local area development;
- Improve the resort's performance by improving working relations, governance and operational procedures of the resort officers based on their duties and functions;
- Build the national park data base through the development of management information systems,
- Increase public awareness of national park management through improving understanding of the natural resources conservation,
- Increase support of the parties for the management of national parks.

60. Stages in resort establishment, which may serve as useful process indicators, have been defined as follows[16]:

0. No RBM implementation
1. Has been divided into resorts (no infrastructure or officers)
2. Resort infrastructure (no officers)
3. Infrastructure and officers (not yet routine)
4. Officers are routinely in the resort and doing the surveillance job (passive)
5. Officers are routinely present in the resort and actively performing full range of prescribed tasks, i.e. surveillance, flora and fauna monitoring, data collection, community outreach, etc.
6. Resort data and information are used on an on-going basis to prepare and update management plan and policy arrangements.

[16] A separate, detailed breakdown of RBM establishment indicators is presented in **Annex 12**.

61. The resort system imposes a higher degree of financial responsibility, autonomy and accountability. It also has implications for cost effectiveness of PA management. These aspects are discussed further in the section below on financial sustainability.

62. In the two years since the RBM guidelines were issued, at least 32 national parks (NPs) across Indonesia, and a number of other PAs, have taken steps towards RBM implementation. These include three of Sulawesi's national parks, namely: (i) Taman Nasional Rawa Aopa Watumohai, (ii) Taman Nasional Bantimurung Bulusaraung, and (iii) Taman Nasional Lore Lindu (one of the project demonstration sites—see below). In these NPs, a range of activities has already taken place, including: training activities, team building exercises, development of information systems, institutional reforms at the resort level, facilities and infrastructure improvements and human resources changes, e.g. through outsourcing.

63. Despite the above, progress in RBM implementation—in Sulawesi and elsewhere—has been slow and motivation of field staff remains low and the skills base insufficient. Essential equipment such as vehicles, motorbikes, GPS etc. is also lacking. Insufficient institutional capacity at the HQ level as well as at the local level hinders effective implementation. There are no existing management standards or PA performance monitoring systems to ensure that individual PAs and resorts are producing the results that are expected to contribute to the overall biodiversity conservation efforts of Sulawesi and the country as a whole. Required field-level operations and job descriptions of individual staff are ill defined and there is no clear accountability system in place to monitor each resort, or at the PA, provincial agency or national level. There are no clear capacity development strategies and action plans for overhauling PA management, nor incentive mechanisms targeting field-level staff. Finally, full implementation of RBM depends on a Ministerial Decree, which remains pending.

MONITORING AND DATA MANAGEMENT RELATED TO SPECIES AND HABITAT CONDITION

64. Baseline biodiversity status monitoring in Indonesia can be classed into five categories:

- Reporting within the PHKA system from site level to *kabupaten* to province to national levels.
- National academic assessments by relevant units of the Indonesian Institute of Science (LIPI). This includes the collection of field specimens, museums, herbaria, taxonomic revisions, production of keys, lists and identification guides and the development of a national biodiversity database.
- Independent interest monitoring, studies and assessments by local NGOs and universities. Examples include regional summaries of bird status by Birdlife Indonesia including identification of endemic bird areas (EBAs) and important bird areas (IBAs).
- International assessments by IUCN (Red Listing), CITES (traded species), RAMSAR (wetlands), CBD Clearing House Mechanism (CHM) and individual international programs (GEF, TNC, etc.).
- Gross monitoring of land cover using remote sense imagery by both national and international agencies.

65. In very few instances are species inventories carried out over time, which is a problem given that trend data reflects status better than absolute total population estimates. Efforts have been made to document status and populations of a few species. These include, in the case of Sulawesi, Maleo birds at specific nesting areas and Babirusa at Nantu. In addition, efforts to monitor populations of multiple species at

Tangkoko were undertaken in 1977 and 1979 and repeated a decade later, but have not been maintained.

66. The diverse and confusing profusion of monitoring effort leads to duplication, overlap and serious gaps in information (some taxa, some regions and trends over time). Data is scattered, not well shared and of variable date, reliability and standards. As such it is easy to ignore.

67. Monitoring of habitat is also patchy and unsystematic. UNESCO has published maps of distribution of different vegetation cover in Indonesia prepared by Van Steenis in the 1960s and by Whitmore in the 1990s. FAO/PPA National Conservation Plan of 1981 maps all parts of Indonesia by current forest cover and type on the basis of then newly available satellite imagery and aerial photos as held at BAKOSURTANAL. MoFor has subsequently published maps and figures of forest cover at different scales and at various dates. Several papers have traced the loss/change in habitat cover for specific regions or specific vegetation types (e.g. mangroves).

68. Closely linked to problems with monitoring are problems with the management and availability of collected data. No systematic database exists for protected areas in Indonesia, though, as noted, a lot of basic data is held in scattered locations. PHKA has only limited knowledge of species status; significantly more data is held by academic agencies and NGOs.

69. Different universities, and conservation NGOs have accumulated important data collections for focal species or for certain study localities. These may form good basic inventories for sites on an ad hoc basis. Such data usually consist of incomplete locality lists of some taxa. Summaries of local conditions are found in original site management plans developed by WWF/PHKA since the 1980s and more recent survey reports for most parts of the country by BirdLife International/Birdlife Indonesia or by TNC, Operation Wallace (based within Bogani Nani Wartabone NP), Wallacea programme, Darwin Initiative projects, etc. BirdLife maintain locality point distribution maps for all threatened bird species based on all published records, known specimens and recent surveys.

70. For Sulawesi, collection density is adequate for Manado and Palu regions, but sparse for Gorontalo and Bolaang Mongondow. The Herbarium also has lists of vernacular names used for common plants in different provinces of Indonesia. The National Biological Institute, located in Bogor, holds zoological collections. A more recent database for holding biological distributional data has been established at Cibinong, but access to the database is restricted. Data is mostly very outdated, not synthesised or published and not refreshed by any systematic inventories or monitoring process.

71. The Directorate of Biodiversity Conservation has recently launched a project to document the status of 14 key national priority animals. Four of these are found in Sulawesi – Lesser Sulphur-crested Cockatoo, Anoa, Babirusa, and Maleo. A small publication presents distribution maps and a status summary, but the initiative is not backed up by any systematic efforts to update data or continually monitor these species in any systematic way. However, there are plans to design and implement just such a monitoring system.

72. In conclusion, there is currently no systematic Sulawesi-wide monitoring system of biodiversity, key species and habitat conditions, supported by sound science and systematic surveys. There is a critical need to establish two ends of such a biodiversity monitoring system: a) regular collection of data in the field re. numbers and status of selected species at selected sites, and b) collation of such data in regional and national PA databases. This should include improve harmonization of biodiversity monitoring, data sharing, better aggregation of different data types and better reporting. Data should be shared and openly available (although it is recognised that some data is sensitive and may require

some level of guarded access). Such a system—which could be based in part on virtual connection between existing data holders—could go a long way towards providing reliable data for adaptive management of PAs and for decision making, including financial priorities, related to PA and species management.

SURVEILLANCE AND CONTROL OF POACHING AND WILDLIFE TRADE

73. As described above in the threats section, and specified with respect to target project sites in Table 6, bushmeat hunting / poaching is a major threat to the sustainability of Sulawesi's protected areas. It is affecting threatened and endemic species, as well those that have not yet been accorded protected status.

74. In terms of setting priorities for species requiring enhanced protection, the Directorate of Biodiversity Conservation has selected 14 target species, including the above-mentioned four Sulawesi endemic species. The Directorate is in the process of developing species action plans for each of the 14 priority species. However, the scientific expertise within the Ministry is very weak and there is no database or systematic biodiversity monitoring mechanisms (see above) to support the design and implementation of these action plans.

75. Significant NGO efforts are underway aimed at addressing the illegal wildlife trade in North Sulawesi. One NGO tried to reduce some of the hunting pressures on macaques by producing artificial skulls looking identical to the real ones, so the replicas could be used for traditional costumes. Other NGOs around the Tangkoko Reserve work to conserve the macaques. For example, the Selamatkan Yaki project emphasizes environmental education to explain to consumers that if they do not reduce hunting to sustainable levels, all the macaques will be gone and there will be no more meat or and no more fun of hunting the primates, a factor which many hunters identified as an important motivation. Selamatkan Yaki has also tried to involve the local Christian church in the campaign for environmental conservation, as well as to get influential community leaders to declare that macaque meat, unlike pork, is not crucial for celebrations. But these demand reduction efforts, as imperative as they are, are painstaking and slow-going.

76. According to Act No. 5/1990 on the Conservation of Biological Resources and Ecosystems, trade of protected wildlife is a criminal offense that is punishable by five years imprisonment and a fine of 100 million rupiahs. In order to provide greater protection to the species and its habitat, the Indonesian government is in the process of reforming species protection laws, including proposed heavier sanctions for the perpetrators of wildlife-related crimes. However, enforcement of prohibitions on poaching, encroachment, wildlife trafficking etc., remains weak, with the official database picking up only a fraction of incidents. Existing regulations on endangered wildlife species are considered too lenient, and fines barely cover the cost of animal rehabilitation. Illegal trade in wildlife, including protected species, is in part linked to lack of public awareness of their importance including the fact that many species are threatened with extinction.

77. PHKA's Directorate of Forest Protection and Investigation, which is responsible for addressing the problem of illegal wildlife trade, has prepared a strategic plan based for this purpose. Effective control of the illegal wildlife trade will require good cooperation between the government, NGOs, and communities living around the forest. This includes monitoring the hunting and illegal wildlife trade, capacity building of law enforcement officers, especially those related to the regulation of species protection and an understanding of the wildlife ecology, increased cooperation between the Ministry

of Forestry with law enforcement officers and other relevant institutions, increasing cooperation in the regional and global levels, as well as the empowerment of the community living around the forest. Together, these kinds of steps can help to break the chain of the wildlife trade.

PA SYSTEM SPATIAL ARRANGEMENT, ECOSYSTEM COVERAGE, ETC.

78. As noted above, management effectiveness of Sulawesi's PAs has substantial room for improvement, and RBM represents a key element in the strategy to do so. However, even assuming dramatically improved management of the existing PA system, there would remain the problem that the system is not fully representative of the wide range of ecosystem types, making it a systemically weak PA network. Thus, a recent PA gap analysis found out that more than 94% of the lowland rain forests and 88.9% of the montane rainforest remain outside of the PA system. More than 59% of the lowland rainforest ecosystem has been disturbed as well as over 49% of the montane rainforest ecosystems.

79. In addition to the above gap analysis, an important new source of information to aid in PA spatial arrangement decisions is the development of an ecosystem profile for Wallacea. This work, being undertaken through the Critical Ecosystem Partnership Fund, began in June 2013 and covers Sulawesi, Maluku and Nusa-Tenggara in Indonesia, along with Timor-Leste. The report of the ecosystem profile process will help to identify priority areas needing action, while helping decisions regarding allocation of up to US$5 million in grants over the coming five-year period

80. One way to address the issue of representativeness is through PA system expansion. Establishment of new PAs generally involves co-operation between PHKA's Directorate for Conservation Areas and provincial governments and/or NGOs. It is generally the latter that propose new forest National Parks and other PAs, typically from lands currently being managed at provincial level as either production or protection forests. In the case of Sulawesi, baseline expansion is taking place on a relatively ad hoc basis; current expansion plans include the establishment of a new National Park, covering approximately 100,000 ha of mountain forest in West Sulawesi.

81. Finally, serious efforts to develop REDD+ in Indonesia, including pilot work in Central Sulawesi supported by UN-REDD, are creating opportunities to realign and expand PAs according to, among other factors, potential to generate carbon credits.

2. Inadequate financial sustainability of Sulawesi's PA system

82. A 2006 study on protected area funding in Indonesia estimated then current funding for terrestrial PAs at US$48.98 million, with US$33.6 million coming from the Central Government budget, US$11.51 million from NGOs and US$3.85 million from bilateral and multi-lateral donors. Given the 2006 area of terrestrial PAs as 22.7 million ha., the estimated per ha. level of finance from government was $1.48 per ha, with an additional $0.69 from NGOs and bilateral and multi-lateral donors. Total finance was thus $2.17 per ha.

83. The study also estimated the optimal level of annual funding for effective management of existing PAs (including marine PAs) at US$135.31 million. The study estimated that the funding gap for effectively managing terrestrial PAs at US$76.6 million per annum.

84. Data collected to complete the PA system financial sustainability scorecard for the Sulawesi sub-system (see Annex 6, Tracking Tool), total 2012 central government allocations to PA management

in Sulawesi's terrestrial PAs is estimated at US$13.23 million. This was complemented by US$ 214,083 in donor funds for a total of US$13.45 million in available finance. Substantial gaps were estimated between the above-mentioned available finance and full coverage of basic (US$ 2.57 million gap) and optimal (US$15.38 million gap) costs.

85. Barriers and baseline activities related to strengthening PA financial sustainability are discussed below, under three main themes.

MAKING THE ENVIRONMENTAL ECONOMIC CASE FOR INVESTMENT IN THE PA SYSTEM

86. There is a serious lack of recognition that PAs have a significant economic value associated with biodiversity and the range of ecosystem services the PAs generate, in addition to their inherent value for harbouring unique biological heritage. Tourism, which is the second largest foreign exchange earner for Sulawesi, for instance, is driven largely by natural attractions. The more effective the park management, the more likely there will be visitors coming to boost tourism revenue. However, there is little appreciation of this fact and also of the PA's other use and non-use values amongst decision makers, resulting in the undermining of tourism resources and essential ecosystem services in pursuit of more obvious economic gains from economic sectors such as agriculture, mining and fisheries.

87. A 2008 study[17] presented the results of an economic valuation of environmental services—including water as a resource, biodiversity, unique natural landscape, nature tourism, archaeological sites and cultural area—in South Sulawesi's Maros Karst Regions Pangkep (KKMP), including direct use values, indirect use values and non-use values. The study estimated annual direct use values of US$124.1 million, indirect use values of US$83.6 million and non-use values of US$6.7 million. Total annual economic value of environmental services in KKMP was thus estimated at some US$214.4 million.

88. Given evidence from the above and other studies, and especially in the context of work done to estimate the value of carbon storage and avoided emissions within the context of REDD+ readiness efforts, the Government is clearly interested in developing payment for ecosystems services options. However, thus far, economic valuation results have not been used to influence policies related to financial allocations to protected areas. Developing robust findings in this area and raising awareness of such findings—particularly related to costs associated with habitat loss and degradation—could have important impacts on central government willingness to pay. Strategies of this kind are being applied within a broader green economy model in other parts of Indonesia, e.g. Heart of Borneo, which is creating opportunities to change the dynamics of PA and other environmental financing in biodiversity-rich areas like Sulawesi.

STRATEGIC ISLAND-WIDE PA SYSTEM FINANCING

89. There has been no attempt to develop a strategy for financing the Sulawesi PA system as a whole. Given that it is unlikely that each individual PA can be financially self-sustained, it is essential to plan sustainable financing for the PA system as a whole.

[17] Kurniawan et. al. 2008.

90. Currently, PA budgeting takes place at the two levels: (i) budgets for individual national parks and (ii) budgets for other categories of PAs within each province. There is little thought given to allocating financial resources in the most cost effective way, e.g. in terms of biodiversity or other benefits that can be gained through such spending / investment. A more strategic form of investment planning, focused on biodiversity and other benefits, combined with an enhanced understanding of the value of such benefits (see previous sub-section), could be an additional means of stimulating investment.

DIVERSIFYING FINANCING SOURCES FOR PA MANAGEMENT

91. Potential for revenue generation through tourism establishment and activities within PAs has remained largely untapped. Currently, there is no clear tourism concession system nor a payment for ecosystem services system which directly supports financing PA management. The park entry fees are collected but then deposited into the central government coffer, providing little incentive for park managers to increase revenue streams.

92. According to the findings of the PA financial sustainability scorecard, well over 90% of funding for PA management in Sulawesi comes in the form of direct government budgetary allocations. PAs are generating little or no revenues of their own, whether from user fees, tourism or other concessions or PES, and have no right to retain revenues. This is the case despite significant potential for revenue generation. Developing systems for revenue generation, along with pilot systems for site-level revenue retention as a form of incentive, could have a significant impact on levels and diversification of overall financial resources available within the sub-system.

93. One potentially significant PA financing source over the medium term is so-called 'payments for performance' in reducing emissions from deforestation and degradation, or REDD+. Indonesia is widely acknowledged as a leading country in terms of REDD-readiness. In addition to a $1 billion agreement signed with Norway in 2010, Indonesia has successfully implemented, and completed, a National Programme (NP) supported by UN-REDD. The programme included a pilot project in Central Sulawesi province. According to a report prepared under that project, an average of 10,507 ha were degraded annually during the period 2009-2011, with an additional 11,640 ha were deforested annually during the same period. Such losses, together with potential gains associated with the '+' elements, including conservation, sustainable management of forests and enhancement of forest stocks, represent important opportunities for generating PA system revenues. Such potential can only be enhanced by opportunities for PA realignment, which could target expansion into areas facing deforestation and degradation threats.

3. Persisting threats and incomplete systems for collaborative governance in PAs and buffer zones

94. **Table 8** above summarizes priority threats identified at each of the three demonstration sites, with specific notes on impacts to key biodiversity. The present section describes baseline management actions and support, along with persisting barriers, to threat reduction and collaborative governance. Additional details are presented in the site profiles in Annex 2.

DISTRICT-LEVEL LAND USE PLANNING

95. Threats to the sustainability of protected areas can usefully be grouped into the two broad categories. The first of these involve unsustainable activities taking place inside PAs themselves. These generally require effective management on the part of PA authorities, as well as the co-operation of communities living in areas surrounding the PAs, particularly within buffer zones.

96. Other kinds of threats relate to changes taking place within the wider production landscape surrounding PAs. Such areas are often critical as buffer zones and sources of connectivity for PAs. District-level planning of development within such areas, along with actions to ensure that such plans are followed in practice, can therefore be essential to ensuring that PAs themselves do not become isolated islands within broadly degraded landscapes. This is particularly problematic for smaller PAs, but can be a problem for even large PAs as well.

97. Landscape profiles developed during the PPG indicated that the above scenario is particularly relevant to the East Minahasa landscape in North Sulawesi. Here, several relatively small protected areas are becoming increasingly isolated by uncoordinated development within the surrounding landscape. Such development is having increasing impacts on areas of potential importance for nature reserve connectivity and potential expansion. This includes lands currently designated as protected forests which are already experiencing rapid degradation, which is likely to increase without greater protection or development of a wider, more inclusive land use strategy. It is also worth noting that not only biodiversity values, but also revenue earning potential associated with REDD+, are among the opportunity costs currently being exacted by the failure to undertake this kind of planning.

PA SITE OPERATIONS

98. At the site level, the PAs are characterised by weak management with inadequate budget allocation and staff numbers, as well as low level of skills among the PA field staff. This is particularly acute in "non-national-park PAs" such as nature reserves and wildlife sanctuaries. For example, in Central Sulawesi Province, there are only 96 staff and an annual management budget of US$ 900,000 to operate 16 non-national park PAs covering over 400,000 ha, compared with US$ 1.4 million budget and 164 staff for the Lore Lindu National Park. In terms of staff skills, in particular, law enforcement, habitat condition monitoring and park neighbour relations and co-management facilitation skills are lacking, resulting in very weak law enforcement. Conservation planning and management system is generally perfunctory. In addition, there is a clear disconnect between PAs and local-level development and land use planning, resulting in encroachment and illegal activities within the PAs. PA-neighbour cooperation is weak with a few exceptions in some parts of Lore Lindu where community conservation agreements have been developed with active village conservation committees. Given the large number of PA neighbouring populations and the intensity of their activities, there is a need for rapidly upscaling some of the successful models for co-management in the island, in order to ensure catalytic successes to bring about large-scale and sustained impacts. Furthermore, there are tremendous opportunities to mainstream PAs in district and provincial land use plans and development and fiscal planning processes. There is also an untapped potential for ensuring that the REDD Plus process will catalyse both the PA management effectiveness and financial sustainability for PAs, while ensuring tangible community benefits from the scheme.

99. The following aspects characterize the baseline situation at the demonstration sites:

- Whilst there has been great improvement in the administrative infrastructure, staffing at different levels and budgets in real terms; these changes have resulted in high costs of buildings, vehicles, equipment (communications, computers etc.) and staff support in major towns and almost no investment in field posts and daily patrol guards.

- Despite hundreds of offences daily – illegal logging, setting traps for wildlife, illegal mining, clearing forest, illegal harvesting of rattan, palm and other products and illegal sale of protected species in local markets—none of these offences are taken to court, providing no disincentive to villages taking advantage of the protected areas.

- Guards in some areas admit to being afraid of local villagers and possibility of reprisals if they should interfere in illegal activities. Friendly links between villagers and PA staff plus ease of cellphone warnings frustrates attempt to catch offenders in the field.

- There is a widespread lack of understanding among villagers as to why there are protected areas. The question 'Why does the government care more about monkeys that ordinary citizens?' needs to be answered by better education awareness of the multiple role of protected areas for catchment protection, climate amelioration, other ecosystem services and tourism and other economic opportunities.

- Efforts to develop model buffer zone developments in a few villages bordering the two national parks (and reportedly Nantu) are admirable and successful but are expensive and small-scale. A cheaper model will be needed to extend to the entire boundaries of these large reserves based on self-help inputs rather than project hand-outs.

- It is clear that Government plus NGO and/or research project is far more effective than government routine on its own. Long-term research interests as provided by universities in Palu and Manado can provide more sustained support than limited lifetime support by external projects.

- The speed of natural regeneration is encouraging. New forests now cover former *Imperata* (alang alang) grasslands near entrance to Tangkoko, now supporting high densities of monkeys, birds and other wildlife where formerly there was almost nothing. There are lessons here for restoration needs in other sites.

- The maleo conservation project in Tambon is very successful and not expensive. It serves an excellent model for extension to all accessible known maleo nesting sites.

- Tourism levels are well below potential but the little development there is is not well managed or controlled. A few people making good money from private investments but profits provide no benefit to majority of population.

- Tangkoko complex suffers from lack of NP status.

100. The following summarises recent and ongoing baseline cooperation at the project demonstration sites:

- The Nature Conservancy (TNC) support for the Lore Lindu National Park and Morowali Nature Reserve in Central Sulawesi Province (see below) focused on development of collaborative management models and thirty community conservation agreements, local water resource management strategies, forest health monitoring systems, as well as the island-wide eco-regional planning exercise.
- The Wildlife Conservation Society (WCS) has been working in North Sulawesi and Gorontalo Provinces since 2001, supporting maleo conservation activities in Bogani Nani Wartabone forests including the purchase of beach front to protect the nests, as well as supporting collaborative management of the Bogani Nani Wartabone National Park, promoting environmentally beneficial alternative livelihoods, and tackling illegal exploitation of wildlife.
- The Conservation Programme Selamatkan Yaki, as part of the Whitley Wildlife Conservation Trust (UK) and Pacific Institute (Manado), has been working at the Greater Tangkoko Conservation Area since 2007. Highlights of the programme have included the creation of a Species Conservation Action Plan (SAP) for *Macaca nigra*, which is a comprehensive document used to guide the conservation of the species into the long-term. By utilising previous research, performing a thorough analysis of the threats facing the macaques and their habitat, then deriving a series of conservation recommendations for the required activities to mitigate these, the creation of this document forms the evidence based strategy for the protection of *M. nigra*. The programme applies a holistic research approach to guide conservation strategies, with focus on Tangkoko as identified as critical habitat for the species. Building on this, a multi-stakeholder workshop was conducted in 2013 to provide a comprehensive framework for action for the species, and also for the Nature Reserve and its surrounds. Through formalised partnerships with the Forestry Department and other key stakeholders, PA management assessments, eco-tourism and education and awareness raising strategies have been developed and are in the process of implementation with full evaluation and monitoring.

JOINT PA / BUFFER ZONE GOVERNANCE SYSTEMS

101. On the whole in Sulawesi, there is a sharp disconnect between PAs and local-level development and land use planning, resulting in encroachment and illegal activities within the PAs. In general, PA-neighbour cooperation is weak.

102. There have been significant efforts made over the years to find a solution to the above critical dynamic. The most extensive experience in developing joint PA/buffer zone governance systems in Sulawesi, and quite possibly in Indonesia as a whole, comes from Lore Lindu National Park (LLNP).[18] Here, from 2003 to 2009, the Nature Conservancy (TNC)[19], among others, was instrumental in helping to develop collaborative management models based on community conservation agreements (CCAs). Thirty such agreements were ultimately concluded, with another 40 identified and begun but not yet completed.[20] In an extensive 2010 survey looking at

[18] Unless otherwise noted, this discussion of LLNP draws on White, Mark L. May 2010. "Lessons learned: Collaborative Management at Lore Lindu National Park." The Nature Conservancy.
[19] TNC support at the site extends back to 1992, but the development of CCAs is dated to 2003.
[20] Together covering all 70 villages surrounding the park.

lessons learned over a nearly 20-year partnership, the design and implementation of CCAs was seen as its most important success.

103. Beginning with the first fully implemented CCA in 2004, the agreements allowed villagers and LLNP leadership to agree on respective collaborative management roles. They also involved agreed definition of community and park boundaries and engagement of communities to help reduce encroachment threats. Communities typically committed to complying with specified conservation and forest management rules in return for a more explicit acknowledgement of their property rights along with other benefits such as agricultural assistance. The CCA process was found to have significantly reduced encroachment, illegal logging, rattan harvest and other threats.

104. Key steps in CCA establishment include: (i) a conservation awareness campaign, (ii) socio-economic survey, (iii) village mapping, (iv) development of a community-based site conservation plan, and (v) establishment of Village Conservation Councils, which help develop regulations and zoning needed to support CCAs.

105. Despite its overall success, the following weaknesses have been identified with respect to the CCA effort:

- Bilateral co-operation between TNC staff and local communities was too often pursued without the participation of LLNP rangers and staff. Indeed, relations between communities and the latter often failed to improve, and a key building block for sustainability, namely LLNP staff equiped and trained to work effectively with CCAs, was never developed.
- Legal and financial sustainability models were also poorly developed. As a result, PA management had little official encouragement to continue or formalize the CCA arrangements.
- There has been little integration of external support with local government support to these same populations.

106. In addition to the opportunity to learn from the above lessons, the current baseline includes a number of factors which combine to create opportunities to revitalize and extend the CCA model. In addition to the persisting capacity created by TNC efforts, new factors include the potential to tap into REDD+ finance to ensure financial sustainability, along with the changing management strategies of LLNP and other national parks, namely the emergence of a less enforcement-oriented and more decentralized RBM system. These factors, combined with the large number of PA neighbouring populations and the intensity of their activities throughout Sulawesi, represent an opportunity for up-scaling and updating the CCA model at LLNP and elsewhere in order to ensure catalytic successes and bring about large-scale, sustained impacts.

STAKEHOLDER ANALYSIS

Table 7: Stakeholder analysis

STAKEHOLDER	OVERALL ROLES AND RESPONSIBILITIES	INTEREST / ROLE IN PROJECT
Ministry of Forestry	Responsible for biodiversity conservation, protected area and wildlife management, as well as forest management.	• Primary implementer of the project at national level and at local level through its subsidiary agencies. • Major beneficiary of capacity building
BAPPENAS	National government agency responsible for national economic and development planning, as well as development of strategies and policies in determining financial allocations for the various sectors of the national economy.	• Participant and beneficiary of planning and financing component
Ministry of Environment	National government agency responsible for environmental management and for reporting to the Convention on Biological Diversity; hosts the National GEF Secretariat office.	• PA threat removal activities associated with pollution control
Ministry of Culture and Tourism	Responsible for conservation and culture development based on cultural values and for development and promotion of tourism resources and destination marketing.	• Partner for nature tourism development and revenue management, in the context of efforts to establish a sustainable PA financing system.
National Parks Agencies	Subsidiary units of the Ministry of Forestry, responsible for managing individual national parks. Both Lore Lindu and Bogani Nani Wartabone National Parks have their own agencies based at the provincial capital.	• These agencies and their subsidiary units will be the primary implementer of the site demonstration activities at provincial and local levels.
Indonesian Institute of Sciences (LIPI)	Governmental authority for science and research in Indonesia, consisting of 47 research centres in fields ranging from social to natural sciences. MoFor collaborates with LIPI for species conservation work.	• Partner for the systematic biodiversity monitoring strengthening component of the project.
Provincial agencies for Natural Resource Conservation	Provincial unit of the Ministry of Forestry, and they are responsible for managing the protected areas except for national parks, including nature reserves, wildlife sanctuaries, nature recreation parks and hunting parks.	• Beneficiary of capacity-building support in North Sulawesi (East Minahasa landscape) • Key overall roles in PA system realignment and expansion
Provincial agencies for Watershed Management	Provincial unit of the Ministry of Forestry responsible for watershed management.	• Stakeholders in provincial and local level project activities.
Provincial Forestry Agencies	Agency under the provincial government in charge of planning and management of the production and protection forests.	• Primary stakeholder for the provincial level activities and should be part of the project steering committee
Provincial development and planning agencies	Agency under the provincial government responsible for provincial development planning.	• Primary stakeholder for the provincial level activities and should be part of the project steering committee • Critical stakeholders for land use plan and financing plan development and implementation.

STAKEHOLDER	OVERALL ROLES AND RESPONSIBILITIES	INTEREST / ROLE IN PROJECT
District Governments in Sulawesi	72 district governments in Sulawesi are responsible for local development and land use planning, service provision and natural resource management in their own areas. They are therefore	• Critical stakeholders for project activities related to land use plan development and implementation.
Central Sulawesi REDD + Working Group	Chaired by the Provincial Governor, the working group comprises provincial government institutions, universities, NGOs, CSOs, the private sector and the provincial level implementing units of the Ministry of Forestry.	• The working group has a key role in ensuring the synergetic impact between the planned REDD plus work and the envisaged project interventions in and around Lore Lindu National Park
Police	Law enforcement	• Important stakeholder for trade surveillance and law enforcement and compliance monitoring of the project.
Local communities and indigenous people	Key users and beneficiaries of forest biodiversity.	• Critical participants of the project at the local level. • Targets of efforts to change reduce unsustainable activities including hunting and encroachment • Potential major role in local habitat conservation, controlling of poaching, and natural resource management. • Beneficiaries of alternative livelihood strategies
Selamatkan YAKI	Selamatkan Yaki has been actively supporting conservation efforts at the Greater Tangkoko Conservation Area (see above). It provides co-financing of US$ 200,000 to the project.	• YAKI has been identified during the PPG as a co-financing implementing partner of the project activities at the Greater Tangkoko Conservation Area
Other international NGOs	Several NGOs have been supporting protected area management in Sulawesi: (i) TNC has a long history working to support co-management in and around Lore Lindu NP and Morowali Nature Reserve; (ii) WCS has been active in the Bogani Nani Wartabone NP focusing on maleo conservation; (iii) Adudu-Nantu Conservation Foundation (YANI) is active in and around Nantu Wildlife Sanctuary in Gorontalo Province.	• Sources of knowledge, experiences and lessons learned • Potential sub-contractors of specific activities at project demonstration sites
CBOs	Support to socio-economic and environmental needs of local populations surrounding PAs CBOs will be a primary stakeholder at the local level interventions of the project.	• Sources of knowledge, experiences and lessons learned • Potential implementers of site-level activities focusing on community-based activities and participation.
Private sector	Logging and plantation concessionaires, tourism concessionaires, private business owners	• Sources of capital for biodiversity-friendly investments and livelihood creation • Targets of efforts to reduce environmentally destructive and unsustainable activities
Ministry of women's empowerment	Responsible for women's and childs participation on biodiversity conservation issues in the environment	• Participant and beneficiary of women's empowerment and children protection component

STAKEHOLDER	OVERALL ROLES AND RESPONSIBILITIES	INTEREST / ROLE IN PROJECT
and child protection		

CONCLUSIONS OF THE BASELINE ANALYSIS

107. The above situation analysis has drawn a number of important conclusions, upon which the project design presented in part II below will rest. These may be summarised as follows:

- The indisputable global significance of Sulawesi's terrestrial biodiversity is based on a wide range of habitats, significant levels of endemism and the presence of a number of globally threatened species.
- The Indonesian Government has taken important steps aimed at conserving this biodiversity, including establishing 63 terrestrial PAs covering some 1.6 million ha.
- A range of development and subsistence-related threats are putting the island's natural wealth at risk, particularly through habitat and land use change and over-exploitation.
- Threats are at a scale well beyond the currently weak capacities and low levels of management effectiveness of the under-financed PA system to absorb and resist; as a result, PAs are becoming increasingly isolated and degraded.
- Unsurprisingly, given the wide range of forest ecosystem types found on the island, a number of ecosystems remain under-represented within the PA system and, as a result, particularly subject to conversion, with implications for island-wide extirpation / extinction.
- Indonesia's PA system is undergoing a transformation—most notably involving the establishment of a system of resort-based management (RBM)—which is creating important opportunities to improve site-level management.
- Further opportunities are being created by a strong national REDD+ initiative—including significant pilot work recently completed in Central Sulawesi with UN-REDD support; however, to date such initiatives have yet to be integrated into PA system planning or financing.

PART II: Strategy

PROJECT RATIONALE AND POLICY CONFORMITY

Fit with the GEF Focal Area Strategy and Strategic Programme

108. The proposed project is consistent with the goals of GEF Biodiversity Objective 1 "Improve Sustainability of Protected Area Systems" (BD1) and specifically the BD1 Focal area Outcome 1.1 "Improved management effectiveness of existing and new protected areas" and Outcome 1.2 "Increased revenue for protected area systems to meet total expenditures required for management." The PA network in Sulawesi, as in the rest of Indonesia, is characterised by low

levels of management effectiveness and the PAs are not adequately distributed across the landscape to properly represent the island's key terrestrial ecosystems.

109. The project seeks to strengthen PA management in endemic-rich Sulawesi and reduce threats to biodiversity in the PAs by putting in place measures to ensure that the highly unique and globally important biodiversity of Sulawesi will be safeguarded from on-going threats to its biodiversity. By strengthening core PA management and raising the level of conservation outcomes in Sulawesi, the project will serve to increase the overall effectiveness of the national PA system in which Sulawesi plays a key part.

110. The project will also directly contribute to the implementation of the CBD's Programme of Work on Protected Areas (PoWPA), in particular:

- Goal 1.1: To establish and strengthen national and regional systems of protected areas integrated into a global network and to make a contribution to globally agreed goals;
- Goal 1.4: To substantially improve site-based protected area planning and management;
- Goal 2.1: To promote equity and benefit sharing;
- Goal 2.2: To enhance and secure involvement of indigenous and local communities and relevant stakeholders;
- Goal 3.2: To build capacity for the planning, establishment and management of PAs;
- Goal 3.4: To ensure financial sustainability of PAs and national and regional systems of PAs;
- Goal 4.1: To develop and adopt minimum standards and best practices for national and regional PA systems; and
- Goal 4.2: To evaluate and improve the effectiveness of PA management.

111. Finally, the project directly contributes to achievement of the Aichi Targets, in particular under the strategic goal C: To improve the status of biodiversity by safeguarding ecosystems, species and genetic diversity. It contributes to Target 11 through increasing significantly the coverage and connectivity of the PA system in important regions with high biodiversity importance and significant ecosystem services, and by increasing management effectiveness of the PA system in a way that is integrated into the wider landscapes.

112. The project will contribute to the achievement of GEF's main indicators under the Biodiversity Objective 1: "Improve Sustainability of Protected Area Systems" (BD1) and specifically the BD1 Focal area Outcome 1.1 "Improved management effectiveness of existing and new protected areas" and Outcome 1.2 "Increased revenue for protected area systems to meet total expenditures required for management."

113. The project builds on the above-described baseline with efforts focused at several geographic levels. First, at the level of individual site-level landscapes, the project will support threat reduction and collaborative governance. This is expected to substantially improve prospects for key endemic species for whom these areas are among the last refuges. Second, the project will help to build the capacity of provincial-level agencies subsidiary to the national level Ministry of Forestry. Third, the project will develop the first integrated, island-level approach to key issues such as PA financial sustainability, biodiversity monitoring and data management, PA system expansion and surveillance and control of poaching and the wildlife trade. Finally, close

involvement of the Jakarta-level headquarters of the Ministry of Forestry's Directorate General of Forest Protection and Nature Conservation (PHKA) will ensure both effective implementation as well as national-level uptake, dissemination and eventual replication of project results.. These levels will be closely co-ordinated.

Fit with the UNDP Strategy and Strategic Programme

114. UNDP's strategy in environment and energy is to support transition to low carbon and climate resilient development, which includes maintaining biodiversity and essential ecosystem services. UNDP has a major biodiversity and ecosystem programme, and protected areas are one of UNDP's signature programmes. The agency has a large portfolio of PA projects globally and across Asia and is equipped with a wealth of accumulated knowledge and experience from projects around the world in promoting PA system objectives in development and sectoral planning. UNDP has a large presence in Indonesia and, in its country operations, the project fits within the UNDAF (2011 – 2015), in particular, Outcome 5 Strengthened climate change mitigation and adaptation and environmental sustainability measures in targeted vulnerable provinces, sectors and communities, Sub-Outcome 11: Strengthened capacity for effective climate change mitigation and adaptation, including ecosystems and natural resources management and energy efficiency. UNDP Country Programme Document (CPD), covering 2011-2015, in particular Country Programme Outcome 2.1. Enhanced capacity of GOI to manage natural resources and energy. In particular, the project will contribute to the CPAP outcome 2.1 Responsible national institutions and relevant stakeholders are more effective in managing environmental resources and addressing environmental pollution by implementing the intended output of Government, private sector and CBO partners have coherent and effective policy frameworks, action plans, implementing arrangement and funding arrangement to sustainably manage terrestrial ecosystems. The UNDP Country Office (CO) will assign an experienced biodiversity conservation programme manager within the Energy and Environment Unit, guided by the head of the Unit and supported by the alternate staff, administrative assistant, and the UNDP finance office. The UNDP Regional Technical Adviser based in Bangkok will provide technical support to the CO for implementation, monitoring and evaluation of the project.

PROJECT GOAL, OBJECTIVE, OUTCOMES AND OUTPUTS/ACTIVITIES

115. The project goal is an effectively managed system of protected areas that is well integrated into its surrounding landscape contributing to sustainable, inclusive and equitable development in Sulawesi. The project objective is to strengthen the effectiveness and financial sustainability of Sulawesi's PA system to respond to existing threats to globally significant biodiversity. With GEF support, interventions at the level of Sulawesi's terrestrial PA system will:

    (i) Enhance the systemic and institutional capacity for planning and management of the Sulawesi PA system;

    (ii) Increase the financial sustainability of the Sulawesi PA system;

    (iii) Reduce threats and strengthen collaborative governance in target PAs and buffer zones.

116. The above outcomes are to be delivered through three components, which are described in detail below, together with associated outputs and activities.

Component 1: Enhanced systemic and institutional capacity for planning and management of Sulawesi PA system

117. GEF financing under Component 1 will provide incremental support to on-going Indonesian government efforts to build the systemic and institutional capacities of Sulawesi's PA system. The island's network of PAs will receive targeted GEF support in order to increase dramatically the pace and degree of improvement in key capacities needed for their planning and management. Since Sulawesi's PA system is almost entirely managed by PHKA, a Directorate-General under the Ministry of Forestry—through its subsidiary local agencies and with headquarters-level support—the component will focus on addressing barriers facing on-going PHKA efforts in this area. These efforts will be placed in an island-wide context—including monitoring, intelligence-based anit-poaching and PA system consolidation efforts—to ensure that each one strategically addresses the key challenges facing the island's biodiversity as a whole. In so doing, the project will reach beyond MoFor to engage and build capacities and support of island-based stakeholders, including provincial government in particular, without whose participation the project's goal would remain unobtainable. The component is expected to have important demonstration / replication effects related to MoFor and local / provincial PA capacity building efforts throughout the Indonesian archipelago.

1.1 Capacity of the Ministry of Forestry strengthened to fully operationalise the "Resort-based management" system for implementation in the national, and particularly in Sulawesi's, PA system, including all categories of PAs

118. Through this output, the capacity of the Ministry of Forestry will be strengthened at both national and provincial levels to support the rapid and full implementation of the Resort-Based Management (RBM) system in Sulawesi, including both the four pilot NPs for RBM establishment, as well as remaining PAs throughout the Sulawesi terrestrial PA sub-system. Issues associated with the operations of field-based units, as well as staff capacity and motivation, will be tackled as priorities, given that there is currently virtually no activity in many PA field posts. Support under this output will be closely linked to target site-level support being provided under Output 3.2 (support for resort-level infrastructure for implementation of RBM) and Output 3.3 (Support for establishment and strengthening of Community Conservation Areas). Government co-financing will ensure infrastructural and other aspects of full implementation at remaining PAs across the island.

119. GEF incremental funding under the present output will ensure that the RBM system, as implemented in Sulawesi and available for replication elsewhere, will incorporate:

(i) PA MANAGEMENT STANDARDS AND PA AND INDIVIDUAL PERFORMANCE MONITORING SYSTEMS FOR DIFFERENT CATEGORIES OF PAS: Organizing PAs, particularly large ones, into resorts is creating opportunities for increased and finer-tuned local accountability for results. Better monitoring of results is expected, in turn, to increase incentives for enhanced individual performance. However, taking advantage of these opportunities will require transparent systems for performance monitoring and appraisal, along with reporting structure and methods. These will be developed and tested through GEF support at the level of the two

target national park authorities (*Balai Taman Nasional*), as well as within provincial-level agency for Natural Resource Conservation (*BKSDA*) in North Sulawesi. Building on baseline efforts in this area, METT analyses, along with improved reporting systems, will become standard tools in the on-going measurement of PA and *Balai*-level management performance.

(ii) TRAINING FOR ENHANCED LAW ENFORCEMENT: Support here will be coordinated with efforts to address illegal wildlife trade (Output 1.3), but will expand the focus to the full range of threats, e.g. encroachment, associated with illegal activities taking place within PAs. Communications and other tools for enhanced law enforcement will be provided to target sites under Output 3.2 and to other PAs via Government co-financing.

(iii) CAPACITY-DEVELOPMENT STRATEGIES AND ACTION PLANS FOR STRENGTHENING MANAGEMENT EFFECTIVENESS: Observations made through enhanced performance monitoring will be collected, grouped into structured action plans and prioritized for targeted project-level support. The aim will be to maximize the cost effectiveness, and measure the short- and long-term impacts of, capacity building for improved management effectiveness. Support for implementation of strategies and action plans, including infrastructural and other support to resort establishment, will be provided to target sites under Output 3.2.

(iv) CLEAR AND WELL-TESTED GUIDELINES FOR COMMUNITY ENGAGEMENT AND CO-MANAGEMENT: RBM is creating important new opportunities for engagement with local communities. This is due partly to field-level placement of *Balai* staff. For example, staffs of Lore Lindu NP are in the process of being decentralized from the current HQ location in Palu to 18 resorts strategically situated on the borders of the NP. Resorts will enable local-level access while creating opportunities for local engagement and co-management. For this to occur successfully, guidelines for community-based initiatives and co-management will need to be developed and their implementation monitored.This does not rule out the commitment and accountability to gender equality and women's empowerment to support the work and promote coordination among all relevant beneficiaries and partner and role of the. In addition, a system for monitoring, reporting on, and learning from the previous and on-going results of such efforts will be developed and tested for Sulawesi. This work will complement and be co-ordinated with, field-level support to the establishment and strengthening of Community Conservation Areas (CCAs) at target sites under Output 3.3.

(v) INCENTIVE MECHANISM FOR RESORT-LEVEL INNOVATION: In order to address the fundamental issues of low motivation among rangers and other field staff, the project will support the establishment and internalisation of a protected area innovation grant. This small grant facility will provide incentives to encourage innovative, local-level solutions to PA resort-level management challenges. The grant facility will be overseen by the Project Board (see management arrangements section below). In order to cast a wide net in the search for innovation, PHKA and Balai staff and units from throughout Sulawesi will have the opportunity to submit and receive grant proposals. Efforts will be made under Component 2 to identify sustainable financing for the incentive mechanism program.

1.2 ***An island-wide system for biodiversity, key species and habitat condition monitoring established with science-based survey mechanisms, protocols for monitoring, robust biodiversity indicators and with all necessary tools and capacity installed within the Directorate of Biodiversity Conservation and partner organisations***

120. As part of the island-wide mechanism for biodiversity monitoring and management, a species and habitat condition monitoring system will be institutionalized, with a set of robust biodiversity indicators, supported by science-based monitoring protocols. Necessary capacity and tools will be put in place within the Directorate of Biodiversity Conservation to support this system, including an IT-based Sulawesi biodiversity monitoring platform which will be populated with data gathered in the field with analytical functions for determining trends to inform management decisions. Agencies for National Parks and Provincial Agencies for Natural Resource Conservation will receive training in order to help them internalise the system as the main entity for inputting data and extracting information and knowledge.

121. **Annex 10** presents details of the kinds of monitoring data to be collected and managed on an ongoing basis and beginning with target sites. All forms of monitoring ultimately depend on the regular gathering of fresh data from the field, and it is at this stage that the project will establish and/or improve existing standards. The project will cultivate habits of routine monitoring and open data sharing, using sensibly selected indicators, simple robust methodologies that do not place an impossible burden on staff and management agencies. These will be designed to be self-motivating to the degree that the results are clearly an aid to management at the local level. Overall, the project will work towards such harmonization, rather than imposing additional new monitoring and reporting processes.

122. Raw data will be filed and kept available for various types of aggregation and analysis. However, a synthesis of results and trends will be prepared annually and made available for use by managers, lawmakers, decision makers, media and interested public. For this purpose, data will be presented in non-technical language, with widely understood visual data presentations such as histograms, pie charts and maps. National standards for PA-related data presentation are expected to emerge from this process.

1.3 Intelligence-based poaching and wildlife trade surveillance system operationalized through establishment and operations of a Sulawesi-based unit

123. In order to reduce the major threat of poaching and illegal harvesting of wildlife, a small, decentralized, i.e. Sulawesi-based, intelligence-based poaching and wildlife trade surveillance unit will be established at a location to be determined in Sulawesi. This unit will report directly to the Directorate of Forest Protection and Investigation in Jakarta, will be staffed by out-posted members of that Directorate[21] and will partner with designated officials at target and other PAs. It will receive technical co-operation and equipment from the project and will be supported in developing an island-level capacity to monitor, analyse and, working in co-operation with PA management authorities, confront poaching and wildlife trade across the island. Focus of initial monitoring activities will be on the project target sites, given that much of the data coming into the system will initially be coming primarily from these sites; as such, it will be closely co-ordinated with support being provided under Outputs 3.2 and 3.3.

[21] Alternatively, staff in question might be seconded from among PHKA staff who are currently employed either at NPs or other provincial-level management authorities in Sulawesi.

124. Once the unit has reached a certain level of capacity, its technical support will be made available to PAs across the island. This innovative, island-level capacity will complement similar efforts to create decentralized, island-wide analytical capacities related to PA alignment (Output 1.4), biodiversity monitoring (Output 1.2) and PA financing (Output 2.2).

125. The surveillance unit and system will be instrumental in documenting expected reductions in trade and consumption levels at these sites, thereby demonstrating the efficacy of approaches being developed. In thematic terms, the output will support: (i) enhanced monitoring of hunting and wildlife trade; (ii) capacity building of law enforcement officers; (iii) improved systems for communications and co-operation between PHKA Balai and law enforcement officials; (iv) coordination with community-level outreach efforts being supported under Output 3.3.

1.4 ***Spatial arrangement of the Sulawesi PA system improved based on the terrestrial PA system consolidation plan (including corridors, area expansion and boundary rationalization) for Sulawesi and integration of the plan into the provincial land use plans***

126. Spatial arrangement of the Sulawesi PA system will be improved based on development of a terrestrial PA system consolidation plan—including corridors, area expansion and boundary rationalization—for Sulawesi, and eventual integration of such a plan into district and provincial land use plans. The PA system consolidation plan will be based on biodiversity importance, the need for climate change adaptation and connectivity, as well as carbon benefit potential. The new areas will be gazetted.

127. The project will support expansion and realignment of the PA system based on a PA system consolidation plan. The plan will collate existing data and analyse biodiversity importance and threats status, vegetation types and bio-geographical representatives of the PA system, and carbon sequestration potential. It will examine the current land uses and land and resource user rights and identify opportunities for PA consolidation. The analysis will result in an action plan that will be vetted by relevant provinces and districts and integrated into respective land use plans.

128. In particular, the project will support the gazettement process for Ganda Dewata, a planned new 79,342 ha. National Park in lowland tropical forest of West Sulawesi, whose status is being converted from protected forest. This area is of particular significance given both that it covers an under-represented Eco region as well as due to the fact that it is located in a province which currently has the lowest proportion of PA coverage of any province in Sulawesi.

129. Like several other outputs under Component 1, this output represents an island-wide approach, which will be co-ordinated at island-level, in co-operation with the relevant national-level Directorates. It will work by engaging each province, and in particular, the planning agencies of each province, in considering the actual and potential benefits of protected areas (see also Output 2.1 below). Ecologically, this will also represents an important opportunity to help ensure the long-term ecological sustainability of the island as a whole.

Component 2: Financial sustainability of the PA system

130. Baseline analysis, including preparation of the PA system financial sustainability scorecard (see **Annex 6**), has identified a number of weaknesses and opportunities associated with financing of

the Sulawesi sub-system of terrestrial PAs. Many of these of course, reflect, and are linked to, the national-level enabling environment.

131. Under the present component, three inter-linked outputs will work together to support enhanced PA system financial sustainability on the island:

    (i) assess, and raise awareness of, the environmental economic value of Sulawesi's PAs;

    (ii) develop a Sulawesi-level PA system financing strategy, and pilot provincial-level plans, based in part on needs assessments developed before and during the PPG;

    (iii) expand and diversify revenue generation for PA management, including from new sources such as nature tourism and REDD+.

2.1 An environmental economic case is made for increased investment in the PA system

132. An environmental economic case will be made for increased investment in the PA system by quantifying the value of Sulawesi's PAs in terms of the full range of ecosystem goods and services being provided. This will include an assessment of the economic rate of return on investment in the PA system, and comparative cost-benefit analysis with other types of land uses, including forestry and agriculture/ plantation.

133. Broad conclusions regarding the system as a whole will draw on previous work, together with three site-level valuation studies to be supported by the project, which will examine specific valuation questions in greater depth, thus serving as a source for further extrapolations and estimates.

2.2 Sulawesi island-wide PA System Financing Plan is developed, projecting the financial needs for PA management and expansion over the next 10 years and outlining the strategies for meeting these needs from both cost and revenue points of view.

134. Building on the above valuation work, a Sulawesi island-wide PA System Financing Plan will be developed, projecting the financial needs for basic and optimal PA management and expansion across all provinces over the next 10 years and outlining strategies for meeting these needs from both cost and revenue points of view. The PA financing plan will identify financial needs for effective management and development, based on PA management plans, and will investigate various means for ensuring cost effective operations at both HQ and the field levels. These will identify, *inter alia*, PA management costs and non-state appropriated revenue options as part of an effort to mobilize market opportunities.

135. Building on the findings of the 2006 study and the updated findings presented in the financial scorecard, the plan will highlight areas and develop proposals for high-priority systemic changes in PA financing systems. Thus, the plan will be include proposals for broader policy reforms, with pilot implementation at site and/or sub-system level in Sulawesi. Key areas to be addressed include the following:

    - Legal and policy support for revenue generation and retention
    - Support for revenue sharing with local stakeholders
    - Laws and policies for alternative

- Financing of collaborative management and buffer zone activities, particularly those organized through CCAs
- Alternative institutional arrangements, including co-management
- Role of business planning
- Budgeting systems, including budgetary incentives
- Tools for cost effective management.

136. Implementation of the financing plan, including the areas outlined above as well as development of diversified financing mechanisms (see Output 2.3 below) will also be supported.

2.3 Diversified revenue generation mechanisms and other financing sources for PA management at national and regional levels

137. A key element of the PA system financing plan described above will be a thorough analysis of revenue generating options and agreement on proposals for revenue generating mechanisms and associated revenue sharing modalities. This process will also benefit from the environmental economic valuation studies and priorities conducted under Output 3.1. Initial investigations during the PPG have helped to identify several promising opportunities. These include:

- ECOTOURISM OPERATIONS AND CONCESSIONS: All three target PAs, along with several others across Sulawesi, appear to have substantial unfulfilled potential for ecotourism and associated PA revenue generation opportunities. This will include efforts to enable the private sector and others to invest in, or otherwise support, PA management (informed by a proper market analysis).
- USER FEES: These are currently set at low levels. Willingness to pay studies (see Output 2.1) will help to establish more appropriate fee levels, while technical support will be provided for cost-effective and transparent fee collection systems.
- REDD+: Building directly on recently completed UN-REDD support in the Central Sulawesi Province and working closely with the national REDD+ office and the Central Sulawesi REDD plus working group, the project will support active participation of PA agencies and Community Conservation Area (CCA) groups in the REDD plus process. CCAs, in particular, represent possible intermediaries for REDD+ schemes, including by contributing to conservation and reduced deforestation and degradation as well as through community-based measurement, reporting and verification (MRV). They represent an important asset in this regard one that should not go to waste. Overall, the aim is to develop mechanisms that will enable the PA system to benefit directly from the REDD + scheme through increased PA coverage and financing for PA management. In particular, the effort will demonstrate the potential for PA expansion and enhanced management effectiveness to contribute to reduced carbon emissions while generating increased financial flows to the system, in a positive feedback loop.
- OTHER PAYMENTS FOR ECOSYSTEM SERVICES: Both at LLNP and Greater Tangkoko, there appear to be possibilities for PES related to water supply and regulation.

138. The above, and other potential mechanisms, will be examined in greater depth as part of the PA financing plan development. For selected mechanisms, the project will support their implementation. This will entail, as appropriate:

- development of an enabling policy/legal environment related to the identified instrument;
- design, negotiation and formalization and operationalisation of the mechanisms;
- development of a national conservation financing mechanism;
- awareness and capacity building for decision makers, local government officials and local and indigenous communities, to ensure continuity of ecosystem service provision and payments, in the application of land-use to maximise ecosystem service provision and its continuity over time.

Component 3: Threat reduction and collaborative governance in the target PAs and buffer zones

139. Under this component, the project will focus on site-level support and capacity building at three target PAs: (i) Lore Lindu National Park (217,991 ha), (ii) Bogani Nani Wartabone National Park (285,105 ha), and (iii) Tangkoko Batuangus complex (8,665 ha). The PAs were selected according to the following criteria: (i) biodiversity importance/global significance; (ii) existing PA support initiatives; (iii) opportunities for financing diversification, including application of REDD+ and other approaches, and (iv) potential for developing unique models for co-management and integration of PA systems in local and provincial development and fiscal plans, by up-scaling the existing co-management arrangements.

140. Landscape profiles have been developed covering each of the above sites and their surroundings (see **Annex 2**). The profiles present in-depth pictures of key issues related to each landscape, including baseline context, PA descriptions, baseline landscape analysis covering threats and barriers, baseline support and opportunities. Additional available information regarding the target sites includes METT analyses and PA finance data (See **Annex 1**, Tracking Tool), as well as institutional capacity scorecards related to the management authority responsible for each site (see **Annex 3**). Key site-level indicators have been developed based on field visits, including Habitat Intactness scores, Ecosystem Health Index (EHI) scores and threat indices (see above, **Tables 4** and **5**).

141. Based on the PPG analyses described above, and the project framework developed in the PIF, a tailored package will be provided to each target site. These will include combinations of support under the following three outputs:

- Integrated land use planning
- Support to PA site-level operations
- Joint PA / buffer zone governance and management.

142. Site-level activities supported under this Component will be closely linked with related outputs being produced under the other project components. In many cases, this will involve systems, policies, capacities and/or tools being developed at larger scales (mainly island-wide), which can then be piloted at the target sites. However, there will be feedback in both directions, whereby

pilot level actions will also be contributing to the stock of knowledge and understanding from which larger scale programme design will emerge.

143. Key output-level inter-connections between this Component and Components 1 and 2 are shown in **Table 8** below:

Table 9: Inter-dependence of Component 3 outputs with other project outputs

Component 1 or 2 Island-wide Outputs	**Component 3 site-level Outputs**
Support to broad RBM capacities (1.1);	Implementation of RBM and related support systems (3.2);
Data management and monitoring system development (1.2)	Site-level pilot data gathering and data set establishment (3.2)
Poaching and wildlife trade surveillance systems (1.3)	Pilot implementation of surveillance systems (3.2)
Development of guidelines for community engagement and co-management (1.1)	Testing of guidelines (3.3)
PA sub-system economic value estimation (2.1)	Pilot site-level valuation work to develop standard values (2.1)[22]
Diversified revenue generation mechanisms developed as part of island-wide PA finance plan (2.2-2.3)	Revenue-generating mechanisms and other PA finance-related reforms under PA finance plan are piloted (2.2-2.3)[23] and potential PA realignment to capture revenue-generating opportunities, e.g. associated with REDD+ (3.1)

3.1 Integrated land use plans, including PA alignment, developed and implemented in two districts

144. Most of Sulawesi's NPs are subject to fragmentation and genetic isolation due to activities in the surrounding landscapes. Overcoming this challenge requires identifying and strengthening vital connectivity and corridor needs for overall conservation and to strengthen landscape-level resilience in anticipation of species distribution shifts in face of changing climate. Mainstreaming biodiversity considerations into planning processes can play an important role in enhancing PA system sustainability. It is also crucial to have a clear PA boundary, as one of the reasons for encroachment by local people is that they do not see a clear boundary of the PA. Examination of PA boundaries in the context of biodiversity, carbon and ecosystem service considerations can also lead to the identification of opportunities for optimizing land uses within a broader landscape.

145. Through an integrated land use planning process at the district levels adjacent to the target PAs, likely including Bitung District in the Greater Tangkoko Conservation Area and a district to be determined in the area surrounding Bogani Nani, the project will support defining and possibly realigning the boundaries of the PAs, marking of revised and other boundaries and buffer zone designation. This will be achieved through community- and district-level consultations, including participatory 3-D modeling for conflict resolution and increasing village participation and

[22] In this case, site-level work is financed under Component 2
[23] Same as previous.

awareness. The plan will also mainstream and integrate biodiversity and carbon management and will examine responsiveness of different scenarios to existing threats to the PAs. It will analyse compatibility of land uses and opportunity costs of different land uses in tandem with financial sustainability work being undertaken under component 2, e.g. opportunities associated with the implementation of REDD+.

146. The project will also support locally appropriate boundary creation, using means such as native salak palm with thorns as well as edible fruits to act as a thick natural boundary wall. Biodiversity mainstreaming in the rural development planning and programmes will also be supported.

147. In Lore Lindu in particular, building on the UN-REDD work with the neighbouring communities, the project will support participatory PA boundary and land use planning, in conjunction with the establishment and revitalization of community managed conservation areas (see Output 3.3 below) that could protect biodiversity and carbon rich areas and derive monetary incentive from the REDD plus and other sustainable financing schemes. In the case of the Tangkoko complex, the project will also support the inclusion of the marine extension (approved by provincial governor since 1977). This is important not only for its own biodiversity importance but as a way to protect coastal forests and maleo nest areas. Tangkoko would also benefit from promotion to NP status, which would offer more zoning options along with a higher profile.

3.2 PA site operation is strengthened

148. This component will support improvement of core PA management functions in the target PAs to address on-going threats to biodiversity. Where possible and cost effective, implementation will be supported at least in part by NGOs already active at the sites.

149. As noted above in the introduction to Component 3, pilot implementation of systems and processes being developed at island level under component 1 will be supported under this output. This will include the following:

- Implementation of resort based management (RBM) (ref. Output 1.1): This will be supported at the resort and section levels in the field, including equipment, skill enhancement and routine enforcement and reporting systems to counter encroachment, illegal poaching and mining.
- Biodiversity and habitat condition monitoring (ref. Output 1.2): Monitoring will be integrated into the routine patrolling regime.
- Monitoring and combating of poaching and the wildlife trade, with the support of the island-level unit being established for this purpose under Output 1.1, The Spatial Monitoring and Reporting Tool (SMART), which has been used in Sumatra with the support of WCS, will be introduced at target sites in order to support and improve anti-poaching patrol work.
- Pilot case studies of environmental economic values, such as (but not limited on) water provision at Gunung Klabat at Tangkoko and water regulation and watershed services at Lore Lindu.[24]

[24] Financed under Output 2.1

- Implementation of site-level revenue generation mechanisms, based on environmental economic valuation studies and priorities identified by PA financing plan.[25]

150. In addition to the above, the following site-level PA operations will be supported:

- Restoration of ecosystems fragmented and degraded by mining or encroachment will be supported, with the full participation of local communities.
- Management planning will be supported as appropriate, defining the management goals, strategy, action and monitoring and evaluation system.
- Knowledge and skills of park staff as well as the local partners including communities will be enhanced through training tailored to improve management of specific threats to the PA including co-management and community engagement, mining site inspections, basic species identification and wildlife behaviour and habitat condition monitoring etc.
- Management infrastructure consolidation (signage, patrol camps, equipment, etc) will also be supported at a limited scale, as strategically necessary.

3.3 Joint PA/buffer zone governance and management structure

151. As described in the baseline section above, Sulawesi, and LLNP in particular, has been the scene of extensive and relatively successful efforts to establish and support Community Conservation Agreements (CCAs). These have had demonstrated positive impacts on biodiversity and threat reduction. Some 30 CCA agreements have been signed in areas surrounding LLNP, with others left in varying stages of development.

152. Given this largely positive experience, GEF support will aim to build on, adapt and replicate the CCA establishment process, while remaining mindful of lessons learned from past NGO support. These lessons, which represent shortcomings of the previous approach, will be applied to the GEF support:

- the need to build positive relations between resort-based staff and CCAs;
- the importance of establishing sustainable financing models (based on strong linkages with Component 2 and possible incorporation of CCA finance into PA financing strategies);
- the need to integrate with district and provincial-level government support within the buffer zone.

153. GEF incremental support will help to revitalize existing CCAs and establish new ones, including several at Bogani Nani and Greater Tangkoko.[26] For each CCA, based on thorough socio-economic and resource surveys and mapping, conservation targets and action plans will be

[25] Financed under Outputs 2.2 and 2.3
[26] Nearly all CCAs established to date were at LLNP.

developed. Joint PA/buffer zone governance and management structures will be put in place, with clear rules, roles and responsibilities for co-managers. The co-management agreements will define mechanisms for reducing the pressure and maintain biodiversity patterns and processes, as well as mechanisms for securing alternative livelihoods, including realisation of the benefits from the REDD plus system in critical ecosystems and corridor areas. These could include sustainable agriculture enterprises such as honeybee keeping, palm nuts harvesting, small-scale cacao plantation, and conservation oriented jobs and tourism ventures. Targeted education programme for local communities will form an important part of the output, through establishment of village education centres and mobile education units for awareness raising regarding the role and state of wildlife and the value of healthy ecosystems. Finally, micro- capital grants will support small income-generating and/or conservation schemes proposed by CCA groups.

154. In addition to working with local communities, the project will encourage NGOs, other parallel projects and local universities to work in field sites and integrate management and monitoring with PA authorities and district officials. Relevant agreements to this effect will be worked out.

PROJECT INDICATORS

155. The project indicators are contained in Section II / Part I (Project Results and Resources Framework) and include a number of 'SMART'[27] impact (or 'objective') and outcome (or 'performance') indicators and targets (summarised in **Table 11**).

[27] Specific, Measurable, Achievable, Relevant and Time-bound.

Table 11: Project Results and Resources Framework (RRF)

Objective/ Outcome	Indicator	Baseline	Annual Project target	Explanatory note
Objective: To strengthen the effectiveness and financial sustainability of Sulawesi's protected area system to respond to threats to globally significant biodiversity	Institutional capacity scores*for: - PHKA (Jakarta) - LLNP - Bogani Nani NP - North Sulawesi BKSDA *Based on UNDP Capacity Scorecard (See annex 5)	- PHKA (Jakarta): 66% - LLNP: 43% - Bogani Nani NP: 42% - North Sulawesi BKSDA: 40%	**2015**: Capacity development strategies and action plan drafted. **2016:** Capacity development strategies and action plan developed; commenced for implementation. **2017**: RPTNs (National Park Management Plan) updated; **2018**: Capacity score for PHKA :70%, LLNP :50%, Bogani Nani NP :50% and North Sulawesi BKSDA: 50%; **2019**: Draft local government regulation on buffer zone; **2020**: Capacity score for PHKA (Jakarta): 75%, LLNP: 55%, Bogani Nani NP: 55% and North Sulawesi BKSDA: 55%;	UNDP Capacity Development scorecard applied for the Ministry of Forestry, Lore Lindu National Parks Agency, Bogani Nani National Parks Agency, North Sulawesi BKSDA. See Annex 4 for UNDP Capacity Development Scorecard baselines assessments.
	Annual levels of forest degradation within Sulawesi's terrestrial PAs	Approximately 56,505 ha of forest loss within PAs from 2000-2008 or 7,603 ha/year	**2015**: - **2016:** Developed baseline forest cover in Project demonstration sites; **2017**: Annual forest degradation at project sites reduced by 5% from the baseline; **2018:** Annual forest degradation at project sites reduced by 10% from the baseline; **2019**: Annual forest degradation at project sites reduced by 15% from the baseline; **2020**: 25% reduction in annual deforestation within PAs and buffer zones in the project sites combined between	Existing area estimates from annual report: Statistik Kehutanan Indonesia.

Objective/ Outcome	Indicator	Baseline	Annual Project target	Explanatory note
			baseline years (2000-2010) and last three years of project (2016-2019).	
1. Enhanced systemic and institutional capacity for planning and management of Sulawesi PA system	Extent of implementation of RBM (Resort-based Management)	RBM has begun to be implemented at all NPs but remains incomplete throughout	**2015**: Gap analysis report on existing policies & RBM operational guidelines drafted. **2016**: Developed operational guidelines for RBM implementation; **2017**: (i) Guidelines for Community engagement & Co-Management developed and (ii) related trainings conducted; **2018**: at least 25% of resorts in all project sites achieved at least one stage above baseline; **2019**: Incentive mechanism for resort level innovation established; **2020:** Using PHKA RBM scoring system (para 60), at least 50% of resorts in the project sites achieved one stage level above the baseline.	Stages in resort establishment have been defined by MoFor oras follows: 1. No RBM implementation 2. Has been divided into resorts (no infrastructure or officers) 3. Resort infrastructure (no officers) 4. Infrastructure and officers (not yet routine) 5. Officers are routinely in the resort and doing the surveillance job (passive) 6. Officers are routinely present in the resort and actively performing full range of prescribed tasks, i.e. surveillance, flora and fauna monitoring, data collection, community outreach, etc. 7. Resort data and information are used on an on-going basis to prepare and update management plan and policy arrangements.
	Effectiveness of anti-poaching efforts	Very limited implementation of anti-poaching laws across Sulawesi	**2015:** - **2016**: (i) a small unit of intelligence based poaching & wildlife trade surveillance established and equipped; (ii) mechanism for monitoring, analysing and reporting developed. **2017**: The Unit was fully operational at least within Project sites and buffer zones**.** **2018:** Reporting system on wildlife trade & consumption was in place at project sites & buffer zones.	Surveys to be administered to buffer zone populations

Objective/ Outcome	Indicator	Baseline	Annual Project target	Explanatory note
			2019: Initial replication of the intelligence based poaching & wildlife trade surveillance unit to other PAs in Sulawesi. **2020:** Intelligence-based anti-poaching has become a well-known feature of PA management, affecting incentives in measurable ways (surveys).	
	Operational island-wide biodiversity monitoring system	No integrated monitoring	**2015: -** **2016:** : Technical guidelines for biodiversity, key species and habitat condition monitoring updated & disseminated to all Sulawesi PAs system. **2017**: Platform for monitoring, reporting & knowledge sharing of the Sulawesi Biodiversity developed at provincial level. **2018**: Fully utilized the platform for island-based biodiversity monitoring, planning and budgeting. **2019**: Publication of Sulawesi biodiversity & best practices of PA management disseminated in various forms of media & discussed/reviewed at national and sub-national level. **2020**: Users across Sulawesi, Indonesia and beyond are able to upload to and access historic data on biodiversity and protected areas, generated by multiple sources, using a platform created by the project.	Target to be measured through project reporting on data system functionality
	Representation of lowland forest (key under-represented forest ecosystem types in Sulawesi's PA system)	131,000 ha, or 4.2% of total remaining habitat type	**2015: -** **2016**: Spatial planning arrangement for Sulawesi PA system designed based on biodiversity importance & bio-	Baseline is from TNC Ecoregional Assessment. End figure may vary depending on site survey to be undertaken as part of NP establishment

Objective/ Outcome	Indicator	Baseline	Annual Project target	Explanatory note
			geographical representatives of the PA system. **2017**: PA System Consolidation Plan and Action plan for expansion and realignment of Sulawesi PA System be vetted by relevant districts and provinces planning authorities to be eventually integrated into their spatial planning. **2018**: Implementation of the Action plan at island level in coordination with relevant directorates within the Ministry of Forestry including gazetting preparation process of new National Park (Ganda Dewata). . **2019**: Policy recommendation & exit strategy to sustain the plan implementation adopted by relevant authorities. **2020**: Representation of low land forest increased to 210,000 ha, or 6.7% of remaining habitat type (representing a 60% increase in coverage).	
2. Financial sustainability of the Sulawesi PA system	Financial sustainability score (%) for the sub-system of Sulawesi's protected areas: - Component 1 – Legal, regulatory and institutional frameworks - Component 2 – Business planning and tools for cost-effective management - Component 3 – Tools for revenue generation	Financial sustainability score (see Annex 6 - Tracking Tool, incl. METTs and Financial Sustainability Scorecard) 34 % 35 % 28 %	**2015**: - **2016**: Economic valuation of Sulawesi PA system reviewed particularly for three project sites. **2017**: Communication strategy to increase public awareness on the importance of biodiversity & ecosystem services provision developed. Key target groups: decision makers, local government official and local and indigenous community. **2018**: Increased financial sustainability score for component 1 (40%), component 2 (40%) and component 3 (35%)	This indicator takes the scores in Part II of the Financial Scorecard, expressing the current status of each component as a percentage of the total possible score (representing a fully functioning financial system at the site and system level). The target value represents the planned improvement in sustainable financing for the provincial PA system by the end of the project. See Annex 6 for Financial Scorecard baselines in GEF BD-1 Tracking Tool.

Objective/ Outcome	Indicator	Baseline	Annual Project target	Explanatory note
			2019: Increased financial investment in the Sulawesi PA system. Quantitative target will be discussed during the Inception Workshop. **2020**: Increased financial sustainability score for component 1 (50%), component 2 (50%) and component 3 (50%).	
	Annual budget allocated to protected areas	Estimated $12.3 million allocated annually.	**2015: -** **2016**: Sulawesi PA system financing plan and strategies developed including proposals for broader policy reform supporting revenue generation and retention, institution arrangement, tool for cost effective management and others. **2017**: Business plan of the Sulawesi PA developed through participatory approach involving communities, private sector, NGOs and related government agencies. **2018**: At least one pilot financing projects operating in each project site. **2019**: Best practiced of the business plan implementation documented for replication. **2020:** Annual budget allocation to the PA system increased 25% equivalent to approx. $15 million.	As recorded in the GEF BD-1 Tracking Tool, Financial Sustainability Scorecard.
	Sustainable financing mechanisms for PAs	Government budgetary allocations / funding only	**2015**: - **2016**: Study on potential financing mechanism for Sulawesi PA management. **2017**: An enabling policy/legal environment developed through technical	Final identification of mechanisms to be made under PA financing plan

Objective/ Outcome	Indicator	Baseline	Annual Project target	Explanatory note
			meetings, consultation and consensus building at local and national level **2018**: Design, negotiation, formalization and operationalization of mechanism implemented. **2019**: National mechanism of the PA system financing socialized to relevant stakeholders. **2020**: At least two new sustainable financing mechanisms for PA management developed, which can provide a minimum of US$ 3 million per year for PA management.	
3. Threat reduction and collaborative governance in the target PAs and buffer zones	METT scores for demonstration sites	LLNP - 61 BNWNP - 64 Tangkoko Batuangas NR - 55	**2015: -** **2016**: Action plan for strengthening management effectiveness of the Sulawesi PA system developed. **2017**: Participatory Biodiversity-based boundaries realigning at project sites and buffer zone designation developed. **2018**: Increased METT scores for LLNP – 65, BNWNP – 67, TBNR Complex - 60 **2019**: Collaborative management in the targeted PAs and buffer zone integrated in Sulawesi PA system action plan. **2020**: Increased METT Score for LLNP – 70, BNWNP – 70, and Tangkoko Batuangas NR – 70	As per GEF 5 BD1Outcome 1 Indicator 1.1: *Protected area management effectiveness score as recorded by Management Effectiveness Tracking Tool (METT).* See Annex 6 for METT Scorecard baselines.
	Threat indices at project demonstration sites	LLNP – 0.23	**2015: -**	Based on cumulative, site-based assessment of severity of 21 individual threats For

Objective/ Outcome	Indicator	Baseline	Annual Project target	Explanatory note
		BNWNP – 0.28 Tangkoko Batuangas NR – 0.31	**2016:** Updated threats and work plan in project sites. **2017:** Developed monitoring, evaluation & reporting mechanism of the PA threats, led by Surveillance Unit. **2018:** Reduced threat indices for LLNP – 20, BNWNP – 25, and Tangkoko Batuangas NR – 25 **2019:** Best practices developed and disseminated. **2020:** Reduced threat indices for LLNP – 0.15; BNWNP – 0.20 Tangkoko Batuangas NR – 0.20	details, see MacKinnon, John. June 2013. Consultancy report of biodiversity monitoring consultant for Enhancing the protected area system in Sulawesi (E-PASS) for Biodiversity Conservation.
	Ecosystem health index at project demonstration sites	Lore Lindu NP - .68 Bogani Nani Wartabone NP - .55 Tangkoko Batuangas NR - .48	**2015**: - **2016**: Updated RBM guidelines including biodiversity and ecosystem health monitoring. **2017:** Developed monitoring, evaluation & reporting mechanism to regularly update the ecosystem health. **2018:** Increased EHI for Lore Lindu NP - 0.70, Bogani Nani Wartabone NP - 0.60, and Tangkoko Batuangas NR - 0.60 **2019:** Implemented and adopted RBM innovation incentive mechanism; published project best practices.	Annex 8 presents detailed breakdown of Ecosystem Health Index.

Objective/ Outcome	Indicator	Baseline	Annual Project target	Explanatory note
			2020: Increased EHI for Lore Lindu NP - .75 Bogani Nani Wartabone NP - .75 Tangkoko Batuangas NR - .75	
	Populations of selected threatened indicator species at project sites	LLNP – Mountain Anoa, Babirusa, Maleo BNWNP – Maleo, Babirusa, mountain Anoa Tangkoko Batuangas NR – Macaca nigra, Sulawesi civet, Maleo, lowland Anoa	**2015**: - **2016**: Monitored of the existing condition of selected threatened species, threats, habitat and wildlife trade. **2017**: Developed species management measures guidelines. **2018**: Maintained population of key species. **2019**: Database on key species information updated and disseminated. **2020:** Indicator population species maintained or increasing; appropriate population structure achieved.	Indicator species selected based on expert opinion, national priorities and site visits and in consultation with MoFor.
	Active encroachment areas in target PAs	- Encroachment levels as of 2011: LLNP 6,333 ha, BNWNP 3,436 h. Tangkoko baseline TBD.	**2015**: - **2016**: Fragmented and degraded ecosystem restoration conducted. **2017**: Conflict resolution to reduce forest encroachment developed. **2018**: Stopped encroachment activity in target sites. **2019**: Best practices adopted and replicated to other sites. **2020**: Zero increase in net levels of active encroachment.	Encroachment estimates are based on field surveys by PA management authorities, as reported by MoFor.
	Existence and effectiveness of collaborative governance systems	Approximately 30 Community Conservation Areas (CCAs) established, currently operating at varying degrees of functionality.	**2015: -** **2016**: Existing CCAs revitalized and 5 new CCAs established.	TNC has taken the lead on CCA establishment in the past and CCA establishment figures are based on their data. Field surveys will be needed to

Objective/ Outcome	Indicator	Baseline	Annual Project target	Explanatory note
			2017: Education programme for local communities mobilized through mobile education units and village education centers establishment **2018**: (i) At least 40 CCAs established/revitalized at all project sites. (ii) At least 30 CCAs above operating at an agreed baseline level of functionality. (iii) At least 12 CCAs above are rated as 'highly functional'. **2019**: Agreements on collaborative management, for instance between PAs and communities, NGOs, parallel projects, local universities and local Government established. Micro-capital grants for small income generating/conservation schemes proposals established. **2020**: (i) At least 45 CCAs, including some at each project demonstration site (ii) 70% of above CCAs are operating at an agreed baseline level of functionality. (iii) 35% of above CCAs are rated as 'highly functional' (rating system to be developed and applied during inception phase).	ascertain current (at time of project start) level of functionality.

RISK ANALYSIS

Table 12. Risk Log

#	Description	Date Identified	Type	Impact & Probability	Countermeasures / Mngt response	Owner	Submitted, updated by	Last Update	Status
1	Much of the demand underpinning illegal poaching in Sulawesi appears to be within-island in nature.	20 Oct 2014	Environmental	Poaching pressure fuelled by the existence of global illegal wildlife trade may decimate wildlife populations. P = 3 I = 4	Few products reach a global market. Project efforts will therefore aim mostly at curbing this local demand, e.g. for bush meat at Tangkoko and encouraging local communities to conduct activities in fulfilling the needs of their breeding for meat.	Technical Officer for NRM	Iwan Kurniawan	20 Oct 2014	No change
2	PA is still cost center. There is no comprehensive negotiation tool to value the biodiversity and ecosystem within the PA as well as enabling policy and set of incentive mechanism. In addition, new elected government has different development targets priority.		Political	Provincial and District Governments may be reluctant to promote conservation oriented land use with a fear of losing state revenues. P = 3 I = 4	Building on the existing biodiversity assessments and carbon mapping and in close collaboration with the national REDD Plus and the Central Sulawesi REDD Plus working group, the project will invest in development of various decision support tools for land-use decision making. This will include the terrestrial PA system consolidation plan for Sulawesi, economic valuation of the PA system and PA system financing plan, and district level land use plans which mainstreams biodiversity and carbon considerations. The project will also support development of new sustainable financing mechanisms through realising payment for conservation actions on the ground. To this end, it will help to establish a close collaboration / integration between REDD+ and PA management / financing strategies. In so doing, it will strongly enhance the complementarity and synergies between PA-based biodiversity conservation and carbon emission reduction strategies and associated financial flows.	Technical Officer for NRM	Iwan Kurniawan	20 Oct 2014	No change

#	Description	Date Identified	Type	Impact & Probability	Countermeasures / Mngt response	Owner	Submitted, updated by	Last Update	Status
3	REDD Financing mechanism did not work well in particular benefit-sharing mechanism and its MRV.	20 Oct 2014	Financial	International and national REDD Plus process does not progress fast enough loses the confidence among the project stakeholders. P = 3 I = 2	This risk has increased since the time of PPG preparation. However, the project will ensure close coordination and synergy with the Indonesia's national REDD plus programme and associated projects, as well as the Central Sulawesi REDD Plus working group. The project will play close attention to the process through which a REDD+ compliance market may be expected to emerge. It will support capacity development within the conservation area and biodiversity conservation divisions of the Ministry of Forestry in order for them to participate meaningfully in the REDD plus process to ensure that PAs are fully integrated in the REDD Plus modalities and implementation. Finally, the project will look to alternative sources of finance, such as ecotourism, to complement potential carbon payments.	Technical Officer for NRM	Iwan Kurniawan	20 Oct 2014	No change
4	Major natural disasters (earthquake, floods, volcanic eruption etc.) inhibit the increase in national and provincial government investment in PA system	20 Oct 2014	Environmental	PA investment will be less priority. Even it will be difficult to maintain business of usual conditions. P = 3 I = 2	The project will support development of new financing mechanisms with clear fund earmarking system in support of the PA system. This will reduce the risk of natural disasters impacting on PA financing. Through the economic valuation exercise, the project will articulate the role of the PA system in disaster prevention so as to avoid the need for increased funding for recovery and reconstruction does not negatively affect the PA financing.	Technical Officer for NRM	Iwan Kurniawan	20 Oct 2014	No change
5	Climate change may undermines the conservation objectives of the Project	20 Oct 2014	Environmental	There is limited study on the impact of climate change to biodiversity. Therefore the government at different level will not able to develop strategic planning/programme according to resilience principles to address anticipated negative	The Project will work to address the anticipated negative impacts of climate change by increasing resilience of the forest landscape, through improving management of protected areas and rationalisation of the protected area system in Sulawesi. For this, the project will incorporate actively the resilience principles in its support for PA management effectiveness enhancement. Through this, the project will contribute to the maintenance of ecosystem resilience under the climate change conditions, so as to	Technical Officer for NRM	Iwan Kurniawan	20 Oct 2014	No change

#	Description	Date Identified	Type	Impact & Probability	Countermeasures / Mngt response	Owner	Submitted, updated by	Last Update	Status
				impact of the climate change. P = 2 I = 2	secure sustainable flow of ecosystem services.				
6	Lack of field-based data and information	20 Oct 2014	Environmental Financial Operational Organizational Political Regulatory Strategic Other	There will be a challenge to develop quantitative project baseline and monitor the progress of project achievement in annual basis. P = 4 I = 4	Considering size of PAs that will be affected by the project intervention and complexity of drivers, the project will develop clear methodology to monitor and evaluate annual project targets. Development of proxy indicators would be helpful particularly to estimate progress made on targeted species population.	Technical Officer for NRM	Iwan Kurniawan	20 Oct 2014	No change

Table 13: Risk assessment guidance matrix used for the risk assessment

		Impact				
Likelihood		CRITICAL	HIGH	MEDIUM	LOW	NEGLIGIBLE
	CERTAIN / IMMINENT	Critical	Critical	High	Medium	Low
	VERY LIKELY	Critical	High	High	Medium	Low
	LIKELY	High	High	Medium	Low	Negligible
	MODERATELY LIKELY	Medium	Medium	Low	Low	Negligible
	UNLIKELY	Low	Low	Negligible	Negligible	Considered to pose no determinable risk

INCREMENTAL REASONING AND EXPECTED GLOBAL, NATIONAL AND LOCAL BENEFITS

156. The **objective** of the proposed project is to **strengthen the effectiveness and financial sustainability of Sulawesi's PA system to respond to existing threats to globally significant biodiversity.**

The Incremental Approach

157. The government of Indonesia has clearly identified biodiversity conservation as a priority and is making significant efforts to create the conditions for sustainable PA management as a key strategy to conserve biodiversity. However, despite strong commitment from the government, actions are seldom taken to concretely remove the barriers to the establishment of a sustainable PA system. In particular, in many existing PAs, pressure for land and biological resources requires urgent action in order to prevent further degradation of critical ecosystems and loss of critically endangered species. The proposed intervention is particularly timely because of the formulation of the first National Action Plan for PAs in 2010 and current efforts of Indonesia to develop capacity to meaningfully participate in REDD plus. **In the baseline situation**, a lack of capacity and resources, and an inability to upscale successful models on the ground in catalysing PA management effectiveness will mean that threats to PAs and the biodiversity they harbour will continue to grow, and will likely lead to further habitat fragmentation and destruction. **In the alternative scenario enabled by the GEF**, systemic and institutional barriers to improved PA management and sustainable financing in Sulawesi will be removed at the national, provincial and site levels, backed by thorough implementation of the RBM system ensuring sustainability of the impact. An island-wide system for biodiversity monitoring will be established for the first time and a poaching and wildlife trade surveillance system will be operationalised. The Sulawesi PA system will be consolidated through realignment and modest expansion, increasing the coverage of the PAs in under-represented vegetation types as well as including important carbon sinks and areas of ongoing deforestation / degradation. Financing sustainability will be improved through management needs-based financial planning, PA revenue diversification, and quantification of the value of the PA system. PA management capacities will be improved both on the ground and in the Sulawesi PA system and local threats will be reduced through multiple benefit planning and implementation as well as through collaborative management of PAs and buffer zones. PA expansion and financing strategies will be harmonized with the REDD Plus process supported by UN-REDD and others, in order to optimize / balance potentially conflicting biodiversity, carbon and sustainable finance objectives within PA management, consolidation, threat reduction, expansion and financing efforts. **Table 13** below summarizes output-level scenarios, with and without the project.

Table 14: Baseline and alternative scenarios, by component and output

Baseline (business-as-usual) scenario	Alternative GEF scenario
Component 1: Systemic and institutional capacity for planning and management of Sulawesi PA system	
• RBM ESTABLISHMENT: Establishment of RBM system on Sulawesi and elsewhere is proceeding in gradual steps, with emphasis on NPs and secondary if any focus on other PA categories. • ISLAND-WIDE SYSTEM FOR BIODIVERSITY, KEY SPECIES AND HABITAT MONITORING: No systematic Sulawesi-wide monitoring. Diverse and confusing species and habitat monitoring effort leads to duplication, overlap and serious information gaps • INTELLIGENCE-BASED POACHING AND WILDLIFE TRADE SURVEILLANCE: Monitoring and enforcement remain weak, regulations too lenient and illegal trade represents an important threat. • TERRESTRIAL PA SYSTEM CONSOLIDATION PLAN: No relevant baseline in terms of planning; gradual PA system expansion may continue on an ad-hoc basis.	• RBM ESTABLISHMENT: Sulawesi's implementation of RBM, across PA types, is setting the pace, and generating adaptive management lessons for, the rest of Indonesia. • ISLAND-WIDE SYSTEM FOR BIODIVERSITY, KEY SPECIES AND HABITAT MONITORING: A locally-based, Sulawesi-wide monitoring system of biodiversity, key species and habitat conditions supported by sound science and systematic surveys is in place and operating. • INTELLIGENCE-BASED POACHING AND WILDLIFE TRADE SURVEILLANCE: Sulawesi-wide anti-poaching operation is in place, with resulting impacts on reduced poaching through altered incentives • TERRESTRIAL PA SYSTEM CONSOLIDATION PLAN: An island-wide plan designed to ensure cost-effective biodiversity conservation through well designed PA alignment, taking accoount of ecosystem services, including carbon and biodiversity values
Component 2: Financial sustainability of the PA system	
• PA SYSTEM ECONOMIC VALUES ESTIMATED: Few studies exist, those that do are largely forgotten, and environmental economic or green economy thinking has little influence on policy makers, decision making or public opinion. • ISLAND-WIDE AND PILOT PROVINCIAL LEVEL PA SYSTEM FINANCIAL PLANS: Financing is done on an ad-hoc basis, with little prioritization or notions of cost effectiveness • DIVERSIFIED REVENUE GENERATION MECHANISMS AND OTHER FINANCING SOURCES FOR PA MANAGEMENT: PAs are vulnerable to fluctuations in budgetary allocations given that the equivalent of 1.5% of budgets are generated by the PAs	• PA SYSTEM ECONOMIC VALUES ESTIMATED: Broad indications of ecosystem service benefits and associated benefits associated with PA establishment and operations • ISLAND-WIDE PA SYSTEM FINANCIAL PLAN: Strategic approach n place designed to ensure maximum cost effectiveness from PA-system investments and to incentivize site-level innovations and cost effectiveness • DIVERSIFIED REVENUE GENERATION MECHANISMS AND OTHER FINANCING SOURCES FOR PA MANAGEMENT: A step-wise approach to removing barriers to revenue retention, together with pilot revenue generation efforts
Component 3: Threat reduction and collaborative governance in the target PAs and buffer zones	
• INTEGRATED LAND USE PLANS, INCLUDING PA ALIGNMENT, DEVELOPED AND IMPLEMENTED IN TWO DISTRICTS: x District-level land use planning takes place without regard to issues of connectivity and fragmentation facing PAs • PA SITE OPERATIONS: Insufficient patrolling and other shortcomings are contributing to reductions in ecosystem health, persistence of threats and loss of threatened species • JOINT PA / BUFFER ZONE GOVERNANCE AND MANAGEMENT STRUCTURE: Earlier capacities to operate CCAs at LLNP are being eroded in the absence of financial and other sustainability strategies, while uptake at other sites is limited	• INTEGRATED LAND USE PLANS, INCLUDING PA ALIGNMENT, DEVELOPED AND IMPLEMENTED IN TWO DISTRICTS: An integrated approach to district and PA planning will have been demonstrated, with an emphasis on cost effectiveness • PA SITE OPERATIONS: Targeted improvements to PA operations and strategies are leading to 20-25% improvement in management effectiveness • JOINT PA / BUFFER ZONE GOVERNANCE AND MANAGEMENT STRUCTURE: CCA capacities are increased, with resulting positive impacts on threat levels at pilot sites; lessons learned from LLNP model and project experience inform community: PA relations elsewhere in Indonesia.

158. The above-described alternative scenario funded by GEF and cofinancing resources is expected to result in key modifications to the baseline scenario that will generate global environmental benefits. The project will generate global environmental benefits in the area of biodiversity conservation. Key global benefits are described below.

159. The immediate **global benefits** are improved management of Sulawesi's terrestrial PA system covering 1,600,480 ha of predominantly forested land in the tropics with an array of globally significant biodiversity including a large number of endemic species including anoa, maleo, babirusa and crested black macaque. GEF funding will secure critically important biodiversity and habitat to deliver global benefits including the realignment of the PA network and the improved conservation of the habitat of the extremely significant number of Sulawesi's endangered endemic species. It will also ensure the realization of substantial potential biodiversity benefits associated with the advent of REDD-Plus strategies for Sulawesi, which would not otherwise be fully achieved through a carbon-specific approach. Incremental benefits will be associated both with the selection of sites for PA system alignment as well as with increased financial sustainability. Moreover, the project will generate globally important lessons on strengthening a PA system and securing sustainable PA financing using the REDD plus mechanism. This will be secured through three project components.

Socioeconomic benefits and Gender

160. Strengthening the PA system in Sulawesi will have significant socioeconomic benefits at both national and local levels. Nationally, it means safeguarding the unique natural heritage for the benefit of current and future generations and ensuring continued supply of ecosystem services for Indonesia. It will also prevent the enormous cost, both in terms of asset loss and human lives, of possible natural disasters including floods and landslides. Locally, communities will continue to be able to benefit from access to an improved forest resource base, including NTFP and tourism resources. Safeguards will be put in place for continued access, through full participation of community members in the PA management operation, with agreed sustainable use regimes and monitoring mechanisms.

161. At the site level, the total population of villages surrounding the three pilot sites is estimated at 122,500, about 85% of whom are located in areas surrounding Lore Lindu National Park. Average baseline income in these communities is estimated at some 450-500,000 IDR per month, or c. $50 per household. Assuming an average household size of 5 persons, this suggests a total annual GDP for the project site buffer zones of US$14.7 million. Under the project baseline scenario, communities living in areas surrounding the three pilot protected areas are placing increasingly unsustainable pressure on a declining resource base. This represents a declining spiral of natural capital, and of ecosystem services benefitting human welfare, including those associated with incomes. Protected areas are slowing, but not eliminating, these trends. In addition, while generating long-term benefits related to ecosystem service provision and maintenance of natural assets, PAs are probably causing net income losses in the short term by restricting local community access to natural resources.

162. The project aims to alter the above dynamic in a way that both conserves biodiversity and associated resources while having a net positive impact, in both the short- and long-term, on local

welfare and incomes. This latter impact will occur in part through a micro-grant mechanism being established under Output 3.3, which will support the establishment and/or expansion of micro-enterprises within communities covered under CCAs. Targeted sectors include sustainable and biodiversity-friendly agriculture enterprises such as honeybee keeping, palm nuts harvesting, small-scale cacao plantation, as well as conservation-oriented jobs and tourism ventures.

163. The project plans to provide approximately US$400,000 (after accounting for costs of administering the programme locally and providing technical support to grantees) in micro-enterprise grants over a three-year period, or some $135,000 per year. The total amount invested will be on the order of 1% of the area's GDP, though it will be equivalent to a significantly larger percentage of annual net capital investment in these villages, perhaps 10-15% or more. Members of beneficiary groups will be most directly impacted; as such, special efforts will be made to ensure a high level of participation by women within such groups. In addition to income increases, communities will benefit from conserved ecosystem services associated with reduced levels of degradation of local resources. The significant number of women and young people will be involved in the micro-enterprise grants program over a three years period. This program to encourage women and girls are engaged in care work and the economic and social contribution and value of women in the society. Furthermore, policies and instruments designed to increase tourism would be most likely to benefit local communities through opportunities for home stay, guiding, etc. REDD+ certainly has the potential, through benefit-sharing mechanisms, to have a positive impact on local communities, particularly in areas where baseline levels of PA encroachment and buffer zone deforestation and degradation and are highest.

164. In order to ensure socioeconomic benefits and their sustainability, local level activities will be carried out with the participation of local stakeholders, with full consideration given to gender dimensions. Many local level activities will be implemented by local stakeholders themselves. There are already a number of successful livelihood support activities in place which have been supported by various NGOs. These include planting of palms by the Maleo nesting beach as a cash crop to support local livelihoods and the deployment of community guards in the beach in Gorontalo purchased and managed by a local NGO with support of the WCS. Establishment of PES mechanisms to be supported by the project will not only generate necessary revenues for the governments and communities for conservation actions, but also provide the world a good model for low carbon, climate resilient development. In addition, by protecting the globally significant ecosystems and biodiversity, Sulawesi's attraction as a nature tourism destination will continue to increase, with a real potential for substantially increasing tourism revenue and employment creation. Following the UNDP and GEF gender policies and strategies special attention will be placed on gender equity, and in particular ensure full participation of women in consultations on integrated natural resource management and land-use planning processes, with a gender disaggregated monitoring and evaluation mechanism.

COST-EFFECTIVENESS

165. According to MoFor, resort-based management (RBM) has the potential to deliver substantial cost savings over traditional management methods. The extent of such savings and how to maximize them, will be investigated under the financial sustainability component

166. The project contributes directly towards larger national policy, regulatory, fiscal, data management and communications goals in support of biodiversity conservation and an effectively managed national PA system through up-scaling of its demonstration activities and approaches. The project implementation arrangements include a direct link between island and national levels to ensure that this potential will be realized.

167. At a technical level, investments in law enforcement, monitoring and information management will be cost-effective investment in terms of project impact as well as for subsequent operations. The project's approaches in building support from across multiple sectors, stakeholders including local communities, and building capacity of the local management authorities are expected to lead to cost-effective PA management that avoids duplication of work, reduces biodiversity degradation and loss of ecosystem services from incompatible development practices, and ensures the sharing of timely information and resources.

168. The total GEF investment of $6.265 million for this project will leverage a minimum of $ 43.7 million in co-financing from Government, UNDP and other donors, a highly cost-effective ratio of 7:1. The overall GEF investment in strengthening overall management effectiveness for Sulawesi's terrestrial PA system will average less than US$2 per hectare per year for pilot sites alone, a small fraction of the likely value of the ecosystem services being conserved.

169. Finally, the receipt of GEF resources channelled through a UN implementing agency is a source of pride for provincial government agencies in Indonesia, which often facilitates their ability to achieve the necessary political commitment to take difficult decisions on issues such as upgrading PA protection status, inter-agency coordination to reduce external pressures on PAs, the adoption of more environmentally friendly practices in related sectors, and concessions on land uses; a particularly cost-efficient means to an end.

PROJECT CONSISTENCY WITH NATIONAL PRIORITIES/PLANS

170. Indonesia's National Long-Term Development Plan (2005-2025) aims to achieve a "green and ever-lasting Indonesia" The vision and mission of the plan is to establish a country that is developed and self-reliant, just and democratic, and peaceful and united, in order to achieve the development goals as mandated in the Preamble to the Constitution of 1945.

171. The Government's commitment to pursuance of a sustainable green development path is clear. Government has launched a green economy programme as part of its sustainable development plan which is pro-growth, pro-job, and pro-poor. To support the implementation of green economics, programmes have been drawn up on food resilience by implementing sustainable agriculture, sustainable forestry management, efficiency and renewable energy usage, clean technology support, waste management, efficient and low carbon transportation management and green infrastructure development.

172. Specific policies include reforms of subsidies for electricity industries to reduce greenhouse gas emissions, reforms of fuels subsidies making them more targeted, new policy instruments for the promotion of renewable energy such as geothermal and other clean energies, as well as incentives for industries which promote environmental friendly products. Indonesia has voluntarily committed to reducing greenhouse gas emissions or carbon intensity per unit of GDP by 2020. Indonesia is committed to reducing its greenhouse gas emissions by 26%, and up to 41% with international support, by 2020. The majority of the emission reduction is expected to be realised in the forestry and land based sectors by reducing and avoiding deforestation and forest degradation. The National Strategy for REDD+ was formulated, with the objective of reducing emissions of greenhouse gases from the forestry sector by a minimum of 14% as part of the aforementioned country's commitment under UNFCCC.

173. Pursuance of REDD+ policy provides the opportunity for advancing biodiversity conservation and increasing management effectiveness of the protected areas in the country, while the policy recognizes the roles of protected areas in safeguarding forests avoiding a significant amount of potential emissions.

174. The second Medium Term Development Plan (2010-2014) contains specific policies and goals on mainstreaming sustainable development and natural resource and environmental management. The project is fully in line with the National Action Plan for PAs, covering the period 2010 – 2015, directly implementing a number of priority actions that go towards meeting the five-year objectives. These include:

- Build and strengthen long-term support for PA protection and management amongst local people and the broader community, and improve management of PAs where possible through involvement of communities and other stakeholders;
- Ensure that PA management is supported by strong institutions that are recognised as priorities in government planning and budgeting processes, and that are well coordinated at national, provincial and district levels;
- Ensure that PAs in Indonesia have adequate funding for effective management by 2014 and that systems are in place to sustain and increase this funding for the future development of the PA system;
- Well trained staff with capacity to effectively implement all PA management functions by 2014;
- Improve effectiveness of PA management through regular systematic evaluation;
- Develop a comprehensive M&E system that provides effective feedback to policy-makers and managers on lessons learned regarding management strategies and which meets local, national and international reporting requirements.

175. Furthermore, the project will directly contribute to achievements of the targets under the Five Year Strategic Plan of the Directorate of Forest Protection and Nature Conservation of the Ministry of Forestry covering the 2010-2014 period, including: Development of BLU (General Service Unit) in the 12 UPTs (Technical Implementation Unit) to support financial sustainability of national parks; 5% reduction of conflict and pressure on protected areas; 3% increase in population of priority species compared to 2008 baseline estimates; 20% reduction in threats to biodiversity on

the islands of Borneo, Sumatra and Sulawesi; and increase in nature tourism by 60% compared to the 2009 baseline.

176. Ministry of Forestry has a specific programme and targets covering all nature reserves and conservation areas across Indonesia. The programme identifies 12 priority provinces and 51 priority national parks. It is organized into six components, each of which has associated targets. These are described in Table 14 below.

Table 15: National priority actions programme

Programme area	Lead department	Work areas
1. Conservation area development and essential ecosystems	Directorate of Conservation Areas	• Conflict and pressure on the national parks and other protected areas (nature reserves / NR, wildlife reserves / WR, hunting parks /HP) and protected forest / PF reduced by 5%. • Management of essential ecosystems as life support increased 10%. • Handling of forest encroachment in 12 priority provinces • Improved management effectiveness of protected areas through resort-based management (RBM) in the 51 priority National Parks.
2. Investigation and forest protection	Directorate of Investigation and Forest Protection	• New cases of forest crime (Illegal logging, encroachment, Illegal Trading of Plants and Wildlife, Illegal Mining and Forest Fire) increased at least 75%. • Encroachment, Illegal Trading of Plants and Wildlife, Illegal Mining and Forest Fire) decreased 25% per year. • Case of law of the conservation area encroachment increased 20%
3. Genetic and species conservation development	Directorate of Biodiversity Conservation	• Populations of biodiversity and endangered species increased by 3% from 2008 according to the biological conditions and the readiness of habitat. • Breeding and utilization of biodiversity species in a sustainable manner increase by 5%.
4. Forest fire control	Directorate of Fire Control	• Hotspots in the Island of Kalimantan, Sumatra and Sulawesi decreased (20% every year for Central Sulawesi and Gorontalo; 10% in North Sulawesi). • Burnt forest area reduced by 50% compared to 2008. • Increase the capacity of government officials and community in the effort of risk reduction, mitigation and management of forest fire hazard in 30 DAOPS (33 provinces)
5. Development of environmental services and nature tourism	Directorate of Environmental Services and Eco-tourism	• Business of nature tourism increased 60% compared to 2008, and the license of new water environmental services utilization is 25 units. • PNBP in the sector of nature tourism increase 100% compared to 2008. • Incomes in certain protected areas increased to a minimum of Rp.800.000, - per month per household (or by 30%) through the efforts of community empowerment. • Increased community development and nature tourism in the conservation areas in 29 provinces, including North Sulawesi and Central Sulawesi.
6. Management support and other technical tasks	All Directorates	• Institutional capacity of conservation area management increased from 16 UPT (Technical Executor Unit) to 77 UPT. E-PASS sites having this program are in the provinces of North Sulawesi and Central Sulawesi. • Establishment of 6 new UPT of General Directorate PHKA in the Riau Islands, Bangka Belitung, Banten, **West Sulawesi, Gorontalo** and North Maluku. • Cooperation and partnerships in the sector of natural forests conservation and their ecosystem by funding sources as grants, non-commercial, and technical assistance, and forest removal program through DNS is increasing

Programme area	Lead department	Work areas
		each year, at least 2 documents per year. MoFor does not have this program in Sulawesi. • Availability of laws and regulations in the sector of conservation of natural forest resources and its ecosystems that is comprehensive in supporting dynamic field, 3 documents per year. MoFor does not have this program in Sulawesi. • Availability of program and budget documents and report of evaluation and financial at 6 central work units and 77 UPT work unit and 33 provincial offices, 580 documents. Specifically at E-PASS sites there will be 20 papers respectively in North Sulawesi and Central Sulawesi and 5 documents in Gorontalo • National Parks and other protected areas of high biodiversity potential, have endangered species and flagship, or have a protective function of upriver, and or have a significant potential for nature tourism, it can self-finance all or part of the development program of conservation in the form of the BLU by 12 units, DNS, trust fund and collaboration by 4 units. In the three E-PASS provinces, there is no such program.

COUNTRY OWNERSHIP: COUNTRY ELIGIBILITY AND COUNTRY DRIVENNESS

177. As a signatory of the CBD and other related multilateral environmental conventions, the Government of Indonesia is committed to biodiversity conservation. The project will directly support the 2003 Indonesian Biodiversity Strategy and Action Plan (IBSAP). More specifically, it directly supports implementation of the following programmes under the IBSAP. Programme 1.3 for improving the effectiveness of conservation area management based on partnership and local community participation, namely; 1.4 for developing community capacity in biodiversity management; 2.12 for developing funding strategy for biodiversity conservation and management within the IBSAP framework; 3.11 for improvement in the effectiveness of conservation area management and conservation in small islands; 4.10 for improving law enforcement to protect conservation areas, including Biosphere Reserves; 4.16 for developing capacity in biodiversity valuation for local government apparatus.

SUSTAINABILITY AND REPLICABILITY

178. The Environmental and Social Screening Procedure (ESSP) was followed during the PPG, as required by the ESSP Guidance Note of the UNDP. The results of the ESSP for this project are summarized as follows. Please see **Annex 4** for the full ESSP summary report.

179. The project's community-related interventions will be focused on communities within and around the three targets of protected areas, namely Lore Lindu National Park, Bogani Nani Wartabone National Park, and Greater Tangkoko Nature Reserve. Given the project's explicit conservation objectives, environmental impacts of the project are largely positive. The project also aims to have a positive social impact, by strengthening PA managers' capacity for community outreach and co-management, as well as by supporting development of co-management agreements that define mechanisms for reducing pressure and maintaining biodiversity patterns and processes, while at

the same time establishing mechanisms for securing alternative livelihoods. The project will support realisation of the benefits for PA resident and buffering communities of the REDD plus mechanism as well as other conservation financing mechanisms.

180. Despite the above, based on the results of the UNDP's Environmental and Social Screening Process, several issues will need to be carefully considered during project implementation. These include possible variable impacts the project could have on women and men, different ethnic groups and social classes. Project activities may also have impacts that could affect women's and men's ability to use, develop and protect natural resources and other natural capital assets. In order to avoid any negative adverse impacts of the project on the community in and around the target protected area sites, selection of target communities will be done in a transparent fashion, based on clear criteria such as location of the communities in relation to protected areas and key biodiversity areas outside the protected areas, type of livelihood activities and their impacts on protected area management. Different roles women and men have in households and communities will be fully taken into account to ensure that the project benefits both genders equally. The project will ensure that all stakeholders will be involved in the development of co-management agreements and other local area management plan development, and capacity will be developed (within both genders) for their implementation, thereby increasing women's and men's ability to use, develop and protect natural resources and capital assets. More concrete measures for social impact mitigation measures are described in the ESSP summary report for specific project components.

181. The project will address sustainability as follows:

- Financial sustainability will be achieved through the project's emphasis on improving funding security for PA operations, especially to support the financial needs of effective PA management, including monitoring and enforcement programmes. The project includes supporting for piloting revenue generating instruments, including REDD+, as well as for addressing institutional barriers and perceptions of environmental economic value. Finally, implementation of resort-based management (RBM) is expected to have a significant impact on cost effectiveness of PA management.

- Institutional sustainability will be improved through capacity development measures for PHKA and site management authorities. In addition to supporting financial sustainability, successful implementation of RBM will be an important contribution to institutional sustainability. Capacity building at national and provincial / site levels will likewise contribute.

- Social sustainability will be improved through efforts to support and empower local communities for greater involvement in PA management activities, especially through demonstration co-management arrangements, sustainable livelihood development and awareness raising to address existing local resource use conflicts and empower women. Long-term investments to raise staff and institutional capacities for stakeholder participation, and sustained improvements in relations with local communities (through regular communication, joint field operations and targeted awareness raising) will lead to increased levels of local

participation and improved PA governance, contributing to the overall sustainability of project outcomes.

- Environmental sustainability will be achieved through improved PA system design in terms of size, habitat representation and connectivity. Key considerations include increasing the resilience of the PA system in the face of climate change, anticipated future developments and environmental change, and strengthening buffer zone management.

182. The project's outcomes are replicable as the barriers it addresses are largely shared by PA sub-systems across Indonesia. As a result, the approaches being demonstrated are transferable to strengthen PA management effectiveness. Strengthening of national-level structures at PHKA will also have a direct benefit in this regard, as national-level human and institutional capacities are raised. Activities for capturing best practices and local traditional knowledge will be used in the project to help promote replicability, including UNDP's Learning and Knowledge Sharing electronic platform.

PART III: Project Results and Resource Framework (RRF)

Project's Development Goal: Effectively managed system of protected areas that is well integrated into its surrounding landscape contributing to sustainable, inclusive and equitable development in Sulawesi.

Objective/ Outcome	Indicator	Baseline	Annual Project target	Source of Information	Risks and assumptions
Objective: To strengthen the effectiveness and financial sustainability of Sulawesi's protected area system to respond to threats to globally significant biodiversity	Institutional capacity scores*for: - PHKA (Jakarta) - LLNP - Bogani Nani NP - North Sulawesi BKSDA *Based on UNDP Capacity Scorecard (See annex 5)	- PHKA (Jakarta): 66% - LLNP: 43% - Bogani Nani NP: 42% - North Sulawesi BKSDA: 40%	**2015**: Capacity development strategies and action plan drafted. **2016:** Capacity development strategies and action plan developed; commenced for implementation. **2017**: RPTNs (National Park Management Plan) updated. **2018**: Capacity score for PHKA :70%, LLNP :50%, Bogani Nani NP :50% and North Sulawesi BKSDA: 50%. **2019**: Draft local government regulation on buffer zone. **2020**: Capacity score for PHKA (Jakarta): 75%, LLNP: 55%, Bogani Nani NP: 55% and North Sulawesi BKSDA: 55%;	Scorecards	Enhanced institutional capacities will not be overwhelmed by potentially increasing, external threat factors associated with population growth, etc.
	Annual levels of forest degradation within Sulawesi's terrestrial PAs	Approximately 56,505 ha of forest loss within PAs from 2000-2008 or 7,603 ha/year	**2015**: - **2016:** Developed baseline forest cover in Project demonstration sites.	Satellite imagery, RBM/patrol report	Availability of fine-grained data suitable for making comparisons Leakage does not substantially counterbalance project efforts

Objective/ Outcome	Indicator	Baseline	Annual Project target	Source of Information	Risks and assumptions
			2017: Annual forest degradation at project sites reduced by 5% from the baseline. **2018:** Annual forest degradation at project sites reduced by 10% from the baseline. **2019**: Annual forest degradation at project sites reduced by 15% from the baseline. **2020**: 25% reduction in annual deforestation within PAs and buffer zones in the project sites combined between baseline years (2000-2010) and last three years of project (2016-2019).		
1. Enhanced systemic and institutional capacity for planning and management of Sulawesi PA system	Extent of implementation of RBM (Resort-based Management)	RBM has begun to be implemented at all NPs but remains incomplete throughout	**2015**: Gap analysis report on existing policies & RBM operational guidelines drafted. **2016**: Developed operational guidelines for RBM implementation; **2017**: (i) Guidelines for Community engagement & Co-Management developed and (ii) related trainings conducted; **2018**: at least 25% of resorts in all project sites achieved at least one stage above baseline;	PHKA surveys	Continued support at Ministerial level for RBM reforms

Objective/ Outcome	Indicator	Baseline	Annual Project target	Source of Information	Risks and assumptions
			2019: Incentive mechanism for resort level innovation established; **2020:** Using PHKA RBM scoring system (para 60), at least 50% of resorts in the project sites achieved one stage level above the baseline.		
	Effectiveness of anti-poaching efforts	Very limited implementation of anti-poaching laws across Sulawesi	**2015:** - **2016**: (i) a small unit of intelligence based poaching & wildlife trade surveillance established and equipped; (ii) mechanism for monitoring, analysing and reporting developed. **2017**: The Unit was fully operational at least within Project sites and buffer zones**.** **2018:** Reporting system on wildlife trade & consumption was in place at project sites & buffer zones. **2019:** Initial replication of the intelligence based poaching & wildlife trade surveillance unit to other PAs in Sulawesi. **2020:** Intelligence-based anti-poaching has become a well-known feature of PA management, affecting incentives in measurable ways (surveys).	Surveys conducted within buffer zone communities	No interest to, or unable to, mislead surveyors on the part of interviewees

Objective/ Outcome	Indicator	Baseline	Annual Project target	Source of Information	Risks and assumptions
	Operational island-wide biodiversity monitoring system	No integrated monitoring - great	**2015: -** **2016:** : Technical guidelines for biodiversity, key species and habitat condition monitoring updated & disseminated to all Sulawesi PAs system. **2017**: Platform for monitoring, reporting & knowledge sharing of the Sulawesi Biodiversity developed at provincial level. **2018**: Fully utilized the platform for island-based biodiversity monitoring, planning and budgeting. **2019**: Publication of Sulawesi biodiversity & best practices of PA management disseminated in various forms of media & discussed/reviewed at national and sub-national level. **2020**: Users across Sulawesi, Indonesia and beyond are able to upload to and access historic data on biodiversity and protected areas, generated by multiple sources, using a platform created by the project.	Project reporting on system functionality; direct experience logging on	Willingness of multiple partners to share data
	Representation of lowland forest (key under-represented forest	131,000 ha, or 4.2% of total remaining habitat type	**2015: -** **2016**: Spatial planning arrangement for Sulawesi PA system designed	Gazettement	Site confirmed to have characteristics needed for NP status

Objective/ Outcome	Indicator	Baseline	Annual Project target	Source of Information	Risks and assumptions
	ecosystem types in Sulawesi's PA system)		based on biodiversity importance & bio-geographical representatives of the PA system. **2017**: PA System Consolidation Plan and Action plan for expansion and realignment of Sulawesi PA System be vetted by relevant districts and provinces planning authorities to be eventually integrated into their spatial planning. **2018**: Implementation of the Action plan at island level in coordination with relevant directorates within the Ministry of Forestry including gazetting preparation process of new National Park (Ganda Dewata). . **2019**: Policy recommendation & exit strategy to sustain the plan implementation adopted by relevant authorities. **2020**: Representation of low land forest increased to 210,000 ha, or 6.7% of remaining habitat type (representing a 60% increase in coverage).		
2. Financial sustainability of the Sulawesi PA system	Financial sustainability score (%) for the sub-system of Sulawesi's protected areas:	Financial sustainability score (see Annex 6 - Tracking Tool, incl. METTs and Financial Sustainability Scorecard)	**2015**: - **2016**: Economic valuation of Sulawesi PA system reviewed particularly for three project sites.	Financial scorecard	

Objective/ Outcome	Indicator	Baseline	Annual Project target	Source of Information	Risks and assumptions
	- Component 1 – Legal, regulatory and institutional frameworks - Component 2 – Business planning and tools for cost-effective management - Component 3 – Tools for revenue generation	34 % 35 % 28 %	**2017**: Communication strategy to increase public awareness on the importance of biodiversity & ecosystem services provision developed. Key target groups: decision makers, local government official and local and indigenous community. **2018**: Increased financial sustainability score for component 1 (40%), component 2 (40%) and component 3 (35%) **2019:** Increased financial investment in the Sulawesi PA system. Quantitative target will be discussed during the Inception Workshop. **2020**: Increased financial sustainability score for component 1 (50%), component 2 (50%) and component 3 (50%).		
	Annual budget allocated to protected areas	Estimated $12.3 million allocated annually.	**2015: -** **2016**: Sulawesi PA system financing plan and strategies developed including proposals for broader policy reform supporting revenue generation and retention, institution arrangement, tool for cost effective management and others.	Financial scorecard in last year of project	No negative fiscal constraints emerging

Objective/ Outcome	Indicator	Baseline	Annual Project target	Source of Information	Risks and assumptions
			2017: Business plan of the Sulawesi PA developed through participatory approach involving communities, private sector, NGOs and related government agencies. **2018**: At least one pilot financing projects operating in each project site. **2019**: Best practiced of the business plan implementation documented for replication. **2020:** Annual budget allocation to the PA system increased 25% equivalent to approx. $15 million.		
	Sustainable financing mechanisms for PAs	Government budgetary allocations / funding only	**2015**: - **2016**: Study on potential financing mechanism for Sulawesi PA management. **2017**: An enabling policy/legal environment developed through technical meetings, consultation and consensus building at local and national level **2018**: Design, negotiation, formalization and operationalization of mechanism implemented.		Ability to navigate any potential legal or regulatory constraints

Objective/ Outcome	Indicator	Baseline	Annual Project target	Source of Information	Risks and assumptions
			2019: National mechanism of the PA system financing socialized to relevant stakeholders. **2020**: At least two new sustainable financing mechanisms for PA management developed, which can provide a minimum of US$ 3 million per year for PA management.		
3. Threat reduction and collaborative governance in the target PAs and buffer zones	METT scores for demonstration sites	LLNP - 61 BNWNP - 64 Tangkoko Batuangas NR - 55	**2015: -** **2016**: Action plan for strengthening management effectiveness of the Sulawesi PA system developed. **2017**: Participatory Biodiversity-based boundaries realigning at project sites and buffer zone designation developed. **2018**: Increased METT scores for LLNP – 65, BNWNP – 67, TBNR Complex - 60 **2019**: Collaborative management in the targeted PAs and buffer zone integrated in Sulawesi PA system action plan. **2020**: Increased METT Score for LLNP – 70, BNWNP – 70, and Tangkoko Batuangas NR – 70	METT surveys	Surveys are unbiased

Objective/ Outcome	Indicator	Baseline	Annual Project target	Source of Information	Risks and assumptions
	Threat indices at project demonstration sites	LLNP – 0.23 BNWNP – 0.28 Tangkoko Batuangas NR – 0.31	**2015: -** **2016:** Updated threats and work plan in project sites. **2017:** Developed monitoring, evaluation & reporting mechanism of the PA threats, led by Surveillance Unit. **2018:** Reduced threat indices for LLNP – 20, BNWNP – 25, and Tangkoko Batuangas NR – 25 **2019:** Best practices developed and disseminated. **2020:** Reduced threat indices for LLNP – 0.15; BNWNP – 0.20 Tangkoko Batuangas NR – 0.20	Threat indices	Surveys are unbiased
	Ecosystem health index at project demonstration sites	Lore Lindu NP - .68 Bogani Nani Wartabone NP - .55 Tangkoko Batuangas NR - .48	**2015**: - **2016**: Updated RBM guidelines including biodiversity and ecosystem health monitoring. **2017:** Developed monitoring, evaluation & reporting mechanism to regularly update the ecosystem health. **2018:** Increased EHI for Lore Lindu NP - 0.70, Bogani Nani Wartabone	EHI surveys	Surveys are unbiased

Objective/ Outcome	Indicator	Baseline	Annual Project target	Source of Information	Risks and assumptions
			NP - 0.60, and Tangkoko Batuangas NR - 0.60 **2019:** Implemented and adopted RBM innovation incentive mechanism; published project best practices. **2020**: Increased EHI for Lore Lindu NP - .75 Bogani Nani Wartabone NP - .75 Tangkoko Batuangas NR - .75		
	Populations of selected threatened indicator species at project sites	LLNP – Mountain Anoa, Babirusa, Maleo BNWNP – Maleo, Babirusa, mountain Anoa Tangkoko Batuangas NR – Macaca nigra, Sulawesi civet, Maleo, lowland Anoa	**2015**: - **2016**: Monitored of the existing condition of selected threatened species, threats, habitat and wildlife trade. **2017**: Developed species management measures guidelines. **2018**: Maintained population of key species. **2019**: Database on key species information updated and disseminated. **2020:** Indicator population species maintained or increasing; appropriate population structure achieved.	Project field surveys	Existing populations remain viable and can stabilize or recover once threat levels are reduced
	Active encroachment areas in target PAs	- Encroachment levels as of 2011: LLNP 6,333 ha, BNWNP 3,436 h.	**2015**: -	Project field surveys	Success of CCA programme and enforcement efforts

Objective/ Outcome	Indicator	Baseline	Annual Project target	Source of Information	Risks and assumptions
		Tangkoko baseline TBD.	**2016**: Fragmented and degraded ecosystem restoration conducted. **2017**: Conflict resolution to reduce forest encroachment developed. **2018**: Stopped encroachment activity in target sites. **2019**: Best practices adopted and replicated to other sites. **2020**: Zero increase in net levels of active encroachment.		
	Existence and effectiveness of collaborative governance systems	Approximately 30 Community Conservation Areas (CCAs) established, currently operating at varying degrees of functionality.	**2015: -** **2016**: Existing CCAs revitalized and 5 new CCAs established. **2017**: Education programme for local communities mobilized through mobile education units and village education centers establishment. **2018**: (i) At least 40 CCAs established/revitalized at all project sites. (ii) At least 30 CCAs above operating at an agreed baseline level of functionality. (iii) At least 12 CCAs above are rated as 'highly functional'.	Project reports	Community interest

Objective/ Outcome	Indicator	Baseline	Annual Project target	Source of Information	Risks and assumptions
			2019: Agreements on collaborative management, for instance between PAs and communities, NGOs, parallel projects, local universities and local Government established. Micro-capital grants for small income generating/conservation schemes proposals established. **2020**: (i) At least 45 CCAs, including some at each project demonstration site (ii) 70% of above CCAs are operating at an agreed baseline level of functionality. (iii) 35% of above CCAs are rated as 'highly functional' (rating system to be developed and applied during inception phase).		

PART IV: Annual Work Plan and Budget

Short Title:	Enhancing the Protected Area System in Sulawesi (E-PASS) for Biodiversity Conservation
Award ID:	00077733
Project ID:	00088356
Business Unit:	IDN10
Project Title:	Enhancing the Protected Area System in Sulawesi (E-PASS) for Biodiversity Conservation
PIMS#:	4392
Implementing Partner:	Ministry of Forestry

Year 1: 2015

EXPECTED OUTPUTS	PLANNED ACTIVITIES	TIMEFRAME				RESPONSIBLE PARTY	PLANNED BUDGET		
		Q 1	Q 2	Q 3	Q 4		Funding Source	Budget Description	Amount (USD)
Output 1. Enhanced systemic and institutional capacity for planning and management of Sulawesi PA system. *Indicators:* 1. Extent of implementation of RBM. 2. Effectiveness of anti-poaching efforts. 3. Operational island-wide biodiversity monitoring system. 4. Representation of lowland forest (key under-represented forest ecosystem types in Sulawesi's PA system). *Baseline:* 1. RBM has begun to be implemented at all NPs but remains incomplete throughout. 2. Very limited implementation of anti-poaching laws across Sulawesi. 3. No integrated monitoring. 4. 131,000 ha, or 4.2% of total remaining habitat type. *Targets:* 1. Using PHKA RBM scoring system, at least 50% of resorts in the project sites have achieved at	*Activity Result 1: Capacity of the Ministry of Forestry strengthened to fully operationalise the "Resort-based management" system for implementation in the national, and particularly in Sulawesi's, PA system, including all categories of PAs* 1.1 Develop PA management standards and individual performance monitoring systems for different categories of PAs. 1.2 Training for enhanced law enforcement. 1.3 Develop Capacity-development strategies and action plans for strengthening management effectiveness. 1.4 Clear and well-tested guidelines for community engagement and co-management. 1.5. Establish of Incentive mechanism for resort-level innovation.	X	X	X	X	MoFor	GEF - 10003	71200 International Consultants 71600 Travel 71400 Contractual Services - Individual 71300 Local Consultants 72100 Contractual services - Companies 72600 Grant 75700 Training and Workshop 72800 IT Equipment 72400 Communication & Audio Equip 74200 Audio Visual & Print Prod Costs	50,000 50,000 50,000 50,000 25,000 0 50,000 35,000 15,500 25,000
	Activity Result 2: An island-wide system for biodiversity, key species and habitat condition monitoring established with science-based survey mechanisms, protocols for monitoring, robust biodiversity indicators and with all necessary tools and capacity installed within the Directorate of Biodiversity Conservation and partner organisations 2.1 Institutionalization of the island-wide mechanism for biodiversity monitoring and management, a species and habitat condition monitoring system. 2.2 Collection and management of monitoring data through improving the existing monitoring & reporting process. 2.3 Publication of national standards for PA-related data.	X	X	X	X				

EXPECTED OUTPUTS	PLANNED ACTIVITIES	TIMEFRAME				RESPONSIBLE PARTY	PLANNED BUDGET		
		Q 1	Q 2	Q 3	Q 4		Funding Source	Budget Description	Amount (USD)
least one stage level above the baseline. 2. Intelligence-based anti-poaching has become a well-known feature of PA management, affecting incentives in measurable ways (surveys). 3. Users across Sulawesi, Indonesia and beyond are able to upload to and access historic data on biodiversity and protected areas, generated by multiple sources, using a platform created by the project. 4. 210,000 ha, or 6.7% of remaining habitat type, representing a 60% increase in coverage. *Related CPAP outcome:* 2.1 Responsible national institutions and relevant stakeholders are more effective in managing environmental resources and addressing environmental pollution.	*Activity Result 3: Intelligence-based poaching and wildlife trade surveillance system operationalised through establishment and operations of a Sulawesi-based unit.* 3.1 Establishment of a decentralized (Sulawesi-based, intelligence-based poaching and wildlife trade surveillance) unit in Sulawesi; at a location to be determined. 3.2 Development an island-level capacity to monitor, analyse and, working in co-operation with PA management authorities, confront poaching and wildlife trade across the island.	X	X	X	X				
	Activity Result 4: Spatial arrangement of the Sulawesi PA system improved based on the terrestrial PA system consolidation plan (including corridors, area expansion and boundary rationalization) for Sulawesi and integration of the plan into the provincial land use plans. 4.1 Improved spatial arrangement of the Sulawesi PA system based on development of a terrestrial PA system consolidation plan (corridors, area expansion and boundary rationalization). 4.2 Toward establishment of potential protection forest as new low land tropical forest national park.	X	X	X	X				
								Sub Total Output 1	**345,000**
Output 2. Financial sustainability of the Sulawesi PA system *Indicators:* 1. Financial sustainability score (%) for the sub-system of Sulawesi's protected areas.	*Activity Result 1: An environmental economic case is made to increase investment in the PA system.* 1.1 Increasing investment in the PA system by quantifying the value of Sulawesi's PAs in terms of the full range of ecosystem goods and services being provided.					Bappenas/ MoFor/ UNDP	GEF - 10003	71200 International Consultant 71300 Local Consultant 71400 Contractual Services – Individual 72100 Contractual Services – Company 75700 Training & workshop 71600 Travel	50,000 50,000 43,000 100,000 50,000 25,000 25,000

EXPECTED OUTPUTS	PLANNED ACTIVITIES	TIMEFRAME				RESPONSIBLE PARTY	PLANNED BUDGET		
		Q 1	Q 2	Q 3	Q 4		Funding Source	Budget Description	Amount (USD)
2. Annual budget allocated to protected areas. 3. Sustainable financing mechanisms for PAs. *Baseline:* 1. Financial sustainable score: a. Component 1 - Legal, regulatory and institutional frameworks: 34% b. Component 2 - Business planning and tools for cost-effective: 35% c. Component 3 - Tools for revenue generation: 28% 2. Estimated $13.45 million allocated annually. 3. Government budgetary allocations / funding only. *Targets:* 1. Financial sustainable score: a. Component 1: 50% b. Component 2: 50% c. Component 3: 50% 2. 25% increase, to $16.81 million. 3. At least two new sustainable financing mechanisms for PA management established, providing a minimum of US$ 3 million per year for PA management. *Related CPAP outcome:* 2.1 Responsible national institutions and relevant stakeholders are more effective in managing environmental resources and addressing environmental pollution.	*Activity Result 2: Sulawesi island-wide PA System Financing Plan is developed, projecting the financial needs for PA management and expansion over the next 10 years and outlining the strategies for meeting these needs from both cost and revenue points of view.* 2.1 Developing Sulawesi island-wide PA System Financing Plan. 2.2 Study on financial needs for effective management and development, based on PA management plans. 2.3 Pilot implementation at site and/or sub-system level in Sulawesi to identify appropriate mechanism on PA financing system. 2.4 Initial implementation of the financing plan as well as development of diversified financing mechanism.	X	X	X	X			74200 Printing Production Costs	
	Activity Result 3: Diversified revenue generation mechanisms and other financing sources for PA management. 3.1 Development of an enabling policy/legal environment related to the identified instrument. 3.2 Design, negotiation and formalization and operationalization of the mechanisms. 3.3 Development of a national mechanism for monitoring, reporting and verification of services, and payment distribution mechanisms. 3.4 Awareness and capacity building for decision makers, local government officials and local and indigenous communities, to ensure continuity of ecosystem service provision and payments, in the application of land-use to maximise ecosystem service provision and its continuity over time.	X	X	X	X				
								Sub Total Output 2	**343,000**

EXPECTED OUTPUTS	PLANNED ACTIVITIES	TIMEFRAME				RESPONSIBLE PARTY	PLANNED BUDGET		
		Q 1	Q 2	Q 3	Q 4		Funding Source	Budget Description	Amount (USD)
Output 3. Threat reduction and collaborative governance in the target PAs and buffer zones. *Indicators:* 1. METT scores for demonstration sites. 2. Threat indices at project demonstration sites. 3. Ecosystem health index at project demonstration sites. 4. Populations of selected threatened indicator species at project sites. 5. Active encroachment areas in target PAs. 6. Existence and effectiveness of collaborative governance systems. *Baseline:* 1. METT Score: LLNP (61); BNWNP (64); Tangkoko Batuangas NR (50). 2. Threat indices: LLNP (0.23); BNWNP (0.28); Tangkoko Batuangas NR (0.31). 3. EHI: LLNP (0.68); BNWNP (0.55); Tangkoko Batuangas NR (0.48). 4. Population of selected species: a. LLNP – Mountain anoa, babirusa, Maleo; b. BNWNP – Maleo, babirusa, mountain anoa;	*Activity Result 1: Integrated land use plans, including PA alignment, developed and implemented in two districts.* 1.1 Examination of PA boundaries in the context of biodiversity and ecosystem service considerations for optimizing land uses within a broader landscape. 1.2 Biodiversity mainstreaming into planning process to enhance PA system sustainability. 1.3 Participatory locally PA boundary maintenance using means such as native salak palm with thorns as well as edible fruits to act as a thick natural boundary wall. 1.4 Establishment and/or revitalization of community managed conservation areas.	X	X	X	X	MoFor	GEF - 10003	71200 International Consultant 71300 Local Consultant 71400 Contractual Services – Individual 72100 Contractual Services – Company 72400 Comm & Audio V Equipment 75700 Training & workshop 71600 Travel 72200 Equipment & Furniture 72600 Grants 74200 Printing Production Costs	 25,000 20,000 25,000 50,000 25,000 100,000 50,000 75,000 300,000 27,000
	Activity Result 2: PA site operation is strengthened. 2.1 Implementation of resort based management (RBM) at selected sites. 2.2 Biodiversity and habitat conditions monitoring. 2.3 Monitoring and combating of poaching and the wildlife trade, with the support of the island-level unit. 2.4 Pilot case studies of environmental economic values. 2.5 Implementation of site-level revenue generation mechanisms, based on environmental economic valuation studies and priorities identified by PA financing plan. 2.6 Restoration of fragmented and degraded ecosystem. 2.7 Development of management planning. 2.8 Capacity need assessment and training for local partners & community.	X	X	X	X				

c. Tangkoko Batuangas NR – Macaca nigra, Sulawesi civet, maleo, lowland anoa. 5. Encroachment levels as of 2011: LLNP 6,333 ha, BNWNP 3,436 h. Tangkoko baseline TBD. 6. Approximately 30 CCAs established, currently operating at varying degrees of functionality. *Targets:* 1. METT Score: LLNP (70); BNWNP (70); Tangkoko Batuangas NR (70). 2. Threat indices: LLNP (0.15); BNWNP (0.20); Tangkoko Batuangas NR (0.20). 3. EHI: LLNP (0.75); BNWNP (0.75); Tangkoko Batuangas NR (0.75). 4. Population of selected species: indicator population species maintained or increasing; appropriate population structure. 5. Zero increase in net levels of active encroachment. 6. Collaborative governance system: 1. At least 45 CCAs, including some at each project demonstration site. 2. 80% of above CCAs are operating at an agreed baseline level of functionality. 3. 40% of above CCAs are rated as 'highly functional'. *Related CPAP outcome:* 2.1 Responsible national institutions and relevant stakeholders are more effective in managing environmental resources and addressing environmental pollution.	*Activity Result 3: Joint PA/buffer zone governance and management structure.* 3.1 Building on, adapting and replicating the CCA establishment process. 3.2 Development mechanism/incentive for securing alternative livelihoods to reduce the pressure and maintain biodiversity. 3.3 Establishment of village education centre for awareness building related to the role and state of wildlife and the value of healthy ecosystem. 3.4 Micro-capital grants to support small income-generating and/or conservation schemes.								
								Sub Total Output 3	**697,000**

EXPECTED OUTPUTS	PLANNED ACTIVITIES	TIMEFRAME				RESPONSIBLE PARTY	PLANNED BUDGET		
		Q 1	Q 2	Q 3	Q 4		Funding Source	Budget Description	Amount (USD)
Output 4. Project Management	*Establishement and operationalization of Project Management Unit*	X	X	X	X	MoFor	GEF - 10003	71400 Contractual Services – Individual 71600 Travel 72400 Comm & Audio V Equipment 72500 Supplies 72800 IT Equipment 74100 Professional Services 74500 UNDP Cost Recovery 75700 Training & workshop	30,000 7,500 1,500 2,000 25,000 2,000 15,000 7,000
	Project assurance related activities	X	X	X	X	UNDP	UNDP - 00012	71400 Contractual Services – Individual 71600 Travel 72400 Comm & Audio V Equipment 72500 Supplies 74500 Miscellanous Expenses 75700 Training & workshop	9,000 5,000 0 0 1,000 10,000
								Sub Total Output 4	**115,000**
								TOTAL BUDGET 2015	**1,500,000**

Year 2: 2016

EXPECTED OUTPUTS	PLANNED ACTIVITIES	TIMEFRAME				RESPONSIBLE PARTY	PLANNED BUDGET		
		Q 1	Q 2	Q 3	Q 4		Funding Source	Budget Description	Amount (USD)
Output 1. Enhanced systemic and institutional capacity for planning and management of Sulawesi PA system. *Indicators:* 1. Extent of implementation of RBM. 2. Effectiveness of anti-poaching efforts. 3. Operational island-wide biodiversity monitoring system. 4. Representation of lowland forest (key under-represented forest ecosystem types in Sulawesi's PA system).	*Activity Result 1: Capacity of the Ministry of Forestry strengthened to fully operationalise the "Resort-based management" system for implementation in the national, and particularly in Sulawesi's, PA system, including all categories of PAs* 1.1 Development of PA management standards and individual performance monitoring systems for different categories of PAs. 1.2 Training for enhanced law enforcement. 1.3 Development of Capacity-development strategies and action plans for strengthening management effectiveness. 1.4 Clear and well-tested guidelines for community engagement and co-management. 1.5. Establishment of Incentive mechanism for resort-level innovation.	X	X	X	X	MoFor	GEF - 10003	71200 International Consultant 71300 Local Consultant 71400 Contractual Services – Individual 72100 Contractual Services – Company 75700 Training & workshop 71600 Travel 72600 Grants 72400 Comm & Audio V Equipment 72800 IT Equipment 74200 Printing Production Costs	10,000 38,600 10,000 29,500 32,500 15,000 100,000 5,500 5,000 5,000

EXPECTED OUTPUTS	PLANNED ACTIVITIES	TIMEFRAME				RESPONSIBLE PARTY	PLANNED BUDGET		
		Q 1	Q 2	Q 3	Q 4		Funding Source	Budget Description	Amount (USD)
Baseline: 1. RBM has begun to be implemented at all NPs but remains incomplete throughout. 2. Very limited implementation of anti-poaching laws across Sulawesi. 3. No integrated monitoring. 4. 131,000 ha, or 4.2% of total remaining habitat type. *Targets:* 1. Using PHKA RBM scoring system, at least 50% of resorts in the project sites have achieved at least one stage level above the baseline. 2. Intelligence-based anti-poaching has become a well-known feature of PA management, affecting incentives in measurable ways (surveys). 3. Users across Sulawesi, Indonesia and beyond are able to upload to and access historic data on biodiversity and protected areas, generated by multiple sources, using a platform created by the project. 4. 210,000 ha, or 6.7% of remaining habitat type, representing a 60% increase in coverage. *Related CPAP outcome:* 2.1 Responsible national institutions and relevant stakeholders are more effective in managing environmental resources and addressing environmental pollution.	*Activity Result 2: An island-wide system for biodiversity, key species and habitat condition monitoring established with science-based survey mechanisms, protocols for monitoring, robust biodiversity indicators and with all necessary tools and capacity installed within the Directorate of Biodiversity Conservation and partner organisations* 2.1 Institutionalization of the island-wide mechanism for biodiversity monitoring and management, a species and habitat condition monitoring system. 2.2 Collection and management of monitoring data through improving the existing monitoring & reporting process. 2.3 Publication of national standards for PA-related data.	X	X	X	X				
	Activity Result 3: Intelligence-based poaching and wildlife trade surveillance system operationalised through establishment and operations of a Sulawesi-based unit. 3.1 Establishment of a decentralized (Sulawesi-based, intelligence-based poaching and wildlife trade surveillance) unit in Sulawesi; at a location to be determined. 3.2 Development an island-level capacity to monitor, analyse and, working in co-operation with PA management authorities, confront poaching and wildlife trade across the island.	X	X	X	X				
	Activity Result 4: Spatial arrangement of the Sulawesi PA system improved based on the terrestrial PA system consolidation plan (including corridors, area expansion and boundary rationalization) for Sulawesi and integration of the plan into the provincial land use plans. 4.1 Improved spatial arrangement of the Sulawesi PA system based on development of a terrestrial PA system consolidation plan (corridors, area expansion and boundary rationalization). 4.2 Toward establishment of potential protection forest as new low land tropical forest national park.	X	X	X	X				
								Sub Total Output 1	**251,100**

EXPECTED OUTPUTS	PLANNED ACTIVITIES	TIMEFRAME				RESPONSIBLE PARTY	PLANNED BUDGET		
		Q 1	Q 2	Q 3	Q 4		Funding Source	Budget Description	Amount (USD)
Output 2. Financial sustainability of the Sulawesi PA system *Indicators:* 1. Financial sustainability score (%) for the sub-system of Sulawesi's protected areas. 2. Annual budget allocated to protected areas. 3. Sustainable financing mechanisms for PAs. *Baseline:* 1. Financial sustainable score: a. Component 1 - Legal, regulatory and institutional frameworks: 34% b. Component 2 - Business planning and tools for cost-effective: 35% c. Component 3 - Tools for revenue generation: 28%	*Activity Result 1: An environmental economic case is made to increase investment in the PA system.* 1.1 Increasing investment in the PA system by quantifying the value of Sulawesi's PAs in terms of the full range of ecosystem goods and services being provided.					Bappenas /MoFor/ UNDP	GEF - 10003	71200 International Consultant 71300 Local Consultant 71400 Contractual Services – Individual 72100 Contractual Services – Company 75700 Training & workshop 71600 Travel 74200 Printing Production Costs	20,000 37,200 10,000 50,000 50,000 25,000 5,000
	Activity Result 2: Sulawesi island-wide PA System Financing Plan is developed, projecting the financial needs for PA management and expansion over the next 10 years and outlining the strategies for meeting these needs from both cost and revenue points of view. 2.1 Developing Sulawesi island-wide PA System Financing Plan. 2.2 Study on financial needs for effective management and development, based on PA management plans. 2.3 Pilot implementation at site and/or sub-system level in Sulawesi to identify appropriate mechanism on PA financing system. 2.4 Initial implementation of the financing plan as well as development of diversified financing mechanism.	X	X	X	X				

EXPECTED OUTPUTS	PLANNED ACTIVITIES	TIMEFRAME				RESPONSIBLE PARTY	PLANNED BUDGET		
		Q 1	Q 2	Q 3	Q 4		Funding Source	Budget Description	Amount (USD)
2. Estimated $13.45 million allocated annually. 3. Government budgetary allocations / funding only. *Targets:* 1. Financial sustainable score: a. Component 1: 50% b. Component 2: 50% c. Component 3: 50% 2. 25% increase, to $16.81 million. 3. At least two new sustainable financing mechanisms for PA management established, providing a minimum of US$ 3 million per year for PA management. *Related CPAP outcome:* 2.1 Responsible national institutions and relevant stakeholders are more effective in managing environmental resources and addressing environmental pollution.	*Activity Result 3: Diversified revenue generation mechanisms and other financing sources for PA management.* 3.1 Development of an enabling policy/legal environment related to the identified instrument. 3.2 Design, negotiation and formalization and operationalization of the mechanisms. 3.3 Development of a national mechanism for monitoring, reporting and verification of services, and payment distribution mechanisms. 3.4 Awareness and capacity building for decision makers, local government officials and local and indigenous communities, to ensure continuity of ecosystem service provision and payments, in the application of land-use to maximise ecosystem service provision and its continuity over time.	X	X	X	X				
								Sub Total Output 2	**197,200**
Output 3. Threat reduction and collaborative governance in the target PAs and buffer zones. *Indicators:* 1. METT scores for demonstration sites. 2. Threat indices at project demonstration sites. 3. Ecosystem health index at project demonstration sites. 4. Populations of selected threatened indicator species at project sites.	*Activity Result 1: Integrated land use plans, including PA alignment, developed and implemented in two districts.* 1.1 Examination of PA boundaries in the context of biodiversity and ecosystem service considerations for optimizing land uses within a broader landscape. 1.2 Biodiversity mainstreaming into planning process to enhance PA system sustainability. 1.3 Participatory locally PA boundary maintenance using means such as native salak palm with thorns as well as edible fruits to act as a thick natural boundary wall. 1.4 Establishment and/or revitalization of community managed conservation areas.	X	X	X	X	MoFor	GEF - 10003	71200 International Consultant 71300 Local Consultant 71400 Contractual Services – Individual 72100 Contractual Services – Company 72400 Comm & Audio V Equipment 75700 Training & workshop 71600 Travel 72200 Equipment & Furniture 72600 Grants 74200 Printing Production Costs	47,800 130,000 20,000 248,750 0 50,000 40,000 25,000 94,500 33,000

EXPECTED OUTPUTS	PLANNED ACTIVITIES	TIMEFRAME				RESPONSIBLE PARTY	PLANNED BUDGET		
		Q 1	Q 2	Q 3	Q 4		Funding Source	Budget Description	Amount (USD)
5. Active encroachment areas in target PAs. 6. Existence and effectiveness of collaborative governance systems. *Baseline:* 1. METT Score: LLNP (61); BNWNP (64); Tangkoko Batuangas NR (50). 2. Threat indices: LLNP (0.23); BNWNP (0.28); Tangkoko Batuangas NR (0.31). 3. EHI: LLNP (0.68); BNWNP (0.55); Tangkoko Batuangas NR (0.48). 4. Population of selected species: a. LLNP – Mountain anoa, babirusa, maleo;	*Activity Result 2: PA site operation is strengthened.* 2.1 Implementation of resort based management (RBM) at selected sites. 2.2 Biodiversity and habitat conditions monitoring. 2.3 Monitoring and combating of poaching and the wildlife trade, with the support of the island-level unit. 2.4 Pilot case studies of environmental economic values. 2.5 Implementation of site-level revenue generation mechanisms, based on environmental economic valuation studies and priorities identified by PA financing plan. 2.6 Restoration of fragmented and degraded ecosystem. 2.7 Development of management planning. 2.8 Capacity need assessment and training for local partners & community.	X	X	X	X				

b. BNWNP – Maleo, babirusa, mountain anoa; c. Tangkoko Batuangas NR – Macaca nigra, Sulawesi civet, maleo, lowland anoa. 5. Encroachment levels as of 2011: LLNP 6,333 ha, BNWNP 3,436 h. Tangkoko baseline TBD. 6. Approximately 30 CCAs established, currently operating at varying degrees of functionality. *Targets:* 1. METT Score: LLNP (70); BNWNP (70); Tangkoko Batuangas NR (70). 2. Threat indices: LLNP (0.15); BNWNP (0.20); Tangkoko Batuangas NR (0.20). 3. EHI: LLNP (0.75); BNWNP (0.75); Tangkoko Batuangas NR (0.75). 4. Population of selected species: indicator population species maintained or increasing; appropriate population structure. 5. Zero increase in net levels of active encroachment. 6. Collaborative governance system: 1. At least 45 CCAs, including some at each project demonstration site. 2. 80% of above CCAs are operating at an agreed baseline level of functionality. 3. 40% of above CCAs are rated as 'highly functional'. *Related CPAP outcome:* 2.1 Responsible national institutions and relevant stakeholders are more effective in managing environmental resources and addressing environmental pollution.	*Activity Result 3: Joint PA/buffer zone governance and management structure.* 3.1 Building on, adapting and replicating the CCA establishment process. 3.2 Development mechanism/incentive for securing alternative livelihoods to reduce the pressure and maintain biodiversity. 3.3 Establishment of village education centre for awareness building related to the role and state of wildlife and the value of healthy ecosystem. 3.4 Micro-capital grants to support small income-generating and/or conservation schemes.								
								Sub Total Output 3	**689,050**

EXPECTED OUTPUTS	PLANNED ACTIVITIES	TIMEFRAME				RESPONSIBLE PARTY	PLANNED BUDGET		
		Q 1	Q 2	Q 3	Q 4		Funding Source	Budget Description	Amount (USD)
Output 4. Project Management	*Establishement and operationalization of Project Management Unit*	X	X	X	X	MoFor	GEF - 10003	71400 Contractual Services – Individual 71600 Travel 72400 Comm & Audio V Equipment 72500 Supplies 72800 IT Equipment 74100 Professional Services 74500 UNDP Cost Recovery 75700 Training & workshop	30,000 2,500 1,000 1,000 4,000 2,000 15,000 7,000
	Project assurance related activities	X	X	X	X	UNDP	UNDP - 00012	71400 Contractual Services – Individual 71600 Travel 72400 Comm & Audio V Equipment 72500 Supplies 74500 Miscellanous Expenses 75700 Training & workshop	19,000 7,500 1,000 1,000 1,000 10,500
								Sub Total Output 4	**102,500**
								TOTAL BUDGET 2016	**1,239,850**

Year 3: 2017

EXPECTED OUTPUTS	PLANNED ACTIVITIES	TIMEFRAME				RESPONSIBLE PARTY	PLANNED BUDGET		
		Q 1	Q 2	Q 3	Q 4		Funding Source	Budget Description	Amount (USD)
Output 1. Enhanced systemic and institutional capacity for planning and management of Sulawesi PA system. *Indicators:* 1. Extent of implementation of RBM. 2. Effectiveness of anti-poaching efforts. 3. Operational island-wide biodiversity monitoring system. 4. Representation of lowland forest (key under-represented forest ecosystem types in Sulawesi's PA system).	*Activity Result 1: Capacity of the Ministry of Forestry strengthened to fully operationalise the "Resort-based management" system for implementation in the national, and particularly in Sulawesi's, PA system, including all categories of PAs* 1.1 Development of PA management standards and individual performance monitoring systems for different categories of PAs. 1.2 Training for enhanced law enforcement. 1.3 Development of Capacity-development strategies and action plans for strengthening management effectiveness. 1.4 Clear and well-tested guidelines for community engagement and co-management. 1.5. Establishment of Incentive mechanism for resort-level innovation.	X	X	X	X	MoFor	GEF - 10003	71200 International Consultant 71300 Local Consultant 71400 Contractual Services – Individual 72100 Contractual Services – Company 75700 Training & workshop 71600 Travel 72600 Grants 72400 Comm & Audio V Equipment 72800 IT Equipment 74200 Printing Production Costs	20,000 21,600 10,000 25,000 10,000 10,000 50,000 0 5,000 5,000

EXPECTED OUTPUTS	PLANNED ACTIVITIES	TIMEFRAME				RESPONSIBLE PARTY	PLANNED BUDGET		
		Q 1	Q 2	Q 3	Q 4		Funding Source	Budget Description	Amount (USD)
Baseline: 1. RBM has begun to be implemented at all NPs but remains incomplete throughout. 2. Very limited implementation of anti-poaching laws across Sulawesi. 3. No integrated monitoring. 4. 131,000 ha, or 4.2% of total remaining habitat type. *Targets:* 1. Using PHKA RBM scoring system, at least 50% of resorts in the project sites have achieved at least one stage level above the baseline. 2. Intelligence-based anti-poaching has become a well-known feature of PA management, affecting incentives in measurable ways (surveys). 3. Users across Sulawesi, Indonesia and beyond are able to upload to and access historic data on biodiversity and protected areas, generated by multiple sources, using a platform created by the project. 4. 210,000 ha, or 6.7% of remaining habitat type, representing a 60% increase in coverage. *Related CPAP outcome:* 2.1 Responsible national institutions and relevant stakeholders are more effective in managing environmental resources and addressing environmental pollution.	*Activity Result 2: An island-wide system for biodiversity, key species and habitat condition monitoring established with science-based survey mechanisms, protocols for monitoring, robust biodiversity indicators and with all necessary tools and capacity installed within the Directorate of Biodiversity Conservation and partner organisations* 2.1 Institutionalization of the island-wide mechanism for biodiversity monitoring and management, a species and habitat condition monitoring system. 2.2 Collection and management of monitoring data through improving the existing monitoring & reporting process. 2.3 Publication of national standards for PA-related data.	X	X	X	X				
	Activity Result 3: Intelligence-based poaching and wildlife trade surveillance system operationalised through establishment and operations of a Sulawesi-based unit. 3.1 Establishment of a decentralized (Sulawesi-based, intelligence-based poaching and wildlife trade surveillance) unit in Sulawesi; at a location to be determined. 3.2 Development an island-level capacity to monitor, analyse and, working in co-operation with PA management authorities, confront poaching and wildlife trade across the island.	X	X	X	X				
	Activity Result 4: Spatial arrangement of the Sulawesi PA system improved based on the terrestrial PA system consolidation plan (including corridors, area expansion and boundary rationalization) for Sulawesi and integration of the plan into the provincial land use plans. 4.1 Improved spatial arrangement of the Sulawesi PA system based on development of a terrestrial PA system consolidation plan (corridors, area expansion and boundary rationalization). 4.2 Toward establishment of potential protection forest as new low land tropical forest national park.	X	X	X	X				
								Sub Total Output 1	**156,600**

EXPECTED OUTPUTS	PLANNED ACTIVITIES	TIMEFRAME				RESPONSIBLE PARTY	PLANNED BUDGET		
		Q 1	Q 2	Q 3	Q 4		Funding Source	Budget Description	Amount (USD)
Output 2. Financial sustainability of the Sulawesi PA system *Indicators:* 1. Financial sustainability score (%) for the sub-system of Sulawesi's protected areas. 2. Annual budget allocated to protected areas. 3. Sustainable financing mechanisms for PAs. *Baseline:* 1. Financial sustainable score: a. Component 1 - Legal, regulatory and institutional frameworks: 34% b. Component 2 - Business planning and tools for cost-effective: 35% c. Component 3 - Tools for revenue generation: 28%	*Activity Result 1: An environmental economic case is made to increase investment in the PA system.* 1.1 Increasing investment in the PA system by quantifying the value of Sulawesi's PAs in terms of the full range of ecosystem goods and services being provided.					Bappenas/MoFor / UNDP	GEF - 10003	71200 International Consultant 71300 Local Consultant 71400 Contractual Services – Individual 72100 Contractual Services – Company 75700 Training & workshop 71600 Travel 74200 Printing Production Costs	20,000 110,000 20,000 197,000 100,000 40,000 40,000
	Activity Result 2: Sulawesi island-wide PA System Financing Plan is developed, projecting the financial needs for PA management and expansion over the next 10 years and outlining the strategies for meeting these needs from both cost and revenue points of view. 2.1 Developing Sulawesi island-wide PA System Financing Plan. 2.2 Study on financial needs for effective management and development, based on PA management plans. 2.3 Pilot implementation at site and/or sub-system level in Sulawesi to identify appropriate mechanism on PA financing system. 2.4 Initial implementation of the financing plan as well as development of diversified financing mechanism.	X	X	X	X				

EXPECTED OUTPUTS	PLANNED ACTIVITIES	TIMEFRAME				RESPONSIBLE PARTY	PLANNED BUDGET		
		Q 1	Q 2	Q 3	Q 4		Funding Source	Budget Description	Amount (USD)
2. Estimated $13.45 million allocated annually. 3. Government budgetary allocations / funding only. *Targets:* 1. Financial sustainable score: a. Component 1: 50% b. Component 2: 50% c. Component 3: 50% 2. 25% increase, to $16.81 million. 3. At least two new sustainable financing mechanisms for PA management established, providing a minimum of US$ 3 million per year for PA management. *Related CPAP outcome:* 2.1 Responsible national institutions and relevant stakeholders are more effective in managing environmental resources and addressing environmental pollution.	*Activity Result 3: Diversified revenue generation mechanisms and other financing sources for PA management.* 3.1 Development of an enabling policy/legal environment related to the identified instrument. 3.2 Design, negotiation and formalization and operationalization of the mechanisms. 3.3 Development of a national mechanism for monitoring, reporting and verification of services, and payment distribution mechanisms. 3.4 Awareness and capacity building for decision makers, local government officials and local and indigenous communities, to ensure continuity of ecosystem service provision and payments, in the application of land-use to maximise ecosystem service provision and its continuity over time.	X	X	X	X				
								Sub Total Output 2	**205,200**
Output 3. Threat reduction and collaborative governance in the target PAs and buffer zones. *Indicators:* 1. METT scores for demonstration sites. 2. Threat indices at project demonstration sites. 3. Ecosystem health index at project demonstration sites. 4. Populations of selected threatened indicator species at project sites. 5. Active encroachment areas in target PAs.	*Activity Result 1: Integrated land use plans, including PA alignment, developed and implemented in two districts.* 1.1 Examination of PA boundaries in the context of biodiversity and ecosystem service considerations for optimizing land uses within a broader landscape. 1.2 Biodiversity mainstreaming into planning process to enhance PA system sustainability. 1.3 Participatory locally PA boundary maintenance using means such as native salak palm with thorns as well as edible fruits to act as a thick natural boundary wall. 1.4 Establishment and/or revitalization of community managed conservation areas.	X	X	X	X	MoFor	GEF - 10003	71200 International Consultant 71300 Local Consultant 71400 Contractual Services – Individual 72100 Contractual Services – Company 72400 Comm & Audio V Equipment 75700 Training & workshop 71600 Travel 72200 Equipment & Furniture 72600 Grants 74200 Printing Production Costs	8,800 110,000 20,000 197,000 0 100,000 40,000 45,000 70,000 40,000

EXPECTED OUTPUTS	PLANNED ACTIVITIES	TIMEFRAME				RESPONSIBLE PARTY	PLANNED BUDGET		
		Q 1	Q 2	Q 3	Q 4		Funding Source	Budget Description	Amount (USD)
6. Existence and effectiveness of collaborative governance systems. *Baseline:* 1. METT Score: LLNP (61); BNWNP (64); Tangkoko Batuangas NR (50). 2. Threat indices: LLNP (0.23); BNWNP (0.28); Tangkoko Batuangas NR (0.31). 3. EHI: LLNP (0.68); BNWNP (0.55); Tangkoko Batuangas NR (0.48). 4. Population of selected species: a. LLNP – Mountain anoa, babirusa, maleo; b. BNWNP – Maleo, babirusa, mountain anoa;	*Activity Result 2: PA site operation is strengthened.* 2.1 Implementation of resort based management (RBM) at selected sites. 2.2 Biodiversity and habitat conditions monitoring. 2.3 Monitoring and combating of poaching and the wildlife trade, with the support of the island-level unit. 2.4 Pilot case studies of environmental economic values. 2.5 Implementation of site-level revenue generation mechanisms, based on environmental economic valuation studies and priorities identified by PA financing plan. 2.6 Restoration of fragmented and degraded ecosystem. 2.7 Development of management planning. 2.8 Capacity need assessment and training for local partners & community.	X	X	X	X				

EXPECTED OUTPUTS	PLANNED ACTIVITIES	TIMEFRAME				RESPONSIBLE PARTY	PLANNED BUDGET		
		Q 1	Q 2	Q 3	Q 4		Funding Source	Budget Description	Amount (USD)
c. Tangkoko Batuangas NR – Macaca nigra, Sulawesi civet, maleo, lowland anoa. 5. Encroachment levels as of 2011: LLNP 6,333 ha, BNWNP 3,436 h. Tangkoko baseline TBD. 6. Approximately 30 CCAs established, currently operating at varying degrees of functionality. *Targets:* 1. METT Score: LLNP (70); BNWNP (70); Tangkoko Batuangas NR (70). 2. Threat indices: LLNP (0.15); BNWNP (0.20); Tangkoko Batuangas NR (0.20). 3. EHI: LLNP (0.75); BNWNP (0.75); Tangkoko Batuangas NR (0.75). 4. Population of selected species: indicator population species maintained or increasing; appropriate population structure. 5. Zero increase in net levels of active encroachment. 6. Collaborative governance system: a. At least 45 CCAs, including some at each project demonstration site. b. 80% of above CCAs are operating at an agreed baseline level of functionality. c. 40% of above CCAs are rated as 'highly functional'. *Related CPAP outcome:* 2.1 Responsible national institutions and relevant stakeholders are more effective in managing environmental resources and addressing environmental pollution.	*Activity Result 3: Joint PA/buffer zone governance and management structure.* 3.1 Building on, adapting and replicating the CCA establishment process. 3.2 Development mechanism/incentive for securing alternative livelihoods to reduce the pressure and maintain biodiversity. 3.3 Establishment of village education centre for awareness building related to the role and state of wildlife and the value of healthy ecosystem. 3.4 Micro-capital grants to support small income-generating and/or conservation schemes.								

EXPECTED OUTPUTS	PLANNED ACTIVITIES	TIMEFRAME				RESPONSIBLE PARTY	PLANNED BUDGET		
		Q 1	Q 2	Q 3	Q 4		Funding Source	Budget Description	Amount (USD)
								Sub Total Output 3	**630,800**
Output 4. Project Management	*Establishement and operationalization of Project Management Unit*	X	X	X	X	MoFor	GEF - 10003	71400 Contractual Services – Individual 71600 Travel 72400 Comm & Audio V Equipment 72500 Supplies 72800 IT Equipment 74100 Professional Services 74500 UNDP Cost Recovery 75700 Training & workshop	30,000 2,500 1,000 1,000 4,000 2,000 15,000 6,000
	Project assurance related activities	X	X	X	X	UNDP	UNDP - 00012	71400 Contractual Services – Individual 71600 Travel 72400 Comm & Audio V Equipment 72500 Supplies 74500 Miscellanous Expenses 75700 Training & workshop	19,000 7,500 1,000 1,000 1,000 10,500
								Sub Total Output 4	**101,500**
								TOTAL BUDGET 2017	**1,094,100**

Year 4: 2018

EXPECTED OUTPUTS	PLANNED ACTIVITIES	TIMEFRAME				RESPONSIBLE PARTY	PLANNED BUDGET		
		Q 1	Q 2	Q 3	Q 4		Funding Source	Budget Description	Amount (USD)
Output 1. Enhanced systemic and institutional capacity for planning and management of Sulawesi PA system. *Indicators:* 1. Extent of implementation of RBM. 2. Effectiveness of anti-poaching efforts. 3. Operational island-wide biodiversity monitoring system. 4. Representation of lowland forest (key under-represented forest ecosystem types in Sulawesi's PA system).	*Activity Result 1: Capacity of the Ministry of Forestry strengthened to fully operationalise the "Resort-based management" system for implementation in the national, and particularly in Sulawesi's, PA system, including all categories of PAs* 1.1 Development of PA management standards and individual performance monitoring systems for different categories of PAs. 1.2 Training for enhanced law enforcement. 1.3 Development of Capacity-development strategies and action plans for strengthening management effectiveness. 1.4 Clear and well-tested guidelines for community engagement and co-management. 1.5. Establishment of Incentive mechanism for resort-level innovation.	X	X	X	X	MoFor	GEF - 10003	71200 International Consultant 71300 Local Consultant 71400 Contractual Services – Individual 72100 Contractual Services – Company 75700 Training & workshop 71600 Travel 72600 Grants 72400 Comm & Audio V Equipment 72800 IT Equipment 74200 Printing Production Costs	20,000 15,100 10,000 20,000 10,000 5,000 0 5,000 0 5,000

EXPECTED OUTPUTS	PLANNED ACTIVITIES	TIMEFRAME				RESPONSIBLE PARTY	PLANNED BUDGET		
		Q 1	Q 2	Q 3	Q 4		Funding Source	Budget Description	Amount (USD)
Baseline: 1. RBM has begun to be implemented at all NPs but remains incomplete throughout. 2. Very limited implementation of anti-poaching laws across Sulawesi. 3. No integrated monitoring. 4. 131,000 ha, or 4.2% of total remaining habitat type. *Targets:* 1. Using PHKA RBM scoring system, at least 50% of resorts in the project sites have achieved at least one stage level above the baseline. 2. Intelligence-based anti-poaching has become a well-known feature of PA management, affecting incentives in measurable ways (surveys). 3. Users across Sulawesi, Indonesia and beyond are able to upload to and access historic data on biodiversity and protected areas, generated by multiple sources, using a platform created by the project. 4. 210,000 ha, or 6.7% of remaining habitat type, representing a 60% increase in coverage. *Related CPAP outcome:* 2.1 Responsible national institutions and relevant stakeholders are more effective in managing environmental resources and addressing environmental pollution.	*Activity Result 2: An island-wide system for biodiversity, key species and habitat condition monitoring established with science-based survey mechanisms, protocols for monitoring, robust biodiversity indicators and with all necessary tools and capacity installed within the Directorate of Biodiversity Conservation and partner organisations* 2.1 Institutionalization of the island-wide mechanism for biodiversity monitoring and management, a species and habitat condition monitoring system. 2.2 Collection and management of monitoring data through improving the existing monitoring & reporting process. 2.3 Publication of national standards for PA-related data.	X	X	X	X				
	Activity Result 3: Intelligence-based poaching and wildlife trade surveillance system operationalised through establishment and operations of a Sulawesi-based unit. 3.1 Establishment of a decentralized (Sulawesi-based, intelligence-based poaching and wildlife trade surveillance) unit in Sulawesi; at a location to be determined. 3.2 Development an island-level capacity to monitor, analyse and, working in co-operation with PA management authorities, confront poaching and wildlife trade across the island.	X	X	X	X				
	Activity Result 4: Spatial arrangement of the Sulawesi PA system improved based on the terrestrial PA system consolidation plan (including corridors, area expansion and boundary rationalization) for Sulawesi and integration of the plan into the provincial land use plans. 4.1 Improved spatial arrangement of the Sulawesi PA system based on development of a terrestrial PA system consolidation plan (corridors, area expansion and boundary rationalization). 4.2 Toward establishment of potential protection forest as new low land tropical forest national park.	X	X	X	X				
								Sub Total Output 1	**90,100**

EXPECTED OUTPUTS	PLANNED ACTIVITIES	TIMEFRAME				RESPONSIBLE PARTY	PLANNED BUDGET		
		Q 1	Q 2	Q 3	Q 4		Funding Source	Budget Description	Amount (USD)
Output 2. Financial sustainability of the Sulawesi PA system *Indicators:* 1. Financial sustainability score (%) for the sub-system of Sulawesi's protected areas. 2. Annual budget allocated to protected areas. 3. Sustainable financing mechanisms for PAs. *Baseline:* 1. Financial sustainable score: a. Component 1 - Legal, regulatory and institutional frameworks: 34% b. Component 2 - Business planning and tools for cost-effective: 35% c. Component 3 - Tools for revenue generation: 28%	*Activity Result 1: An environmental economic case is made to increase investment in the PA system.* 1.1 Increasing investment in the PA system by quantifying the value of Sulawesi's PAs in terms of the full range of ecosystem goods and services being provided.					Bappenas /MoFor/ UNDP	GEF - 10003	71200 International Consultant 71300 Local Consultant 71400 Contractual Services – Individual 72100 Contractual Services – Company 75700 Training & workshop 71600 Travel 74200 Printing Production Costs	20,000 12,600 10,000 100,000 25,000 25,000 6,000
	Activity Result 2: Sulawesi island-wide PA System Financing Plan is developed, projecting the financial needs for PA management and expansion over the next 10 years and outlining the strategies for meeting these needs from both cost and revenue points of view. 2.1 Developing Sulawesi island-wide PA System Financing Plan. 2.2 Study on financial needs for effective management and development, based on PA management plans. 2.3 Pilot implementation at site and/or sub-system level in Sulawesi to identify appropriate mechanism on PA financing system. 2.4 Initial implementation of the financing plan as well as development of diversified financing mechanism.	X	X	X	X				

EXPECTED OUTPUTS	PLANNED ACTIVITIES	TIMEFRAME				RESPONSIBLE PARTY	PLANNED BUDGET		
		Q 1	Q 2	Q 3	Q 4		Funding Source	Budget Description	Amount (USD)
2. Estimated $13.45 million allocated annually. 3. Government budgetary allocations / funding only. *Targets:* 1. Financial sustainable score: a. Component 1: 50% b. Component 2: 50% c. Component 3: 50% 2. 25% increase, to $16.81 million. 3. At least two new sustainable financing mechanisms for PA management established, providing a minimum of US$ 3 million per year for PA management. *Related CPAP outcome:* 2.1 Responsible national institutions and relevant stakeholders are more effective in managing environmental resources and addressing environmental pollution.	*Activity Result 3: Diversified revenue generation mechanisms and other financing sources for PA management.* 3.1 Development of an enabling policy/legal environment related to the identified instrument. 3.2 Design, negotiation and formalization and operationalization of the mechanisms. 3.3 Development of a national mechanism for monitoring, reporting and verification of services, and payment distribution mechanisms. 3.4 Awareness and capacity building for decision makers, local government officials and local and indigenous communities, to ensure continuity of ecosystem service provision and payments, in the application of land-use to maximise ecosystem service provision and its continuity over time.	X	X	X	X				
								Sub Total Output 2	**198,600**
Output 3. Threat reduction and collaborative governance in the target PAs and buffer zones. *Indicators:* 1. METT scores for demonstration sites. 2. Threat indices at project demonstration sites. 3. Ecosystem health index at project demonstration sites. 4. Populations of selected threatened indicator species at project sites.	*Activity Result 1: Integrated land use plans, including PA alignment, developed and implemented in two districts.* 1.1 Examination of PA boundaries in the context of biodiversity and ecosystem service considerations for optimizing land uses within a broader landscape. 1.2 Biodiversity mainstreaming into planning process to enhance PA system sustainability. 1.3 Participatory locally PA boundary maintenance using means such as native salak palm with thorns as well as edible fruits to act as a thick natural boundary wall. 1.4 Establishment and/or revitalization of community managed conservation areas.	X	X	X	X	MoFor	GEF - 10003	71200 International Consultant 71300 Local Consultant 71400 Contractual Services – Individual 72100 Contractual Services – Company 72400 Comm & Audio V Equipment 75700 Training & workshop 71600 Travel 72200 Equipment & Furniture 72600 Grants 74200 Printing Production Costs	41,800 90,000 20,000 206,300 0 67,500 40,000 45,000 75,000 20,000

EXPECTED OUTPUTS	PLANNED ACTIVITIES	TIMEFRAME				RESPONSIBLE PARTY	PLANNED BUDGET		
		Q 1	Q 2	Q 3	Q 4		Funding Source	Budget Description	Amount (USD)
5. Active encroachment areas in target PAs. 6. Existence and effectiveness of collaborative governance systems. *Baseline:* 1. METT Score: LLNP (61); BNWNP (64); Tangkoko Batuangas NR (50). 2. Threat indices: LLNP (0.23); BNWNP (0.28); Tangkoko Batuangas NR (0.31). 3. EHI: LLNP (0.68); BNWNP (0.55); Tangkoko Batuangas NR (0.48). 4. Population of selected species: a. LLNP – Mountain anoa, babirusa, maleo;	*Activity Result 2: PA site operation is strengthened.* 2.1 Implementation of resort based management (RBM) at selected sites. 2.2 Biodiversity and habitat conditions monitoring. 2.3 Monitoring and combating of poaching and the wildlife trade, with the support of the island-level unit. 2.4 Pilot case studies of environmental economic values. 2.5 Implementation of site-level revenue generation mechanisms, based on environmental economic valuation studies and priorities identified by PA financing plan. 2.6 Restoration of fragmented and degraded ecosystem. 2.7 Development of management planning. 2.8 Capacity need assessment and training for local partners & community.	X	X	X	X				

b. BNWNP – Maleo, babirusa, mountain anoa; c. Tangkoko Batuangas NR – Macaca nigra, Sulawesi civet, maleo, lowland anoa. 5. Encroachment levels as of 2011: LLNP 6,333 ha, BNWNP 3,436 h. Tangkoko baseline TBD. 6. Approximately 30 CCAs established, currently operating at varying degrees of functionality. *Targets:* 1. METT Score: LLNP (70); BNWNP (70); Tangkoko Batuangas NR (70). 2. Threat indices: LLNP (0.15); BNWNP (0.20); Tangkoko Batuangas NR (0.20). 3. EHI: LLNP (0.75); BNWNP (0.75); Tangkoko Batuangas NR (0.75). 4. Population of selected species: indicator population species maintained or increasing; appropriate population structure. 5. Zero increase in net levels of active encroachment. 6. Collaborative governance system: a. At least 45 CCAs, including some at each project demonstration site. b. 80% of above CCAs are operating at an agreed baseline level of functionality. c. 40% of above CCAs are rated as 'highly functional'. *Related CPAP outcome:* 2.1 Responsible national institutions and relevant stakeholders are more effective in managing environmental resources and addressing environmental pollution.	*Activity Result 3: Joint PA/buffer zone governance and management structure.* 3.1 Building on, adapting and replicating the CCA establishment process. 3.2 Development mechanism/incentive for securing alternative livelihoods to reduce the pressure and maintain biodiversity. 3.3 Establishment of village education centre for awareness building related to the role and state of wildlife and the value of healthy ecosystem. 3.4 Micro-capital grants to support small income-generating and/or conservation schemes.								
								Sub Total Output 3	**605,600**

EXPECTED OUTPUTS	PLANNED ACTIVITIES	TIMEFRAME				RESPONSIBLE PARTY	PLANNED BUDGET		
		Q 1	Q 2	Q 3	Q 4		Funding Source	Budget Description	Amount (USD)
Output 4. Project Management	*Establishement and operationalization of Project Management Unit*	X	X	X	X	MoFor	GEF - 10003	71400 Contractual Services – Individual 71600 Travel 72400 Comm & Audio V Equipment 72500 Supplies 72800 IT Equipment 74100 Professional Services 74500 UNDP Cost Recovery 75700 Training & workshop	30,000 2,500 500 500 0 2,000 15,000 6,000
	Project assurance related activities	X	X	X	X	UNDP	UNDP - 00012	71400 Contractual Services – Individual 71600 Travel 72400 Comm & Audio V Equipment 72500 Supplies 74500 Miscellanous Expenses 75700 Training & workshop	19,000 7,500 1,000 1,000 1,000 10,500
								Sub Total Output 4	**96,500**
								TOTAL BUDGET 2018	**990,800**

Year 5: 2019

EXPECTED OUTPUTS	PLANNED ACTIVITIES	TIMEFRAME				RESPONSIBLE PARTY	PLANNED BUDGET		
		Q 1	Q 2	Q 3	Q 4		Funding Source	Budget Description	Amount (USD)
Output 1. Enhanced systemic and institutional capacity for planning and management of Sulawesi PA system. *Indicators:* 1. Extent of implementation of RBM. 2. Effectiveness of anti-poaching efforts. 3. Operational island-wide biodiversity monitoring system. 4. Representation of lowland forest (key under-represented forest ecosystem types in Sulawesi's PA system).	*Activity Result 1: Capacity of the Ministry of Forestry strengthened to fully operationalise the "Resort-based management" system for implementation in the national, and particularly in Sulawesi's, PA system, including all categories of PAs* 1.1 Development of PA management standards and individual performance monitoring systems for different categories of PAs. 1.2 Training for enhanced law enforcement. 1.3 Development of Capacity-development strategies and action plans for strengthening management effectiveness. 1.4 Clear and well-tested guidelines for community engagement and co-management. 1.5. Establishment of Incentive mechanism for resort-level innovation.	X	X	X	X	MoFor	GEF - 10003	71200 International Consultant 71300 Local Consultant 71400 Contractual Services – Individual 72100 Contractual Services – Company 75700 Training & workshop 71600 Travel 72600 Grants 72400 Comm & Audio V Equipment 72800 IT Equipment 74200 Printing Production Costs	20,000 48,700 7,000 62,500 10,000 5,000 50,000 0 0 5,000

EXPECTED OUTPUTS	PLANNED ACTIVITIES	TIMEFRAME				RESPONSIBLE PARTY	PLANNED BUDGET		
		Q 1	Q 2	Q 3	Q 4		Funding Source	Budget Description	Amount (USD)
Baseline: 1. RBM has begun to be implemented at all NPs but remains incomplete throughout. 2. Very limited implementation of anti-poaching laws across Sulawesi. 3. No integrated monitoring. 4. 131,000 ha, or 4.2% of total remaining habitat type. *Targets:* 1. Using PHKA RBM scoring system, at least 50% of resorts in the project sites have achieved at least one stage level above the baseline. 2. Intelligence-based anti-poaching has become a well-known feature of PA management, affecting incentives in measurable ways (surveys). 3. Users across Sulawesi, Indonesia and beyond are able to upload to and access historic data on biodiversity and protected areas, generated by multiple sources, using a platform created by the project. 4. 210,000 ha, or 6.7% of remaining habitat type, representing a 60% increase in coverage. *Related CPAP outcome:* 2.1 Responsible national institutions and relevant stakeholders are more effective in managing environmental resources and addressing environmental pollution.	*Activity Result 2: An island-wide system for biodiversity, key species and habitat condition monitoring established with science-based survey mechanisms, protocols for monitoring, robust biodiversity indicators and with all necessary tools and capacity installed within the Directorate of Biodiversity Conservation and partner organisations* 2.1 Institutionalization of the island-wide mechanism for biodiversity monitoring and management, a species and habitat condition monitoring system. 2.2 Collection and management of monitoring data through improving the existing monitoring & reporting process. 2.3 Publication of national standards for PA-related data.	X	X	X	X				
	Activity Result 3: Intelligence-based poaching and wildlife trade surveillance system operationalised through establishment and operations of a Sulawesi-based unit. 3.1 Establishment of a decentralized (Sulawesi-based, intelligence-based poaching and wildlife trade surveillance) unit in Sulawesi; at a location to be determined. 3.2 Development an island-level capacity to monitor, analyse and, working in co-operation with PA management authorities, confront poaching and wildlife trade across the island.	X	X	X	X				
	Activity Result 4: Spatial arrangement of the Sulawesi PA system improved based on the terrestrial PA system consolidation plan (including corridors, area expansion and boundary rationalization) for Sulawesi and integration of the plan into the provincial land use plans. 4.1 Improved spatial arrangement of the Sulawesi PA system based on development of a terrestrial PA system consolidation plan (corridors, area expansion and boundary rationalization). 4.2 Toward establishment of potential protection forest as new low land tropical forest national park.	X	X	X	X				
								Sub Total Output 1	**208,200**

EXPECTED OUTPUTS	PLANNED ACTIVITIES	TIMEFRAME				RESPONSIBLE PARTY	PLANNED BUDGET		
		Q 1	Q 2	Q 3	Q 4		Funding Source	Budget Description	Amount (USD)
Output 2. Financial sustainability of the Sulawesi PA system *Indicators:* 1. Financial sustainability score (%) for the sub-system of Sulawesi's protected areas. 2. Annual budget allocated to protected areas. 3. Sustainable financing mechanisms for PAs. *Baseline:* 1. Financial sustainable score: a. Component 1 - Legal, regulatory and institutional frameworks: 34% b. Component 2 - Business planning and tools for cost-effective: 35% c. Component 3 - Tools for revenue generation: 28%	*Activity Result 1: An environmental economic case is made to increase investment in the PA system.* 1.1 Increasing investment in the PA system by quantifying the value of Sulawesi's PAs in terms of the full range of ecosystem goods and services being provided.					Bappenas /MoFor/ UNDP	GEF - 10003	71200 International Consultant 71300 Local Consultant 71400 Contractual Services – Individual 72100 Contractual Services – Company 75700 Training & workshop 71600 Travel 74200 Printing Production Costs	17,000 10,000 10,000 100,000 25,000 10,000 1,000
	Activity Result 2: Sulawesi island-wide PA System Financing Plan is developed, projecting the financial needs for PA management and expansion over the next 10 years and outlining the strategies for meeting these needs from both cost and revenue points of view. 2.1 Developing Sulawesi island-wide PA System Financing Plan. 2.2 Study on financial needs for effective management and development, based on PA management plans. 2.3 Pilot implementation at site and/or sub-system level in Sulawesi to identify appropriate mechanism on PA financing system. 2.4 Initial implementation of the financing plan as well as development of diversified financing mechanism.	X	X	X	X				

EXPECTED OUTPUTS	PLANNED ACTIVITIES	TIMEFRAME				RESPONSIBLE PARTY	PLANNED BUDGET		
		Q 1	Q 2	Q 3	Q 4		Funding Source	Budget Description	Amount (USD)
2. Estimated $13.45 million allocated annually. 3. Government budgetary allocations / funding only. *Targets:* 1. Financial sustainable score: a. Component 1: 50% b. Component 2: 50% c. Component 3: 50% 2. 25% increase, to $16.81 million. 3. At least two new sustainable financing mechanisms for PA management established, providing a minimum of US$ 3 million per year for PA management. *Related CPAP outcome:* 2.1 Responsible national institutions and relevant stakeholders are more effective in managing environmental resources and addressing environmental pollution.	*Activity Result 3: Diversified revenue generation mechanisms and other financing sources for PA management.* 3.1 Development of an enabling policy/legal environment related to the identified instrument. 3.2 Design, negotiation and formalization and operationalization of the mechanisms. 3.3 Development of a national mechanism for monitoring, reporting and verification of services, and payment distribution mechanisms. 3.4 Awareness and capacity building for decision makers, local government officials and local and indigenous communities, to ensure continuity of ecosystem service provision and payments, in the application of land-use to maximise ecosystem service provision and its continuity over time.	X	X	X	X				
								Sub Total Output 2	**173,000**
Output 3. Threat reduction and collaborative governance in the target PAs and buffer zones. *Indicators:* 1. METT scores for demonstration sites. 2. Threat indices at project demonstration sites. 3. Ecosystem health index at project demonstration sites. 4. Populations of selected threatened indicator species at project sites. 5. Active encroachment areas in target PAs.	*Activity Result 1: Integrated land use plans, including PA alignment, developed and implemented in two districts.* 1.1 Examination of PA boundaries in the context of biodiversity and ecosystem service considerations for optimizing land uses within a broader landscape. 1.2 Biodiversity mainstreaming into planning process to enhance PA system sustainability. 1.3 Participatory locally PA boundary maintenance using means such as native salak palm with thorns as well as edible fruits to act as a thick natural boundary wall. 1.4 Establishment and/or revitalization of community managed conservation areas.	X	X	X	X	MoFor	GEF - 10003	71200 International Consultant 71300 Local Consultant 71400 Contractual Services – Individual 72100 Contractual Services – Company 72400 Comm & Audio V Equipment 75700 Training & workshop 71600 Travel 72200 Equipment & Furniture 72600 Grants 74200 Printing Production Costs	39,600 173,500 7,000 167,200 1,000 92,800 40,000 50,000 75,000 30,000

EXPECTED OUTPUTS	PLANNED ACTIVITIES	TIMEFRAME				RESPONSIBLE PARTY	PLANNED BUDGET		
		Q 1	Q 2	Q 3	Q 4		Funding Source	Budget Description	Amount (USD)
6. Existence and effectiveness of collaborative governance systems. *Baseline:* 1. METT Score: LLNP (61); BNWNP (64); Tangkoko Batuangas NR (50). 2. Threat indices: LLNP (0.23); BNWNP (0.28); Tangkoko Batuangas NR (0.31). 3. EHI: LLNP (0.68); BNWNP (0.55); Tangkoko Batuangas NR (0.48). 4. Population of selected species: a. LLNP – Mountain anoa, babirusa, maleo; b. BNWNP – Maleo, babirusa, mountain anoa; c. Tangkoko Batuangas NR – Macaca nigra, Sulawesi civet, maleo, lowland anoa.									
	Activity Result 2: PA site operation is strengthened. 2.1 Implementation of resort based management (RBM) at selected sites. 2.2 Biodiversity and habitat conditions monitoring. 2.3 Monitoring and combating of poaching and the wildlife trade, with the support of the island-level unit. 2.4 Pilot case studies of environmental economic values. 2.5 Implementation of site-level revenue generation mechanisms, based on environmental economic valuation studies and priorities identified by PA financing plan. 2.6 Restoration of fragmented and degraded ecosystem. 2.7 Development of management planning. 2.8 Capacity need assessment and training for local partners & community.	X	X	X	X				

EXPECTED OUTPUTS	PLANNED ACTIVITIES	TIMEFRAME				RESPONSIBLE PARTY	PLANNED BUDGET		
		Q 1	Q 2	Q 3	Q 4		Funding Source	Budget Description	Amount (USD)
5. Encroachment levels as of 2011: LLNP 6,333 ha, BNWNP 3,436 h. Tangkoko baseline TBD. 6. Approximately 30 CCAs established, currently operating at varying degrees of functionality. *Targets:* 1. METT Score: LLNP (70); BNWNP (70); Tangkoko Batuangas NR (70). 2. Threat indices: LLNP (0.15); BNWNP (0.20); Tangkoko Batuangas NR (0.20). 3. EHI: LLNP (0.75); BNWNP (0.75); Tangkoko Batuangas NR (0.75). 4. Population of selected species: indicator population species maintained or increasing; appropriate population structure. 5. Zero increase in net levels of active encroachment. 6. Collaborative governance system: a. At least 45 CCAs, including some at each project demonstration site. b. 80% of above CCAs are operating at an agreed baseline level of functionality. c. 40% of above CCAs are rated as 'highly functional'. *Related CPAP outcome:* 2.1 Responsible national institutions and relevant stakeholders are more effective in managing environmental resources and addressing environmental pollution.	*Activity Result 3: Joint PA/buffer zone governance and management structure.* 3.1 Building on, adapting and replicating the CCA establishment process. 3.2 Development mechanism/incentive for securing alternative livelihoods to reduce the pressure and maintain biodiversity. 3.3 Establishment of village education centre for awareness building related to the role and state of wildlife and the value of healthy ecosystem. 3.4 Micro-capital grants to support small income-generating and/or conservation schemes.								
								Sub Total Output 3	**676,100**

EXPECTED OUTPUTS	PLANNED ACTIVITIES	TIMEFRAME				RESPONSIBLE PARTY	PLANNED BUDGET		
		Q 1	Q 2	Q 3	Q 4		Funding Source	Budget Description	Amount (USD)
Output 4. Project Management	*Establishement and operationalization of Project Management Unit*	X	X	X	X	MoFor	GEF - 10003	71400 Contractual Services – Individual 71600 Travel 72400 Comm & Audio V Equipment 72500 Supplies 72800 IT Equipment 74100 Professional Services 74500 UNDP Cost Recovery 75700 Training & workshop	27,000 2,500 500 500 0 2,000 12,500 6,050
	Project assurance related activities	X	X	X	X	UNDP	UNDP - 00012	71400 Contractual Services – Individual 71600 Travel 72400 Comm & Audio V Equipment 72500 Supplies 74500 Miscellanous Expenses 75700 Training & workshop	9,000 7,500 1,000 1,000 1,000 10,500
								Sub Total Output 4	**81,050**
								TOTAL BUDGET 2019	**1,138,350**

Year 6: 2020

EXPECTED OUTPUTS	PLANNED ACTIVITIES	TIMEFRAME				RESPONSIBLE PARTY	PLANNED BUDGET		
		Q 1	Q 2	Q 3	Q 4		Funding Source	Budget Description	Amount (USD)
Output 1. Enhanced systemic and institutional capacity for planning and management of Sulawesi PA system. *Indicators:* 1. Extent of implementation of RBM. 2. Effectiveness of anti-poaching efforts. 3. Operational island-wide biodiversity monitoring system. 4. Representation of lowland forest (key under-represented forest ecosystem types in Sulawesi's PA system).	*Activity Result 1: Capacity of the Ministry of Forestry strengthened to fully operationalise the "Resort-based management" system for implementation in the national, and particularly in Sulawesi's, PA system, including all categories of PAs* 1.1 Development of PA management standards and individual performance monitoring systems for different categories of PAs. 1.2 Training for enhanced law enforcement. 1.3 Development of Capacity-development strategies and action plans for strengthening management effectiveness. 1.4 Clear and well-tested guidelines for community engagement and co-management. 1.5. Establishment of Incentive mechanism for resort-level innovation.	X	X			MoFor	GEF - 10003	71200 International Consultant 71300 Local Consultant 71400 Contractual Services – Individual 72100 Contractual Services – Company 75700 Training & workshop 71600 Travel 72600 Grants 72400 Comm & Audio V Equipment 72800 IT Equipment 74200 Printing Production Costs	18,000 20,000 0 0 10,000 5,000 0 0 0 5,000

EXPECTED OUTPUTS	PLANNED ACTIVITIES	TIMEFRAME				RESPONSIBLE PARTY	PLANNED BUDGET		
		Q 1	Q 2	Q 3	Q 4		Funding Source	Budget Description	Amount (USD)
Baseline: 1. RBM has begun to be implemented at all NPs but remains incomplete throughout. 2. Very limited implementation of anti-poaching laws across Sulawesi. 3. No integrated monitoring. 4. 131,000 ha, or 4.2% of total remaining habitat type. *Targets:* 1. Using PHKA RBM scoring system, at least 50% of resorts in the project sites have achieved at least one stage level above the baseline. 2. Intelligence-based anti-poaching has become a well-known feature of PA management, affecting incentives in measurable ways (surveys). 3. Users across Sulawesi, Indonesia and beyond are able to upload to and access historic data on biodiversity and protected areas, generated by multiple sources, using a platform created by the project. 4. 210,000 ha, or 6.7% of remaining habitat type, representing a 60% increase in coverage. *Related CPAP outcome:* 2.1 Responsible national institutions and relevant stakeholders are more effective in managing environmental resources and addressing environmental pollution.	*Activity Result 2: An island-wide system for biodiversity, key species and habitat condition monitoring established with science-based survey mechanisms, protocols for monitoring, robust biodiversity indicators and with all necessary tools and capacity installed within the Directorate of Biodiversity Conservation and partner organisations* 2.1 Institutionalization of the island-wide mechanism for biodiversity monitoring and management, a species and habitat condition monitoring system. 2.2 Collection and management of monitoring data through improving the existing monitoring & reporting process. 2.3 Publication of national standards for PA-related data.								
	Activity Result 3: Intelligence-based poaching and wildlife trade surveillance system operationalised through establishment and operations of a Sulawesi-based unit. 3.1 Establishment of a decentralized (Sulawesi-based, intelligence-based poaching and wildlife trade surveillance) unit in Sulawesi; at a location to be determined. 3.2 Development an island-level capacity to monitor, analyse and, working in co-operation with PA management authorities, confront poaching and wildlife trade across the island.								
	Activity Result 4: Spatial arrangement of the Sulawesi PA system improved based on the terrestrial PA system consolidation plan (including corridors, area expansion and boundary rationalization) for Sulawesi and integration of the plan into the provincial land use plans. 4.1 Improved spatial arrangement of the Sulawesi PA system based on development of a terrestrial PA system consolidation plan (corridors, area expansion and boundary rationalization). 4.2 Toward establishment of potential protection forest as new low land tropical forest national park.								
								Sub Total Output 1	**58,000**

EXPECTED OUTPUTS	PLANNED ACTIVITIES	TIMEFRAME				RESPONSIBLE PARTY	PLANNED BUDGET		
		Q 1	Q 2	Q 3	Q 4		Funding Source	Budget Description	Amount (USD)
Output 2. Financial sustainability of the Sulawesi PA system *Indicators:* 1. Financial sustainability score (%) for the sub-system of Sulawesi's protected areas. 2. Annual budget allocated to protected areas. 3. Sustainable financing mechanisms for PAs. *Baseline:* 1. Financial sustainable score: a. Component 1 - Legal, regulatory and institutional frameworks: 34% b. Component 2 - Business planning and tools for cost-effective: 35% c. Component 3 - Tools for revenue generation: 28%	*Activity Result 1: An environmental economic case is made to increase investment in the PA system.* 1.1 Increasing investment in the PA system by quantifying the value of Sulawesi's PAs in terms of the full range of ecosystem goods and services being provided.	X	X			Bappenas/ MoFor/ UNDP	GEF - 10003	71200 International Consultant 71300 Local Consultant 71400 Contractual Services – Individual 72100 Contractual Services – Company 75700 Training & workshop 71600 Travel 74200 Printing Production Costs	10,000 10,000 10,000 45,000 25,000 10,000 0
	Activity Result 2: Sulawesi island-wide PA System Financing Plan is developed, projecting the financial needs for PA management and expansion over the next 10 years and outlining the strategies for meeting these needs from both cost and revenue points of view. 2.1 Developing Sulawesi island-wide PA System Financing Plan. 2.2 Study on financial needs for effective management and development, based on PA management plans. 2.3 Pilot implementation at site and/or sub-system level in Sulawesi to identify appropriate mechanism on PA financing system. 2.4 Initial implementation of the financing plan as well as development of diversified financing mechanism.								

EXPECTED OUTPUTS	PLANNED ACTIVITIES	TIMEFRAME				RESPONSIBLE PARTY	PLANNED BUDGET		
		Q 1	Q 2	Q 3	Q 4		Funding Source	Budget Description	Amount (USD)
2. Estimated $13.45 million allocated annually. 3. Government budgetary allocations / funding only. *Targets:* 1. Financial sustainable score: a. Component 1: 50% b. Component 2: 50% c. Component 3: 50% 2. 25% increase, to $16.81 million. 3. At least two new sustainable financing mechanisms for PA management established, providing a minimum of US$ 3 million per year for PA management. *Related CPAP outcome:* 2.1 Responsible national institutions and relevant stakeholders are more effective in managing environmental resources and addressing environmental pollution.	*Activity Result 3: Diversified revenue generation mechanisms and other financing sources for PA management.* 3.1 Development of an enabling policy/legal environment related to the identified instrument. 3.2 Design, negotiation and formalization and operationalization of the mechanisms. 3.3 Development of a national mechanism for monitoring, reporting and verification of services, and payment distribution mechanisms. 3.4 Awareness and capacity building for decision makers, local government officials and local and indigenous communities, to ensure continuity of ecosystem service provision and payments, in the application of land-use to maximise ecosystem service provision and its continuity over time.								
								Sub Total Output 2	**110,000**
Output 3. Threat reduction and collaborative governance in the target PAs and buffer zones. *Indicators:* 1. METT scores for demonstration sites. 2. Threat indices at project demonstration sites. 3. Ecosystem health index at project demonstration sites. 4. Populations of selected threatened indicator species at project sites.	*Activity Result 1: Integrated land use plans, including PA alignment, developed and implemented in two districts.* 1.1 Examination of PA boundaries in the context of biodiversity and ecosystem service considerations for optimizing land uses within a broader landscape. 1.2 Biodiversity mainstreaming into planning process to enhance PA system sustainability. 1.3 Participatory locally PA boundary maintenance using means such as native salak palm with thorns as well as edible fruits to act as a thick natural boundary wall. 1.4 Establishment and/or revitalization of community managed conservation areas.	X	X			MoFor	GEF - 10003	71200 International Consultant 71300 Local Consultant 71400 Contractual Services – Individual 72100 Contractual Services – Company 72400 Comm & Audio V Equipment 75700 Training & workshop 71600 Travel 72200 Equipment & Furniture 72600 Grants 74200 Printing Production Costs	25,000 30,000 0 25,000 0 50,000 40,000 0 75,000 0

EXPECTED OUTPUTS	PLANNED ACTIVITIES	TIMEFRAME				RESPONSIBLE PARTY	PLANNED BUDGET		
		Q 1	Q 2	Q 3	Q 4		Funding Source	Budget Description	Amount (USD)
5. Active encroachment areas in target PAs. 6. Existence and effectiveness of collaborative governance systems. *Baseline:* 1. METT Score: LLNP (61); BNWNP (64); Tangkoko Batuangas NR (50). 2. Threat indices: LLNP (0.23); BNWNP (0.28); Tangkoko Batuangas NR (0.31). 3. EHI: LLNP (0.68); BNWNP (0.55); Tangkoko Batuangas NR (0.48). 4. Population of selected species: a. LLNP – Mountain anoa, babirusa, maleo;	*Activity Result 2: PA site operation is strengthened.* 2.1 Implementation of resort based management (RBM) at selected sites. 2.2 Biodiversity and habitat conditions monitoring. 2.3 Monitoring and combating of poaching and the wildlife trade, with the support of the island-level unit. 2.4 Pilot case studies of environmental economic values. 2.5 Implementation of site-level revenue generation mechanisms, based on environmental economic valuation studies and priorities identified by PA financing plan. 2.6 Restoration of fragmented and degraded ecosystem. 2.7 Development of management planning. 2.8 Capacity need assessment and training for local partners & community.								

b. BNWNP – Maleo, babirusa, mountain anoa; c. Tangkoko Batuangas NR – Macaca nigra, Sulawesi civet, maleo, lowland anoa. 5. Encroachment levels as of 2011: LLNP 6,333 ha, BNWNP 3,436 h. Tangkoko baseline TBD. 6. Approximately 30 CCAs established, currently operating at varying degrees of functionality. *Targets:* 1. METT Score: LLNP (70); BNWNP (70); Tangkoko Batuangas NR (70). 2. Threat indices: LLNP (0.15); BNWNP (0.20); Tangkoko Batuangas NR (0.20). 3. EHI: LLNP (0.75); BNWNP (0.75); Tangkoko Batuangas NR (0.75). 4. Population of selected species: indicator population species maintained or increasing; appropriate population structure. 5. Zero increase in net levels of active encroachment. 6. Collaborative governance system: a. At least 45 CCAs, including some at each project demonstration site. b. 80% of above CCAs are operating at an agreed baseline level of functionality. c. 40% of above CCAs are rated as 'highly functional'. *Related CPAP outcome:* 2.1 Responsible national institutions and relevant stakeholders are more effective in managing environmental resources and addressing environmental pollution.	*Activity Result 3: Joint PA/buffer zone governance and management structure.* 3.1 Building on, adapting and replicating the CCA establishment process. 3.2 Development mechanism/incentive for securing alternative livelihoods to reduce the pressure and maintain biodiversity. 3.3 Establishment of village education centre for awareness building related to the role and state of wildlife and the value of healthy ecosystem. 3.4 Micro-capital grants to support small income-generating and/or conservation schemes.								
								Sub Total Output 3	**245,000**

EXPECTED OUTPUTS	PLANNED ACTIVITIES	TIMEFRAME				RESPONSIBLE PARTY	PLANNED BUDGET		
		Q 1	Q 2	Q 3	Q 4		Funding Source	Budget Description	Amount (USD)
Output 4. Project Management	*Establishement and operationalization of Project Management Unit*	X	X			MoFor	GEF - 10003	71400 Contractual Services – Individual 71600 Travel 72400 Comm & Audio V Equipment 72500 Supplies 72800 IT Equipment 74100 Professional Services 74500 UNDP Cost Recovery 75700 Training & workshop	30,000 7,500 1,400 2,000 1,000 2,000 15,000 5,000
	Project assurance related activities	X	X			UNDP	UNDP - 00012	71400 Contractual Services – Individual 71600 Travel 72400 Comm & Audio V Equipment 72500 Supplies 74500 Miscellanous Expenses 75700 Training & workshop	9,000 7,500 1,000 1,000 1,000 5,500
								Sub Total Output 4	**88,900**
								TOTAL BUDGET 2020	**501,900**

Summary of Project Budget

Responsible Party	Fund ID	Donor Name	Atlas Budgetary Acct Code	Atlas Budget Description	Amount 2015 (USD)	Amount 2016 (USD)	Amount 2017 (USD)	Amount 2018 (USD)	Amount 2019 (USD)	Amount 2020 (USD)	Total (USD)	Budget Note
Component 1: Enhanced systemic and institutional capacity for planning and management of Sulawesi PA system												
Ministry of Forestry	62000	GEF	71200	International Consultants	50,000	10,000	20,000	20,000	20,000	18,000	138,000	1
			71300	Local Consultants	50,000	38,600	21,600	15,100	48,700	20,000	194,000	2
			71400	Contractual Services - Individual	45,000	10,000	10,000	10,000	7,000	0	82,000	3
			72100	Contractual services - Companies	25,000	29,500	25,000	20,000	62,500	0	162,000	4
			75700	Training and Workshop	50,000	32,500	10,000	10,000	10,000	10,000	122,500	5
			71600	Travel	50,000	15,000	10,000	5,000	5,000	5,000	90,000	6
			72600	Grants	0	100,000	50,000	0	50,000	0	200,000	7
			72400	Communication & Audio Equip	15,000	5,500	0	5,000	0	0	25,500	8
			72800	IT Equipment	35,000	5,000	5,000	0	0	0	45,000	9

			74200	Audio Visual & Print Prod Costs	25,000	5,000	5,000	5,000	5,000	5,000	50,000	10
				TOTAL COMPONENT 1	**345,000**	**251,100**	**156,600**	**90,100**	**208,200**	**58,000**	**1,109,000**	
Component 2: Financial sustainability of the Sulawesi PA system												
Bappenas/Ministry of Forestry /UNDP	62000	GEF	71200	International Consultants	50,000	20,000	20,000	20,000	17,000	10,000	137,000	11
			71300	Local Consultants	50,000	37,200	27,200	12,600	10,000	10,000	147,000	12
			71400	Contractual Services - Individual	43,000	10,000	10,000	10,000	10,000	10,000	93,000	13
			72100	Contractual services - Companies	100,000	50,000	100,000	100,000	100,000	45,000	495,000	14
			75700	Training and workshop	50,000	50,000	25,000	25,000	25,000	25,000	200,000	15
			71600	Travel	25,000	25,000	10,000	25000	10,000	10,000	105,000	16
			74200	Audio Visual & Print Prod Costs	25,000	5,000	13,000	6,000	1,000	0	50,000	17
				TOTAL COMPONENT 2	**343,000**	**197,200**	**205,200**	**198,600**	**173,000**	**110,000**	**1,227,000**	
Component 3: Threat reduction and collaborative governance in the target PAs and buffer zones												
Ministry of Forestry	62000	GEF	71200	International Consultants	25,000	47,800	8,800	41,800	39,600	25,000	188,000	18
			71300	Local Consultants	20,000	130,000	110,000	90,000	173,500	30,000	553,500	19
			71400	Contractual Services - Individual	25,000	20,000	20,000	20,000	7,000	0	92,000	20
			72100	Contractual services - Companies	50,000	248,750	197,000	206,300	167,200	25,000	894,250	21
			72400	Communication & Audio Equip	25,000	0	0	0	1,000	0	26,000	22
			75700	Training and Workshop	100,000	50,000	100,000	67,500	92,800	50,000	460,300	23
			71600	Travel	50,000	40,000	40,000	40,000	40,000	40,000	250,000	24
			72200	Equipment	75,000	25,000	45,000	45,000	50,000	0	240,000	25
			72600	Grants	300,000	94,500	70,000	75,000	75,000	75,000	689,500	26
			74200	Audio Visual & Print Prod Costs	27,000	33,000	40,000	20,000	30,000	0	150,000	27
				TOTAL COMPONENT 3	**697,000**	**689,050**	**630,800**	**605,600**	**676,100**	**245,000**	**3,543,550**	
PROJECT MANAGEMENT COST												
Ministry of Forestry	62000	GEF	71400	Contractual Services - Individual	30,000	30,000	30,000	30,000	27,000	30,000	177,000	28
			71600	Travel	7,500	2,500	2,500	2,500	2,500	7,500	25,000	29
			72400	Communication & Audio Equip	1,500	1,000	1000	500	500	1,400	5,900	30
			72500	Supply	2,000	1,000	1,000	500	500	2,000	7,000	31

			72800	IT Equipment	25,000	4000	4,000	0	0	1,000	34,000	32
			74100	Professional Service	2,000	2,000	2,000	2,000	2,000	2,000	12,000	33
			74500	UNDP Cost Recovery	15,000	15,000	15,000	15,000	12,500	15,000	87,500	34
			75700	Workshops	7,000	7,000	6,000	6,000	6,050	5,000	37,050	35
				TOTAL COMPONENT 4 (GEF)	**90,000**	**62,500**	**61,500**	**56,500**	**51,050**	**63,900**	**385,450**	
				TOTAL BUDGET (GEF)	**1,475,000**	**1,199,850**	**1,054,100**	**950,800**	**1,108,350**	**476,900**	**6,265,000**	
Ministry of Forestry	04000	UNDP	71400	Contractual Services - Individual	9,000	19,000	19,000	19,000	9,000	9,000	84,000	36
			71600	Travel	5,000	7,500	7,500	7,500	7,500	7,500	42,500	37
			72400	Communication & Audio Equip	0	1,000	1,000	1000	1,000	1,000	5,000	38
			72500	Supply	0	1,000	1,000	1000	1,000	1,000	5,000	39
			74500	Miscellaneous Expenses	1,000	1,000	1,000	1,000	1,000	1,000	6,000	40
			75700	Workshops	10,000	10,500	10,500	10,500	10,500	5,500	57,500	41
				TOTAL COMPONENT 4 (UNDP)	**25,000**	**40,000**	**40,000**	**40,000**	**30,000**	**25,000**	**200,000**	
				GRAND TOTAL	**1,500,000**	**1,239,850**	**1,094,100**	**990,800**	**1,138,350**	**501,900**	**6,465,000**	

Budget Notes	
Component 1	
1	• Full operationalization of the system of "Resort Based Management (RBM)" (Output 1.1) - International Protected Area Management Specialist (USD 3,000*8 weeks=USD 24,000); • Developing an island-wide system for biodiversity, key species and habitat condition monitoring (Output 1.2) - International Biodiversity Monitoring Specialist (USD 3,000*6 weeks=USD 18,000); • Development of intelligence-based poaching and wildlife trade surveillance system (Output 1.3) - International Wildlife Trade Specialist (USD3,000*6 weeks=USD 18,000); • Enhanced spatial arrangements of Sulawesi PA system, including for changing status of protected forest to NP at Ganda Dewata (Output 1.4) - International PA System Planning Specialist (USD 3,000*6 weeks=USD18,000); • International Evaluation Expert for mid-term and final evaluation of Outcome 1 (USD 4,000*2 weeks=USD 8,000); • International Technical Advisor will support Project Manager on successful implementation of Outcome 1 (USD3,250*16 weeks=USD 52,000); *Details provided in overview of inputs in technical assistance consultants table.* Total: US$138,000
2	• Local Institutional Capacity Development Specialist will work in collaboration with international protected area management specialist to strengthen the capacity of the Ministry of Forestry to fully operationalize the RBM under Output 1.1.(USD 750*40 weeks=USD 30,000);

	• Establish an island-wide monitoring system (Output 1.2.) - Local Biodiversity Monitoring Specialist will work in collaboration with international biodiversity monitoring specialist under (USD 750*40 weeks=USD 30,000); • Operationalisation of intelligence-based poaching and wildlife trade surveillance system (Output 1.3) - Local Wildlife Trade Specialist will work in collaboration with international wildlife trade specialist (USD 750*50 weeks=USD 37,500); • Enhanced spatial arrangement of Sulawesi PA system (Output 1.4) - Local PA System Planning Specialist will work in collaboration with international PA system planning specialist (USD 750*60 weeks=USD 45,000); • Strengthening of human and financial resource management for PA agencies (Output 1.1-1.3) – Financial and human resource management specialist (USD 500 * 91 weeks = USD 45,500) • Local Evaluation Expert will assist international evaluation expert for mid-term and final evaluation of Outcome 2 (USD 750*8 weeks=USD 6,000); *Details provided in overview of inputs in technical assistance consultants table.* Total: US$194,000
3	Project personnel salary to support implementation and deliverables of project component 1. Sub total: USD 82,000.
4	• Sub-contract for development of Sulawesi biodiversity monitoring platform [1.2] (US$50,000) • Sub-contracts for organization of policy consultations, capacity building and awareness-raising activities at: (i) National level - to accelerate RBM implementation [1.1], coordinated biodiversity monitoring [1.2] and anti-poaching [1.3] policies), and (ii) Sulawesi level – to provide capacity building support for RBM management systems [1.1], develop and build systems and provincial-level support for coordinated biodiversity monitoring [1.2] and PA system consolidation plan [1.4]) (US$72,000). • Sub-contracts for stakeholder consultation meetings and national knowledge-sharing meetings to ensure successfully dissemination of Output 1.1. – 1.4. (US$40,000). Total: US$162,000
5	Provision of training pertaining to protected area system planning, biodiversity, key species and habitat condition monitoring system, illegal trade surveillance system, resort based management etc. Technical meetings, stakeholder consultation and consensus building meeting at local and national level for development and implementation of PA management standards and PA and individual performance monitoring system for different categories of PAs; tools for enhanced law enforcement and trade surveillance system, guideline development for community engagement, capacity development strategy for effective PA management and incentive mechanisms for resort-level innovation. (US$122,500).
6	Travel of local and international consultants (International and Local Protected Area Management Specialist, International and Local Biodiversity Monitoring Specialist, International and Local Wildlife Trade Specialist, International and Local PA System Planning Specialist, International and Local Monitoring and Evaluation Specialist) for implementation of Outcome 1 (US$90,000)
7	Innovative, local-level solutions to resort-level management challenges supported through small grants ($5-15,000 each) (Output 1.1) (US$200,000).
8	Enhanced monitoring of wildlife trade surveillance through Communication and Audio Equipment (US$25,500).
9	IT Equipment for field-level IT-based Sulawesi biodiversity monitoring platform [1.2], wildlife trade surveillance system [1.3] and PA system expansion / realignment [1.4]: Government co-financing will cover the bulk of equipment and vehicle costs while GEF will cover specific capacity building needs related to site monitoring equipment, including binoculars, telescopes, digital cameras, GPS units, vegetation and water quality monitoring equipment, etc. (US$45,000).
10	Dissemination of project results and lessons learned through printing and publication of knowledge products, posters, leaflets and workshop materials for Outcome 1 (US$50,000).
Component 2	

11	• PA system environmental economic values estimated, including tourism and other use and non-use values [2.1] - International Environmental (USD 3,000*12 weeks=USD 36,000); • Development of a Sulawesi-level PA sub-system financing plan [2.2] and support to diversification of financing sources for PA management [2.3] - International Environmental Financing Specialist (USD 3,000*18 weeks=USD 54,000); • International Evaluation Expert for mid-term and final evaluation of Outcome 2 (USD 4,000*2 weeks=USD 8,000) • International Technical Advisor to support Project Manager on successful implementation of Outcome 2 (USD3,250*12 weeks=USD 39,000) *Details provided in overview of inputs in technical assistance consultants table.* Total: US$137,000
12	• Local Environmental Economist will work in collaboration with international Environmental Economist to quantify the value of Sulawesi's PAs in terms of tourism and other use and non-use values under Output 2.1. (USD 750*40 weeks=USD 30,000); • Local Environmental Financing Specialist will work in collaboration with international Environmental Financing Specialist under Output 2.2. (USD 750*108weeks=USD 81,000) and Output 2.3. (USD 750 *40=USD 30,000) to develop and project the PA system financing plan, and to diversify financing sources; • Local Evaluation Expert will assist international evaluation expert for mid-term and final evaluation of Outcome 2 (USD 750*8 weeks=USD 6,000); *Details provided in overview of inputs in technical assistance consultants table.* Total: US$147,000
13	Project personnel salary to support implementation and deliverables of project component 2. Total: USD 93,000
14	• Sub-contract for environmental economic studies ($54,400); • Sub-contract for development and piloting of three demonstration site-level financing mechanisms ($345,000); • Subcontracts for stakeholder consultation meetings and national/regional knowledge-sharing meetings covering Output 2.1. – 2.3 ($50,000); • Sub-contracts for meetings at national and regional level for capacity building and awareness raising activities of Outcome 2 ($50,000). Total: US$499,400
15	Provision of training pertaining to PA system financing planning, PA valuation and diversification of financing sources. Technical meetings, consultation and consensus building meetings to be held at local and national level for development and implementation of Outputs 2.1. – 2.3. Topics include: (i) Quantifying the value of PAs in terms of tourism and other use and non-use values, (ii) developing and implementing a Sulawesi-level PA financing system, and (iii) diversifying financial sources will be realized during such technical meetings, which are different than capacity building and awareness raising meetings. (US$ 200,000)
16	Travel of local and international consultants (International and Local Environmental Economist, International and Local Financing Specialist, and International Monitoring and Evaluation Specialist) for implementation of Outcome 2. (US$105,000)
17	Translation, editing, design and printing of reports and awareness materials developed under Outcome 2 (US$50,000).
Component 3	
18	• Biodiversity and carbon considerations and PA realignment proposals developed for two district-level integrated land use plans [3.1]: International Integrated Land Use Planning Specialist (USD 3,000*9 weeks=USD 27,000); • Strengthened PA site operations [3.2] strengthened: International Protected Area Management Specialist (USD 3,000*10w=USD 30,000), International Biodiversity Monitoring Specialist (USD 3,000*10w=USD 30,000), International Wildlife Trade Specialist (USD 3,000*9w=USD 27,000);

	• Joint PA/buffer zone governance and management structure in place [3.3]: International Community Engagement / Co-management Specialist (USD 3,000*9w=USD 27,000); • International Evaluation Expert for mid-term and final evaluation of Outcome 3 (USD 4,000*2 weeks=USD 8,000) • International Technical Advisor will support Project Manager on successful implementation of Outcome 2 (USD3,250*12 weeks=USD 39,000) *Details provided in overview of inputs in technical assistance consultants table* Total: US$188,000
19	• Technically coordination of Component 3 by Protected Area Management Specialist at each site (USD 750*200 weeks X 3 specialists = USD 450,000) • • PA site operation under Output 3.2 will be strengthened through support of several local consultants who will be working with international consultants. Local Biodiversity Monitoring Specialist (USD 750*65 weeks=USD 48,750), Local Wildlife Trade Specialist (USD 750 *65w=USD 48,750); • Local Evaluation Expert for mid-term and final evaluation of Outcome 3– 750*8 weeks=6,000; *Details provided in overview of inputs in technical assistance consultants table* Total: US$553,500
20	Project personnel salary to support implementation and deliverables of project component 3. Sub total: USD 92,000.
21	• Integrated Land Use Plans for two districts including PA alignment [3.1], working in collaboration with international Integrated Land Use Planning Specialist - (USD 50,000); • Development and implementation of a joint PA/buffer zone governance and management structure [3.3] will be supported by a local Community Engagement / Co-management Specialist, working in collaboration with international community engagement specialist (US$ 50,000); • Matching funding for Selamatkan Yaki for strengthening of PA site-level operations [3.2], including capacity building, at the Greater Tangkoko Conservation Area (US$264,250) • Sub-contract for technical support to existing Community Conservation Areas (CCAs) and establishment of up to 15 new CCAs (US$320,000) • Sub-contract for infrastructural and other support to RBM implementation at LLNP and BN (US$210,000) Total: US$ 894,250
22	Communication and audio equipment costs from GEF sources will support field staff for strengthening of enforcement (USD 26,000).
23	Provision of training pertaining to integrated land use planning, operationalization of RBM, PA/buffer zone management and co-management, park infrastructure maintenance, law enforcement, habitat restoration, biodiversity monitoring. Ttechnical meetings, community consultations and consensus building meetings for: establishment of collaborative area and natural resource management agreements, defining mechanism for governance and management of PA/buffer zone; development of integrated land use plan, development of community capacity and awareness raising. (US$ 460,300).
24	Travel of local and international consultants (International and Local Land Use Planning Specialist, International and Local Protected Area Management Specialist, International and Local Biodiversity Monitoring Specialist, International and Local Wildlife Trade Specialist, International and Local Community Engagement / Co-management Specialist, International and Local Monitoring and Evaluation Specialist) for implementation of Outcome 3. Total: US$250,000
25	Equipment costs from GEF sources in support of infrastructure to implement PA site operation. Discussions with the government have enabled co-funding to be used to cover the bulk of equipment and vehicle costs under government co-financing. GEF will cover only needs of project staff and consultants plus specific infrastructure needs (signage, patrol camps, patrol equipment, etc) (US$240,000).

26	Micro-capital grants to support innovative alternative income generating schemes. Grants will be provided within the framework of new and on-going Community Conservation Agreements (CCAs) with villages surrounding PAs. (US$689,500)
27	• Development and publication of the integrated landscape management plans, associated studies and advocacy materials. Production of various awareness raising materials, marketing and communications strategies in the three landscapes (involving the production of posters and art prints, leaflets) will also be produced. Training materials, biodiversity monitoring and reporting documents and other informative documents for dissemination to key stakeholders will be printed and publicized as appropriate. (US$50,000). • A documentary film will be prepared for training material related to dissemination of PA site operations and also for awareness raising among stakeholders during and after project implementation (US$100,000). Total: US$ 150,000
Project Management Costs	
28	Project personnel salary for day-to-day management. Sub total: USD 177,000
29	Management-related travel to/from project sites for the project management team to enable hands-on management. Sub-total: $ 25,000
30	Communication equipment to support operational of project management unit. Sub-total: $ 6,000
31	Office stationary and miscellaneous. Sub total USD 7,000.
32	IT equipment to support operational of project management unit (laptop, LCD projector etc). Sub-total: $ 34,000
33	An accountancy firm will be hired at $2,000 per year for annual audits. Sub Total: $12,000
34	UNDP Cost Recovery Charges: Estimated UNDP Direct Project Service/Cost recovery charges as indicated in the Agreement in Section IV Part I of the Project Document. The project is to be managed on the 100% Country Office Cost Recovery basis, upon request of the government implementing partner. The estimated cost (Total USD 75,000) includes: (i) recruitment and payroll management of project staff; (ii) purchase of goods and equipment as requested; and (iii) hiring of consultants. In accordance with GEF Council requirements, the costs of these services will be part of the executing entity's Project Management Cost allocation identified in the project budget. DPS costs would be charged at the end of each year based on the UNDP Universal Pricelist (UPL) or the actual corresponding service cost. The amounts here are estimations based on the services preliminarily indicated, however as part of annual project operational planning the DPS to be requested during the calendar year would be defined and the amount included in the yearly project management budgets and would be charged based on actual services provided at the end of that year. Sub Total: $87,500.
35	Workshop/meeting to review progress of project implementation. Sub-total $ 37,050
36	Project personnel salary to undertake project assurance functions. Sub total: USD 84,000
37	Management-related travel to/from project sites for the country office. Sub-total: $ 42,500
38	Communication equipment to support operational of project management unit. Sub-total: $ 5,000
39	Office stationary. Sub total USD 5,000.
40	Miscellaneous to support operational of project management unit. Sub-total: $ 6,000
41	Workshop/meeting to review progress of project implementation. Sub-total $ 53,000

PART V: Management Arrangements

EXECUTION MODALITY

183. The project will be implemented under the framework of the UNDP Country Programme Action Plan (CPAP) 2011 – 2015 applying the National Implementation Modality (NIM), where the Ministry of Forestry will act as the Implementing Partner. In line with the UNDP Executive Board decision DP/2005/3 dated 21 to 28 January 2005, UNDP's Programme and Operations Policies and Procedures (POPP) describes NIM as the overall management of UNDP programme activities in a specific programme country carried out by an eligible national entity of that country. NIM takes into consideration the technical and administrative capacity of the entity to assume responsibility for mobilizing and effectively applying the required inputs in order to achieve the expected outputs.

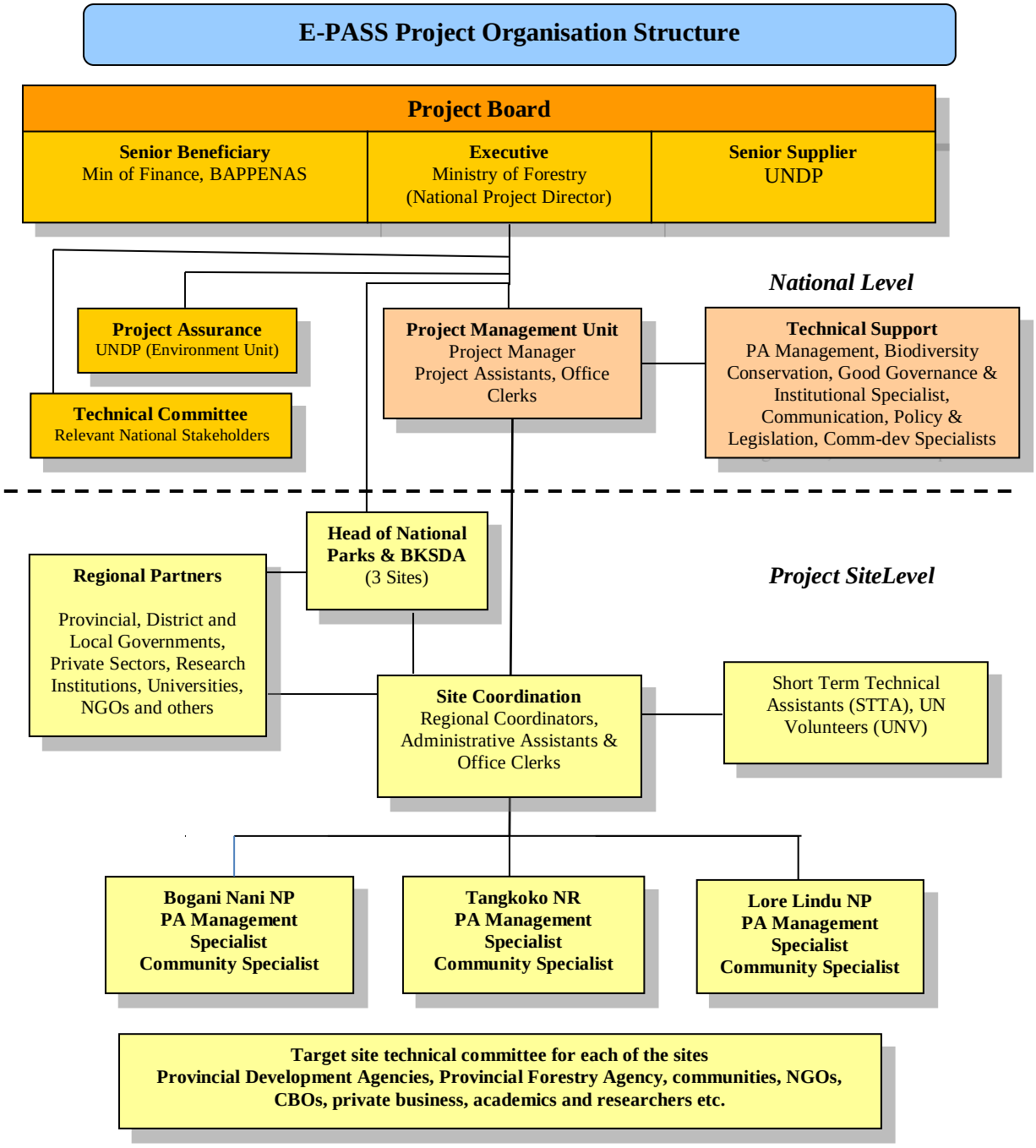
184. The Implementing Partner is responsible and accountable for managing the project - including the monitoring and evaluation of project interventions - and achieving project outputs, and for the effective use of project resources. Under the mandate of Implementing Partner, MoFor, the Directorate General (DG) of Forest Protection and Nature Reserve, Directorate of Biodiversity Conservation will execute the project on behalf of the GoI under the NIM modality, in close collaboration with other relevant directorates in particular the Directorate of Conservation Areas and the Directorate of Forest Investigation and Protection. According to the Permenhut (Ministry of Forestry Regulation) No 40/2010 on Institutional Arrangement of the Ministry of Forestry, the Biodiversity Conservation Directorate is responsible for the preparation of policy formulation, standardization, technical guidance and evaluation in the field of biodiversity conservation and management.

PROJECT OVERSIGHT

185. Oversight of project activities will be the responsibility of the Project Board (PB). Regular operational oversight will be ensured by UNDP, through the UNDP Country Office in Jakarta, and strategic oversight will be ensured by the UNDP/GEF Regional Technical Advisor (RTA) responsible for the project. This oversight will include ensuring that the project practices due diligence with regard to UNDP's Environmental and Social Screening Procedure.

186. The Ministry of Forestry will take overall responsibility for the project execution, and the timely and verifiable attainment of project objectives and outcomes, but will report to the PB. Ministry of Forestry will provide support to, and inputs for, the implementation of all project activities, and recruitment of project staff and contracting of consultants and service providers with advice from and the involvement of the UNDP. In addition, BAPPENAS will lead the implementation of project output 2.3 in coordination with Ministry of Finance, Ministry of Forestry and other related stakeholders. International procurement will be mainly handled by the UNDP upon request of the Ministry.

187. The organizational structure of the project is described below.



188. **The Project Board (PB)** is the highest decision-making body in project management and implementation. The responsibilities of the PB include providing overall direction and review of the project implementation targeting at least one higher level Outcome, reviewing and approving the AWP proposal, and reporting on the project implementation. Project Assurance is the function of the Project Board to ensure the project is able to perform its functions appropriately. It will provide inputs to the Project Board members regarding the criteria of general project

implementation as a source for Project Board members to then provide inputs and directions to the NPD and the Project Manager.

189. On behalf of the Ministry of Forestry, the NPD chairs and coordinates the Project Board members that consist of the representations from the Directorates of Biodiversity Conservation, Conservation Area and Forest Investigation and Protection, the National Parks Agencies for Lore Lindu and Bogani Nani Wartabone, the Provincial Agencies for Natural Resource Conservation in North Sulawesi and Central Sulawesi, the Ministry of Finance, the National Development Planning Agency (BAPPENAS), and UNDP. Ministry of Forestry, UNDP and the Ministry of Finance will have the executive power to make the final decisions.

190. **National Project Director (NPD)** is the official responsible for monitoring the business case of the project, and "managing by exception" the overall project implementation. NPD will be appointed by the Implementing Partner to oversee and provide appropriate guidance to the UNDP-Project Management Unit, which will manage day to day activities of the project. However, the Implementing Partner will retain overall ownership of the programme, including authority to provide strategic guidance and to endorse the project Annual Work Plan.

191. The NPD for this project will be the Director of Biodiversity Conservation, DG of Forest Protection and Nature Reserve, Ministry of Forestry. The NPD will be responsible for providing government oversight and guidance for project implementation, including the coordination of project activities among the main parties to the project: the government implementing partners at the national and local levels, the project manager, consultants and UNDP, including oversight of the Project Management Unit. The NPD will not be paid from the project funds, but will represent a government contribution to the Project.

192. More specific responsibilities include:

- To develop common understanding of what is needed to expedite the implementation of the project;
- To ensure that the expected results of the project are of satisfactory substantive quality and that they contribute to the achievement of the intended outcome identified in the UN One Plan. This will be discharged through the (i) approval of project work plans, TORs, reports, (ii) follow-up on the implementation of recommendations made by regular project reviews and/or external evaluations, and (iii) conducting of internal reviews, evaluations and advice on the main outputs of the project.
- To ensure that project resources, national as well as international, are effectively utilized for their intended purposes the following are required (i) verification of project budgets and payments, (ii) approval of budget revisions within the agency flexibility limit, (iii) follow-up on the implementation of recommendations made by external audits and (iv) internal audits as/if needed.
- Ensure that counterpart funds are made available by the Implementing Partner in sufficient quantities and in a timely manner to support project implementation.
- Ensure that project parties, particularly national parties (including the Implementing Partner) fully participate in project implementation, effectively collaborate in project activities and duly benefit from project results.

- Ensure that the results achieved and lessons learned by the project are properly documented, proactively disseminated to, and duly shared with, all project parties, particularly national parties.
- Provide regular updates to the Project Board.
- Establish effective communication and decision making amongst actors involved in the project.

193. UNDP's roles as project assurance are mainly to: (i) monitor the project's progress towards intended outputs; (ii) monitor that resources entrusted to UNDP are utilized appropriately; (iii) ensure national ownership, on-going stakeholder engagement and sustainability; (iv) ensure that the project's outputs contribute to intended country programme outcomes; (v) participate in the project management board; (vi) report on progress to donors and to UNDP through corporate reporting mechanisms.

PROJECT MANAGEMENT

Project management at the central level

194. **Project Management Unit (PMU)** will be established to carry out day-to-day project management and strengthen the Implementing Partner's capacity in ensuring project deliverables are both timely and achieve quality results. PMU will be housed within the Ministry of Forestry and headed by the National Project Manager (NPM) supported by the Chief Technical Adviser (CTA) and operational support personnel. The plan to achieve outputs for a given year is articulated in the Annual Work Plan (AWP), which will be drawn up by the Project Manager, with technical inputs of NPD, CTA and staff of the Ministry of Forestry.

195. **Project Manager (PM)** will lead management of the project, supported by a team of technical and operational staff housed within the Ministry of Forestry. The PM is accountable to the Ministry of Forestry and the Project Board for the quality, timeliness and effectiveness of the activities carried out, as well as for the use of funds. The PM will report to the UNDP CO in close consultation with the NPD for all of the project's substantive and administrative issues. From the strategic point of view of the project, the PM will report on a periodic basis to the Project Board. Generally, the PM will be responsible for meeting government obligations under the project, under the NIM. S/he will perform a liaison role with the Government, UNDP and other UN Agencies, NGOs and project partners, and maintain close collaboration with other donor agencies providing co-financing. Full ToR for the PM is attached in Section IV, Part III.

196. **Chief Technical Adviser (CTA)** will be internationally recruited and will be responsible for providing overall technical backstopping to the Project, S/he will render technical support to the NPD, PM, PA agency staff and other government counterparts. The CTA will coordinate the provision of the required technical inputs by various specialists, review and preparation Terms of Reference, and provision of technical support to assure the outputs of consultants and ensure other sub-contractors meet expected standards. CTA will report directly to the NPD. Full ToR for the CTA is attached in Section IV, Part III.

Project management at the site level

197. In order to ensure strong presence of the project as well as close coordination with park authorities and local stakeholders, a field coordination unit will be established for each of the three project target sites. The field coordination unit will be located within the Lore Lindu National Parks Agency and the Bogani Nani Wartabone National Park Agency. Activities in the Tangkoko Nature Reserve complex will be coordinated by the co-financing NGO Selamatkan YAKI jointly with the Agency for Natural Resource Conservation for North Sulawesi. Field coordination units will be staffed by a protected area management specialist and a community co-management specialist, working daily with seconded to the units from the respective agencies. A technical committee will be established at the target sites, including the Provincial Development Agencies, Provincial Forestry Agency, NGOs, CBOs and private businesses working in the target areas, and academics and researchers to provide technical guidance and inputs to the site level activities of the project. The technical committee will also serve as a local level coordination fora for the project.

198. In recruitment of specialists for the project, potential use of the United Nations Volunteer (UNV) scheme will be actively considered. Possible placement of UNVs will be considered for fieldwork at the village level, for technical implementation of activities and for coordination tasks between stakeholders, especially when village communities are involved.

FLOW OF FINANCIAL RESOURCES

199. Based on the approved Annual Work Plan, UNDP provides the required financial resources to the Implementing Partner to carry out project activities. The transfer of financial resources is done in accordance with the Harmonized Approach to Cash Transfer (HACT) mechanism, which identifies the following four cash transfer modalities:

(i) Direct Cash Transfers to Implementing Partners, for obligations and expenditures to be made by them in support of activities;
(ii) Direct Payments to vendors and other third parties, for obligations incurred by the Implementing Partners;
(iii) Reimbursement to Implementing Partners for obligations made and expenditure incurred by them in support of activities;
(iv) Direct Agency Implementation through which UNDP makes obligations and incurs expenditure in support of activities (Country Office Support Services – COSS).

200. As agreed between the Implementing Partner and UNDP, the project adopted a combination of the above-mentioned mechanisms for cash transfer modality. Therefore, UNDP shall also act as the Responsible Party to obtain certain goods and relevant services upon request of the Implementing Partner which will be detailed during project implementation.

201. In providing these services, UNDP will apply its rules and regulations. The Support services and conditions attached to them are described in the Country Office Support Service Agreement in Section IV of this document. Services provided by the UNDP Country Office, including those through the COSS modality, will be subject to audit by UNDP's external (the United Nations Board of Auditors) and/or internal auditors (UNDP's Office of Audit and Investigation).

202. With respect to the Government of Indonesia's reporting procedures on grant realization, UNDP shall prepare the Minutes of Handover (Berita Acara Serah Terima – BAST) of Goods and Services to be signed jointly by UNDP and the Implementing Partner's Authorized Budget Owner (Kuasa Pengguna Anggaran - KPA). This will be submitted by the Implementing Partner as an attachment of SP3HL-BJS (Authorization Letter of Revenue Recognition of Direct Grant: Goods, Services, and Securities) to the Directorate General of Debt Management (Direktorat Jenderal Pengelolaan Utang – DJPU) and the State Treasury Service Office (Kantor Pelayanan Pembendaharaan Negara – KPPN) under the Directorate General of Treasury (Direktorat Jenderal Perbendaharaan) of the Ministry of Finance. In order to secure the accuracy of BAST, UNDP will provide the MoE with data on a quarterly basis which will consist of at least:

    a. Date of handover
    b. Goods: name and price (in effective currency and Indonesian currency) per item of handed over equipment.
    c. Services: total expenditures (in effective currency and Indonesian currency).

203. The BAST will be prepared at least one month after the end of each quarter and upon availability of UNDP Combined Delivery Report (CDR). UNDP will prepare CDR based on the expenditures reports received from the project and recorded in Atlas (the UNDP corporate management system) at the end of the quarter. The CDR is the report that reflects the total expenditures and actual obligations (recorded in Atlas) of a Project during a period (quarterly and mandatory at the end of each year). The CDR constitutes the official report of expenditures and obligations of the project for a given period.

204. For the activities executed by Ministry of Forestry, it is responsible for managing the project account, and reporting to the Ministry of Finance the utilization/realization of the grants as expenditures according to the relevant government regulations on a regular basis.

PART VI: Monitoring and Evaluation Plan and Budget

MONITORING AND REPORTING[28]

205. Project monitoring and evaluation will be conducted in accordance with established UNDP and GEF procedures and will be provided by the project team and the UNDP Country Office (UNDP-CO) with support from the UNDP/GEF Regional Coordination Unit in Bangkok. The Strategic Results Framework in Section II provides performance and impact indicators for project implementation along with their corresponding means of verification. The BD-1 Tracking Tool incorporating METT forms and Financial Sustainability Scorecard (see Annex 1), Capacity Assessment Scorecard (see Annex 3) and Ecosystem Health Index (see Annex 4) will all be used as instruments to monitor progress in PA management effectiveness. The M&E plan includes: inception report, project implementation reviews, quarterly and annual review reports, and mid-term and final evaluations. The following sections outline the principal components of the Monitoring and Evaluation Plan and indicative cost estimates related to M&E activities. The project's Monitoring and Evaluation Plan will be presented and finalized in the Project's Inception Report following a collective fine-tuning of indicators, means of verification, and the full definition of project staff M&E responsibilities.

Inception Phase

206. A Project Inception Workshop will be conducted with the full project team, relevant government counterparts, co-financing partners, the UNDP-CO and representation from the UNDP-GEF Regional Coordinating Unit as appropriate. A fundamental objective of the Inception Workshop will be to assist the project team to understand and take ownership of the project's goals and objectives, as well as finalize preparation of the project's first Annual Work Plan (AWP) on the basis of the Strategic Results Framework. This will include updating of baseline situations and review of the logframe (indicators, means of verification, assumptions), imparting additional detail as needed. Baseline for all the indicators needs to be determined during the inception phase where needed. On the basis of this exercise, the AWP will be finalised with precise and measurable performance indicators, and in a manner consistent with the expected outcomes for the project. Additionally, the purpose and objective of the Inception Workshop (IW) will be to: (i) introduce project staff to the UNDP-GEF team which will support the project during its implementation, namely the CO and responsible Regional Coordinating Unit staff; (ii) detail the roles, support services and complementary responsibilities of UNDP-CO and RCU staff vis à vis the project team; (iii) provide a detailed overview of UNDP-GEF reporting and monitoring and evaluation (M&E) requirements, with particular emphasis on the Annual Project Implementation Reviews (APIRs) and related documentation, the Annual Review Report (ARR), as well as mid-term and final evaluations. Equally, the IW will provide an opportunity to inform the project team on UNDP project related budgetary planning, budget reviews, and mandatory budget re-phasing. The IW

[28] As per GEF guidelines, the project will also be using the BD 1 Management Effectiveness Tracking Tool (METT). New or additional GEF monitoring requirements will be accommodated and adhered to once they are officially launched.

will also provide an opportunity for all parties to understand their roles, functions, and responsibilities within the project's decision-making structures, including reporting and communication lines, and conflict resolution mechanisms. The Terms of Reference for project staff and decision-making structures will be discussed again, as needed, in order to clarify for all, each party's responsibilities during the project's implementation phase.

Monitoring responsibilities and events

207. A detailed schedule of project review meetings will be developed by the project management, in consultation with project implementation partners and stakeholder representatives and incorporated in the Project Inception Report. Such a schedule will include: (i) tentative time frames for Project Steering Committee Meetings and (ii) project related Monitoring and Evaluation activities. Day-to-day monitoring of implementation progress will be the responsibility of the Project Manager based on the project's Annual Work Plan and its indicators. The Project Manager will inform the UNDP-CO of any delays or difficulties faced during implementation so that the appropriate support or corrective measures can be adopted in a timely and remedial fashion. The Project Manager will fine-tune the progress and performance/impact indicators of the project in consultation with the full project team at the Inception Workshop with support from UNDP-CO and assisted by the UNDP-GEF Regional Coordinating Unit. Specific targets for the first year implementation progress indicators together with their means of verification will be developed at this Workshop. These will be used to assess whether implementation is proceeding at the intended pace and in the right direction and will form part of the Annual Work Plan. Targets and indicators for subsequent years will be defined annually as part of the internal evaluation and planning processes undertaken by the project team.

208. Measurement of impact indicators related to global biodiversity benefits will occur according to the schedules defined in the Inception Workshop, using METT and EHI scores. The measurement of these will be undertaken through subcontracts or retainers with relevant institutions. Periodic monitoring of implementation progress will be undertaken by the UNDP-CO through quarterly meetings with the Implementing Partner, or more frequently as deemed necessary. This will allow parties to take stock and to troubleshoot any problems pertaining to the project in a timely fashion to ensure smooth implementation of project activities.

209. Annual Monitoring will occur through the Project Board Meetings . This is the highest policy-level meeting of the parties directly involved in the implementation of a project. The project will be subject to Project Board Meetings at least two times a year. The first such meeting will be held within the first six months of the start of full implementation.

210. The Project Manager in consultations with UNDP-CO and UNDP-GEF RCU will prepare a UNDP/GEF PIR during the months of June-August. In addition, the Project Manager, in consultation with UNDP-CO will prepare an ARR by the end of January and submit it to PSC members at least two weeks prior to the Project Board Meeting for review and comments. The ARR will be used as one of the basic documents for discussions in the Project Board Meeting. The Project Manager will present the ARR (and if needed the PIR) to the Project Board Meeting, highlighting policy issues and recommendations for the decision of the Project Board Meeting participants. The Project Manager also informs the participants of any agreement reached by

stakeholders during the PIR/ARR preparation on how to resolve operational issues. Separate reviews of each project component may also be conducted if necessary. The Project Board has the authority to suspend disbursement if project performance benchmarks are not met. Benchmarks will be developed at the Inception Workshop, based on delivery rates, and qualitative assessments of achievements of outputs.

211. The terminal Project Board Meeting is held in the last month of project operations. The Project Manager is responsible for preparing the Terminal Report and submitting it to UNDP-CO and UNDP-GEF RCU. It shall be prepared in draft at least two months in advance of the terminal PSCM in order to allow review, and will serve as the basis for discussions in the Project Board Meeting. The terminal meeting considers the implementation of the project as a whole, paying particular attention to whether the project has achieved its stated objectives and contributed to the broader environmental objective. It decides whether any actions are still necessary, particularly in relation to sustainability of project results, and acts as a vehicle through which lessons learnt can be captured to feed into other projects under implementation or formulation.

212. UNDP Country Offices and UNDP-GEF RCU as appropriate, will conduct yearly visits to project sites based on an agreed upon schedule to be detailed in the project's Inception Report/Annual Work Plan to assess at first hand project progress. Any other member of the Project Board Meeting can also accompany these visits.

Project Reporting

213. The Project Manager in conjunction with the UNDP-GEF extended team will be responsible for the preparation and submission of the following reports that form part of the monitoring process. The first six reports are mandatory and strictly related to monitoring, while the last two have a broader function and the frequency and nature is project specific to be defined throughout implementation.

214. A Project Inception Report will be prepared immediately following the Inception Workshop. It will include a detailed Biennial Work Plan divided in quarterly time-frames detailing the activities and progress indicators that will guide implementation during the first year of the project. This Work Plan will include the dates of specific field visits, support missions from the UNDP-CO or the Regional Coordinating Unit (RCU) or consultants, as well as time-frames for meetings of the project's decision making structures. The Report will also include the detailed project budget for the first full year of implementation, prepared on the basis of the Annual Work Plan, and including any monitoring and evaluation requirements to effectively measure project performance during the targeted 12-month time-frame. The Inception Report will include a more detailed narrative on the institutional roles, responsibilities, coordinating actions and feedback mechanisms of project related partners. In addition, a section will be included on progress to date on project establishment and start-up activities and an update of any changed external conditions that may affect project implementation. When finalized, the report will be circulated to project counterparts who will be given a period of one calendar month in which to respond with comments or queries. Prior to this circulation of the IR, the UNDP Country Office and UNDP-GEF's Regional Coordinating Unit will review the document.

215. An Annual Review Report (ARR) shall be prepared by the Project Manager and shared with the Project Steering Committee. As a self-assessment by the project management, it does not require a cumbersome preparatory process. As a minimum requirement, the Annual Review Report shall consist of the Atlas standard format for the Project Progress Report (PPR) covering the whole year with updated information for each element of the PPR as well as a summary of results achieved against pre-defined annual targets at the project level. As such, it can be readily used to spur dialogue with the Project Board and partners. An ARR will be prepared on an annual basis prior to the Project Steering Committee meeting to reflect progress achieved in meeting the project's Annual Work Plan and assess performance of the project in contributing to intended outcomes through outputs and partnership work. The ARR should consist of the following sections: (i) project risks and issues; (ii) project progress against pre-defined indicators and targets and (iii) outcome performance.

216. The Project Implementation Review (PIR) is an annual monitoring process mandated by the GEF. It has become an essential management and monitoring tool for project managers and offers the main vehicle for extracting lessons from on-going projects. Once the project has been under implementation for a year, a Project Implementation Report must be completed by the CO together with the project team. The PIR should be participatorily prepared in July and discussed with the CO and the UNDP/GEF Regional Coordination Unit during August with the final submission to the UNDP/GEF Headquarters taking place in the first week of September.

217. Quarterly Progress Monitoring through UNDP ATLAS: Progress made shall be monitored in the UNDP Enhanced Results Based Management Platform. A Combined Delivery Report (CDR) summarizing all project expenditures, is mandatory and should be issued quarterly following the finalization of the quarterly. The Project Manager should send it to the Project Steering Committee for review and the Implementing Partner should certify it. The following logs should be prepared and updated: (i) The Issues Log is used to capture and track the status of all project issues throughout the implementation of the project. It will be the responsibility of the Project Manager to track, capture and assign issues, and to ensure that all project issues are appropriately addressed; (ii) the Risk Log is maintained and updated throughout the project to capture potential risks to the project and associated measures to manage risks. Risks become critical when the impact and probability are high. It will be the responsibility of the Project Manager to maintain and update the Risk Log, using Atlas; and (iii) the Lessons Learned Log is maintained throughout the project to capture insights and lessons based on good and bad experiences and behaviour. It is the responsibility of the Project Manager to maintain and update the Lessons Learned Log. Project Progress Reports (PPR) can be generated in the Executive Snapshot. Other ATLAS logs can be used to monitor issues, lessons learned etc. The use of these functions is a key indicator in the UNDP Executive Balanced Scorecard.

218. Project Terminal Report: During the last three months of the project the project team will prepare the Project Terminal Report. This comprehensive report will summarize all activities, achievements and outputs of the Project, lessons learnt, objectives met, or not achieved, structures and systems implemented, etc. and will be the definitive statement of the Project's activities during its lifetime. It will also lay out recommendations for any further steps that may need to be taken to ensure sustainability and replicability of the Project's activities.

219. Periodic Thematic Reports: As and when called for by UNDP, UNDP-GEF or the Implementing Partner, the project team will prepare Specific Thematic Reports, focusing on specific issues or areas of activity. The request for a Thematic Report will be provided to the project team in written form by UNDP and will clearly state the issue or activities that need to be reported on. These reports can be used as a form of lessons learnt exercise, specific oversight in key areas, or as troubleshooting exercises to evaluate and overcome obstacles and difficulties encountered. UNDP is requested to minimize its requests for Thematic Reports, and when such are necessary will allow reasonable timeframes for their preparation by the project team.

220. Technical Reports are detailed documents covering specific areas of analysis or scientific specializations within the overall project. As part of the Inception Report, the project team will prepare a draft Reports List, detailing the technical reports that are expected to be prepared on key areas of activity during the course of the Project, and tentative due dates. Where necessary this Reports List will be revised and updated, and included in subsequent APRs. Technical Reports may also be prepared by external consultants and should be comprehensive, specialized analyses of clearly defined areas of research within the framework of the project and its sites. These technical reports will represent, as appropriate, the project's substantive contribution to specific areas, and will be used in efforts to disseminate relevant information and best practices at local, national and international levels.

221. Project Publications such as knowledge products and compilations of lessons learned will form a key method of crystallizing and disseminating the results and achievements of the Project. These publications may be scientific or informational texts on the activities and achievements of the Project, in the form of journal articles, multimedia publications, etc. These publications can be based on Technical Reports, depending upon the relevance, scientific worth, etc. of these Reports, or may be summaries or compilations of a series of Technical Reports and other research. The project team will determine if any of the Technical Reports merit formal publication, and will also (in consultation with UNDP, the government and other relevant stakeholder groups) plan and produce these Publications in a consistent and recognizable format. Project resources will need to be defined and allocated for these activities as appropriate and in a manner commensurate with the project's budget.

INDEPENDENT EVALUATIONS, AUDITS AND FINANCIAL REPORTING

222. The project will be subjected to at least two independent external evaluations as follows: An independent Mid-Term Review will be undertaken at exactly the mid-point of the project lifetime. The Mid-Term Review will determine progress being made towards the achievement of outcomes and will identify course correction if needed. It will focus on the effectiveness, efficiency and timeliness of project implementation; will highlight issues requiring decisions and actions; and will present initial lessons learned about project design, implementation and management. Furthermore, it will review and update the ESSP report. Findings of this review will be incorporated as recommendations for enhanced implementation during the final half of the project's term. The organization, terms of reference and timing of the mid-term review will be decided after consultation between the parties to the project document. The Terms of Reference

for this Mid-term review will be prepared by the UNDP CO based on guidance from the UNDP-GEF Regional Coordinating Unit.

223. An independent Final Evaluation will take place three months prior to the terminal Project Steering Committee meeting, and will focus on the same issues as the mid-term evaluation. The final evaluation will also look at impact and sustainability of results, including the contribution to capacity development and the achievement of global environmental goals. The Final Evaluation should also provide recommendations for follow-up activities. The Terms of Reference for this evaluation will be prepared by the UNDP CO based on guidance from the UNDP-GEF Regional Coordinating Unit.

LEARNING AND KNOWLEDGE SHARING

224. The project will develop a communications strategy in the first year, which will be updated annually and implementation supported by a communications, education and awareness specialist. This will include capturing and disseminating lessons learned, for review at Project Board meetings in order to inform the direction and management of the project, and will be shared with project stakeholders as appropriate. A full colour popular style project completion report will document the project's stories, achievements and lessons learned at the end of the project.

225. Results from the project will also be disseminated within and beyond the project intervention zone through a number of existing information sharing networks and forums. In addition, the project will participate, as relevant and appropriate, in UNDP/GEF sponsored networks, organized for Senior Personnel working on projects that share common characteristics. UNDP/GEF Regional Unit has established an electronic platform for sharing lessons between the project coordinators. The project will identify and participate, as relevant and appropriate, in scientific, policy-based and/or any other networks, which may be of benefit to project implementation though lessons learned. The project will identify, analyze, and share lessons learned that might be beneficial in the design and implementation of similar future projects. Identifying and analyzing lessons learned is an on- going process, and the need to communicate such lessons as one of the project's central contributions is a requirement to be delivered not less frequently than once every 12 months. UNDP/GEF shall provide a format and assist the project team in categorizing, documenting and reporting on lessons learned.

COMMUNICATIONS AND VISIBILITY REQUIREMENTS

226. Full compliance is required with UNDP's Branding Guidelines and guidance on the use of the UNDP logo. These can be accessed at http://web.undp.org/comtoolkit/reaching-the-outside-world/outside-world-core-concepts-visual.shtml. Full compliance is also required with the GEF Branding Guidelines and guidance on the use of the GEF logo. These can be accessed at http://www.thegef.org/gef/GEF_logo. The UNDP and GEF logos should be the same size. When both logs appear on a publication, the UNDP logo should be on the left top corner and the GEF logo on the right top corner. Further details are available from the UNDP-GEF team based in the region.

227. Full compliance is also required with the GEF's Communication and Visibility Guidelines (the "GEF Guidelines"). The GEF Guidelines can be accessed at: http://www.thegef.org/gef/sites/thegef.org/files/documents/C.40.08_Branding_the_GEF%20final_0.pdf

228. Amongst other things, the GEF Guidelines describe when and how the GEF logo needs to be used in the case of project publications, vehicles, supplies and other project equipment. The GEF Guidelines also describe other GEF promotional requirements regarding press releases, press conferences, press visits, visits by Government officials, productions and other promotional items.

229. Where other agencies and project partners have provided support through co-financing, their branding policies and requirements should be similarly applied.

AUDIT CLAUSE

230. The Government will provide the Resident Representative with certified periodic financial statements, and with an annual audit of the financial statements relating to the status of UNDP (including GEF) funds according to the established procedures set out in the Programming and Finance manuals. The Audit will be conducted according to UNDP financial regulations, rules and audit policies by the legally recognized auditor of the Government, or by a commercial auditor engaged by the Government.

Table 16: M&E Activities, Responsibilities, Budget and Time Frame

Type of M&E activity	Responsible Parties	Budget (US$)	Time frame
Inception Workshop (IW)	Project Manager Ministry of Forestry and Water Affairs, General Directorate of Forestry, UNDP, UNDP-GEF	30,000 (based on experience of UNDP CO)	Within first two months of project start up
Inception Report	Project Team Project Board, UNDP CO	None	Immediately following IW
Measurement of Means of Verification for Project Results	Project Manager will oversee the hiring of specific studies and institutions, and delegate responsibilities to relevant team members	To be finalized in Inception Phase and Workshop. . Indicative cost: 20,000.	Start, mid and end of project
Annual Measurement of Means of Verification for Project Progress and Performance	Oversight by Project GEF Technical Advisor, Project Manager and M&E local expert Measurements by Forest Enterprise Directors	To be determined as part of the Annual Work Plan's preparation. Cost to be covered by field survey budget.	Annually prior to APR/PIR and to the definition of annual work plans
AMR/PIR	Project Team Project Board UNDP-RTA UNDP-GEF	None	Annually
QMR	Project Team (including M&E local expert)	None	Quarterly
Steering Committee meetings	Project Manager	None	Following IW and annually thereafter.
Technical and periodic status reports	Project team Hired consultants as needed	15,000	TBD by Project team and UNDP-CO

Type of M&E activity	Responsible Parties	Budget (US$)	Time frame
Mid-term External Review including ESSP review and update	Project team Project Board UNDP-GEF RCU External Consultants (evaluation team)	40,000	At the mid-point of project implementation.
Final External Evaluation	Project team, Project Board, UNDP-GEF RCU External Consultants (evaluation team)	40,000	At the end of project implementation
Terminal Report	Project team Project Board External Consultant	None	At least one month before the end of the project
Audit	UNDP-CO Project team	10,000	Yearly
Visits to field sites (UNDP staff travel costs to be charged to IA fees)	UNDP-CO, UNDP-GEF RCU Government representatives	None	Yearly average one visit per year
TOTAL (indicative) COST (Excluding project and UNDP staff time costs)		155,000	

PART VII: Legal Context

231. This document together with the CPAP signed by the Government and UNDP which is incorporated by reference constitute together a Project Document.

a) The Revised Basic Arrangement for Technical Assistance signed 29 October 1954 between the United Nations, the International Labour Organisation, the Food and Agriculture Organisation of the United Nations, the United Nations Educational, Scientific and Cultural Organisation, the International Civil Aviation Organisation, and the World Health Organisation and the Government of the Republic of Indonesia

b) The Standard Agreement on Operational Assistance signed 12 June 1969 between the United Nations, the International Labour Organisation, the Food and Agriculture Organisation of the United Nations, the United Nations Educational, Scientific and Cultural Organisation, the International Civil Aviation Organisation, the World Health Organisation, the International Telecommunication Union, the World Meteorological Organisation, the International Atomic Energy Agency, the Universal Postal Union, the Inter-Governmental Maritime Consultative Organisation and the United Nations Industrial Development Organisation and the Government of the Republic of Indonesia

c) The Agreement signed 7 October 1960 between the United Nations Special Fund and the Government of the Republic of Indonesia, and

d) all CPAP provisions apply to this document.

232. Additionally, this document together with the CPAP signed by the Government and UNDP which is incorporated by reference constitute together the instrument envisaged in the Supplemental Provisions to the Project Document, attached hereto as Annex 7.

233. Consistent with the above Supplemental Provisions, the responsibility for the safety and security of the implementing partner and its personnel and property, and of UNDP's property in the implementing partner's custody, rests with the implementing partner.

234. The implementing partner shall:

a) put in place an appropriate security plan and maintain the security plan, taking into account the security situation in the country where the project is being carried out;

b) assume all risks and liabilities related to the implementing partner's security, and the full implementation of the security plan.

235. UNDP reserves the right to verify whether such a plan is in place, and to suggest modifications to the plan when necessary. Failure to maintain and implement an appropriate security plan as required hereunder shall be deemed a breach of this agreement.

236. The implementing partner agrees to undertake all reasonable efforts to ensure that none of the UNDP funds received pursuant to the Project Document are used to provide support to individuals or entities associated with terrorism and that the recipients of any amounts provided by UNDP hereunder do not appear on the list maintained by the Security Council Committee established pursuant to resolution 1267 (1999). The list can be accessed via http://www.un.org/Docs/sc/committees/1267/1267ListEng.htm. This provision must be included in all sub-contracts or sub-agreements entered into under this Project Document. "

237. All activities herein shall comply with UNDP National Execution (NEX) Guidelines. The following types of revisions may be made to the Project Document, with the signature of the UNDP only, provided it is assured that the other parties involved in the Project have no objections to the proposed changes: (1) Revisions which do not involve significant changes to the immediate objectives, outputs or activities of the Project, but are caused by the rearrangement of inputs agreed to or by cost increases due to inflation, etc.; and (2) Mandatory annual revisions, which re-phase the delivery of Project inputs or involve increased experts or other costs due to inflation or that take into account expenditures flexibility

238. The UNDP Resident Representative in Jakarta is authorized to effect in writing the following types of revision to this Project Document, provided that he/she has verified the agreement thereto by the UNDP-EEG Unit and is assured that the other signatories to the Project Document have no objection to the proposed changes:

a) Revision of, or addition to, any of the annexes to the Project Document;

b) Revisions which do not involve significant changes in the immediate objectives, outputs or activities of the project, but are caused by the rearrangement of the inputs already agreed to or by cost increases due to inflation;

c) Mandatory annual revisions which re-phase the delivery of agreed project inputs or increased expert or other costs due to inflation or that take into account agency expenditure flexibility; and

d) Inclusion of additional annexes and attachments only as set out here in this Project Document.