



# Technical Assistance Report

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Project Number: 44413  
Capacity Development Technical Assistance (CDTA)  
February 2013

## Republic of Indonesia: Sustainable Forest and Biodiversity Management in Borneo (Cofinanced by the Climate Change Fund, the Regional Cooperation and Integration Fund, and the Global Environment Facility)

## CURRENCY EQUIVALENTS

(as of 18 January 2013)

Currency Unit	–	rupiah (Rp)
Rp1.00	=	\$0.000104
\$1.00	=	Rp9,650

## ABBREVIATIONS

ADB	–	Asian Development Bank
DESCA	–	Directorate of Environmental Services and Conservation Areas
GEF	–	Global Environment Facility
HOB	–	Heart of Borneo
NSPA	–	National Strategic Plan of Action
PES	–	payment for ecosystem services
PMC	–	project management consultant
PMO	–	project management office
REDD	–	reducing emissions from deforestation and forest degradation

## TECHNICAL ASSISTANCE CLASSIFICATION

<b>Type</b>	–	Capacity development technical assistance (CDTA)
<b>Targeting classification</b>	–	Targeted intervention—MDGs
<b>Sector (subsector)</b>	–	Agriculture and natural resources (forestry)
<b>Themes (subthemes)</b>	–	<b>Environmental sustainability</b> (natural resources conservation), capacity development (institutional development)
<b>Climate change</b>	–	Climate change adaptation and climate change mitigation
<b>Location (impact)</b>	–	Rural (medium), national (high), regional (medium)
<b>Partnerships</b>	–	Climate Change Fund, Regional Cooperation and Integration Fund, and Global Environment Facility

## NOTE

In this report, "\$" refers to US dollars.

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<b>Director General</b>	K. Senga, Southeast Asia Department (SERD)
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## I. INTRODUCTION

1. The Heart of Borneo (HOB), covering about 22 million hectares and comprising approximately one-third of the island of Borneo,<sup>1</sup> is among the world's top priority areas for conservation.<sup>2</sup> Its large carbon sequestration and storage capacity makes it an important component of the fast shrinking band of equatorial forests that function as the "lungs of the earth." The ecosystem services provided by the HOB have significant impact on the lives of about 12 million local and indigenous peoples, including over 200 Dayak groups,<sup>3</sup> who depend heavily on its resources for their subsistence. The Indonesian Borneo ecosystem services contribute about 11% to the country's gross domestic product.<sup>4</sup>

2. As the HOB is one of a few areas on earth where large-scale conservation can still be implemented, the Government of Indonesia, through the Ministry of Forestry, requested Asian Development Bank (ADB) technical assistance (TA) to strengthen the capacity of public and private sector institutions in sustainable biodiversity and forest management in the HOB. The TA responds to this request.<sup>5</sup> It will address the need to conserve the remaining forests of the HOB, which is a global and regional concern, and will support government agencies in fulfilling the objectives of the HOB National Strategic Plan of Action (NSPA) (2009–2013).<sup>6</sup> With cofinancing from the Global Environment Facility (GEF), the TA aims to improve the management of natural resources in the HOB Indonesia by providing technical and operations support for (i) strengthening policies and institutions for sustainable forest and biodiversity management, (ii) strengthening government capacity to develop sustainable local community livelihood opportunities and sustainable financing schemes, including piloting payment for ecosystem services (PES) financing schemes for forest and biodiversity management; and (iii) improving land use and forestry practices. The design and monitoring framework is in Appendix 1.

## II. ISSUES

3. **Weaknesses in natural resource governance.** Indonesia has numerous national and local laws governing the use of its natural resources. However conflicting provisions, perverse incentives for unsustainable use, ambiguity in procedures and area of responsibility, and incongruence with customary laws mean that national agencies and local units are unable to effectively carry out natural resource management responsibilities, especially under its current decentralized management regime. The result is an actual open access regime in many areas with critical resource stocks. During 1997–1998, more than half of the timber harvested in Kalimantan was illegal (footnote 2). Each year, about 1 million cubic meters of timber are smuggled from Kalimantan to Sabah. The revenue losses incurred in the 1990s due to smuggling are reckoned to be over \$580 million.<sup>7</sup> In addition to foregone revenue from illegal activities, the area is left with denuded and destroyed forests, threatened biodiversity, lost livelihood opportunities, and

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<sup>1</sup> The territory of Borneo is divided among three countries: (i) Brunei Darussalam in the northwest covering about 0.3 million hectares; (ii) Sarawak, Malaysia covering about 3.4 million hectares along the northwest coast and Sabah, Malaysia covering about 5.8 million hectares along the northeastern tip of Borneo; and (iii) Indonesia for Kalimantan Island covering about 12.5 million hectares.

<sup>2</sup> WWF. 2005. *Borneo: Treasure Island at Risk*. Frankfurt am Main: WWF Germany. <http://assets.panda.org/downloads/treasureislandatrisk.pdf>

<sup>3</sup> Indigenous peoples of Borneo.

<sup>4</sup> B. Chameidis. 2010. *The Invisibility of Nature: Green on Green*. <http://www.nicholas.duke.edu/thegreengrok/economics>

<sup>5</sup> The TA first appeared in the business opportunities section of ADB's website on 23 February 2011.

<sup>6</sup> Heart of Borneo–National Working Group. 2009. *National Strategic Plan of Action: Heart of Borneo*. [http://www.hobgreeneconomy.org/downloads/Indonesia\\_strategic\\_plan\\_of\\_action\\_heartofborneo.pdf](http://www.hobgreeneconomy.org/downloads/Indonesia_strategic_plan_of_action_heartofborneo.pdf). This national document forms the basis for inclusion of Indonesia's priorities in the Trilateral Strategic Plan of Action that is under development by the Governments of Indonesia, Malaysia and Brunei.

<sup>7</sup> Environmental Investigation Agency and Telapak. 2001. *Timber Trafficking: Illegal Logging in Indonesia Southeast Asia and International Consumption of Illegally Sourced Timber*. September.

higher cost of forest rehabilitation. The government needs to enhance policies and capacity to establish an enabling environment for more effective and sustainable resource utilization and management of the HOB.

4. **Deficiencies in land use and spatial planning.** Local units involved in HOB management prepare land use and spatial plans based on limited geographic information on the state of natural ecosystems in the HOB and key conservation management indicators. This creates problems for determining the extent to which these plans support the objectives of the HOB NSPA and relevant national plans, including the Long-Term Forestry Development Plan and the National Strategy on Reducing Emissions from Deforestation and Forest Degradation (REDD) and REDD+. <sup>8</sup> Implementation of these plans has also been less than effective due to inadequate national and local logistical, financial, and technical capacity. The completion and implementation of land use and spatial plans, and the establishment of permanent forest estates based on these plans are considered as requisite starting points in enhancing HOB management.

5. **Inadequate management, funding, and limited expanse of conservation areas.** National parks and other areas set aside for conservation are vital for maintaining the ecological integrity of the HOB and serve as the cornerstone of any protection effort. However, areas established as national parks are insufficient—comprising only about 20% of the Indonesian HOB. They all have inadequate funding and serious management constraints, which compromise their effectiveness. The management constraints include lack of sustainable financing, technical capability, management systems, and logistics.

6. **Insufficient incentives for sustainable resource management.** Ecosystem goods and services are exploited for free or with minimal payment—insufficient to finance the management of the services. The absence of policies to facilitate internalization of economic values of ecosystem services and appropriate incentives for sustainable land-use practices in the HOB has led to overexploitation, low investment in value-added processes, and high environmental externalities, depriving the government of much needed funds for law enforcement and natural resource management operations. Appropriate economic instruments, therefore, should be developed and implemented to generate funds for improved governance and sustainable forest management and conservation.

7. The TA aims to address these persistent issues and problems that contribute to the degradation of forest resources within the Indonesian HOB, consistent with the country and sector strategy of the government for sustainable biodiversity and forest management. The TA objective is consistent with the Indonesian Ministry of Forestry Strategic Plan (2010–2014), the National Action Plan for Greenhouse Gas Emission, National Draft Strategy for REDD (Readiness Phase, 2009–2012)<sup>9</sup> and the HOB NSPA. The TA incorporates lessons learned from ADB's experience developing a national REDD+ program in Indonesia<sup>10</sup> as part of the Forest Investment Program (FIP).<sup>11</sup> Furthermore, the HOB initiative is one of the strategic pillars for subregional cooperation under the Brunei Darussalam–Indonesia–Malaysia–the Philippines East ASEAN Growth Area<sup>12</sup>

<sup>8</sup> REDD+ goes beyond deforestation and forest degradation, and includes the role of conservation, sustainable management of forests, and enhancement of forest carbon stocks.

<sup>9</sup> These plans reflect Indonesia's priorities for forest management, which include combating illegal logging, rehabilitation, conservation of forest and securing forest areas, and reduction of greenhouse gas emissions.

<sup>10</sup> Some lessons learned include (i) the importance of working with decentralized governance structures such as forest management units, to improve their capacity and skills for community based forest management; (ii) engaging the private sector as an important change agent to protect the HOB, and (iii) strengthening knowledge transfer between districts, provinces, and communities on forest management, particularly on spatial planning.

<sup>11</sup> The TA design complements Indonesia's Forest Investment Program (FIP), endorsed by the FIP subcommittee in November 2012 (<https://www.climateinvestmentfunds.org/cif/node/10699>) and dovetails with a proposed ADB grant (*Sustainable Forest and Biodiversity Management in Borneo*, funded by the Japan Fund for Poverty Reduction).

<sup>12</sup> The United Nations Development Programme is working closely with the Government of Malaysia in designing and implementing the Malaysia portion of the HOB to complement ADB's focus on the Indonesian part of HOB.

and the Association of Southeast Asian Nations.<sup>13</sup> It supports ADB's commitment to environmentally sustainable growth under Strategy 2020<sup>14</sup> and is aligned with ADB's Regional Cooperation and Integration Strategy,<sup>15</sup> the fourth pillar of which is cooperation in regional public goods. ADB's country strategy emphasizes strengthening environmental and natural resource management in Indonesia. The TA is included in the country operations business plan, 2013–2014.<sup>16</sup>

### III. THE PROPOSED TECHNICAL ASSISTANCE

#### A. Impact and Outcome

8. The impact will be the sustainable use of forest resources in the HOB area in Indonesia, which will be measured by the increase in forest cover, carbon sequestration capacity, and gross domestic product of villages in protected areas. The outcome will be the improved management of natural resources and biodiversity in four districts<sup>17</sup> in the HOB area in Indonesia as reflected by the reduction of forest loss and incidence of wildlife and biodiversity poaching.

#### B. Methodology and Key Activities

9. The TA adopts a programmatic approach. The implementation plan incorporates strategies for (i) promoting participation among multisector and multilevel stakeholders to strengthen commitment and ownership, (ii) streamlining efforts and interventions to avoid overlaps and consolidating support for field activities to maximize impacts on intended beneficiaries, and (iii) developing a coordinated and synergistic response to the management of HOB forest ecosystems based on an integrated landscape-based management approach. The TA will have four main outputs.

10. **Output 1: Policy and institutions for sustainable forest and biodiversity management strengthened.**<sup>18</sup> The TA will improve the management capacity of public and private institutions that are working in the HOB, particularly in implementing district HOB action plans and relevant forestry management plans. Capacity building interventions will be designed based on identified institutional weaknesses and strengths to carry out a policy reform agenda for forest resource management in line with the country's National Strategy on REDD, Ministry of Forestry Strategic Plan of Action (2010–2014), and the HOB NSPA. Regional (trilateral) interventions will be implemented in line with the evolving HOB initiative by focusing on strategies for strengthening tri-country cooperation and coordination through tri-country workshops, regular dialogue, and regional conferences. The TA will use strategic communications and knowledge products to engage key stakeholders (local governments, private sector and communities) to nurture the expertise required to apply financial models and design business investments based on ecosystem values.

11. The TA will strengthen the existing collaborative management scheme in Kayan Mentarang National Park and in the districts of Malinau and Nunukan in East Kalimantan, which encompass the national park, by (i) facilitating the approval of the park's boundary and its field demarcation; (ii) finalizing delineation of zones in the 11 territories in the park, including developing the buffer zone framework; (iii) conducting capacity building interventions for increasing knowledge and skills of local stakeholders by establishing village conservation

<sup>13</sup> Support to the HOB consistent with the emphasis on promoting sustainable forest management under the "environmental sustainability" theme outlined in the ASEAN Socio-Cultural Community Blueprint of the Roadmap for ASEAN Community, 2009–2015.

<sup>14</sup> ADB. 2008. *Strategy 2020: The Long-Term Strategic Framework of the Asian Development Bank, 2008–2020*. Manila.

<sup>15</sup> ADB. 2006. *Regional Cooperation and Integration Strategy*. Manila.

<sup>16</sup> ADB. 2012. *Country Operations Business Plan: Indonesia, 2013–2014*. Manila.

<sup>17</sup> Kapuas Hulu and Melawi districts in West Kalimantan, and Malinau and Nunukan districts in East Kalimantan.

<sup>18</sup> The GEF will provide about \$1.330 million to fund TA interventions under output 1.

models; (iv) implementing participatory park enforcement and monitoring systems; and (v) developing strategies to address transborder forest resource management issues.

12. **Output 2: Land use and forestry practices improved.**<sup>19</sup> The TA will strengthen the existing land use planning system to effectively reduce forest conversion and degradation. It will establish baseline estimates on greenhouse gas emissions for the HOB and strengthen capacity on REDD+ preparedness, particularly of local communities. The TA will establish four REDD+ demonstration sites.<sup>20</sup> From these demonstration areas, two pilot sites will be selected to undertake key activities, including (i) developing the REDD+ collaborative plan; (ii) defining the reduction emission level; and (iii) formulating a monitoring, reporting, and verification system to monitor the impact of interventions and benefit sharing. Gender analysis will be conducted and social safeguard requirements will be integrated to promote active community participation in the implementation of REDD+ pilot projects. The REDD+ demonstration activities will be linked and/or integrated into the carbon markets or other forms of voluntary REDD payment schemes before project completion. The TA will also identify investments for possible financing under the Forest Investment Program, and may include replication of pilot initiatives in other sites, expansion of geographic coverage, or introduction of innovations to enhance REDD+ impacts.<sup>21</sup>

13. **Output 3: Potential PES and sustainable financing schemes for forest and biodiversity management identified and developed.**<sup>22</sup> The TA will identify potential sustainable financing and PES schemes to help sustain the implementation of protection, conservation, and development activities in the HOB, emphasizing the optimum benefits to local stakeholders. In-depth supply chain studies will be undertaken of four industries (e.g., mining, palm oil, rubber, and tourism) that are expanding on a large scale with increasingly adverse impacts on the integrity of HOB forest resources. The studies will provide the basis for participatory design and pilot testing of PES mechanisms in two sites and the generation of revenues for environmental service providers. The piloting of PES schemes will be implemented in the two project sites (e.g., Malinau and Nunukan districts in East Kalimantan and Melawi and Kapuas Hulu districts in West Kalimantan). Lessons and best practices will be formulated into a sustainable financing operations manual for application in other districts.

14. **Output 4: Project management services delivered.**<sup>23</sup> The Directorate of Environmental Services and Conservation Areas (DESCA) of the Ministry of Forestry will serve as the executing agency for the TA. It will establish a project management office (PMO) in Bogor and TA implementation units at the district level to coordinate, supervise, and manage activities. ADB will engage a project management consultant (PMC) firm to implement and manage the TA, in coordination with the PMO. ADB will conduct in-country clinics to strengthen DESCA capacity for procurement and financial aspects. A monitoring, reporting, and verification system will be installed to monitor and evaluate the TA impacts. The TA will provide guidance in harmonizing the systems for carbon accounting and ecosystem valuation across sectors and agencies and establish provincial, district, and community roles in the system.

### C. Cost and Financing

15. The TA is estimated to cost \$4,477,273 equivalent, of which (i) \$1,250,000 will be financed on a grant basis by the Climate Change Fund,<sup>24</sup> (ii) \$700,000 will be financed on a

<sup>19</sup> The Climate Change Fund will provide about \$1.125 million to fund TA interventions under output 2.

<sup>20</sup> Two in Kayan Mentarang National Park and one each in the Melawi and Kapuas Hulu districts in West Kalimantan.

<sup>21</sup> These will be based on demonstrated feasibility and degree of contribution to biodiversity conservation, enhancement of carbon absorption capacity, household income generation, and improved community welfare.

<sup>22</sup> The GEF will provide about \$0.947 million to fund TA interventions under output 3.

<sup>23</sup> Project management costs of about \$1.075 million will be funded by the GEF (about \$0.250 million), the Climate Change Fund (about \$0.125 million), and the Regional Cooperation and Integration Fund (about \$0.70 million).

<sup>24</sup> Established by ADB.

grant basis by the Regional Cooperation and Integration Fund (footnote 24); and (iii) \$2,527,273 will be financed on a grant basis by the GEF, and administered by ADB. The government will provide counterpart support in the form of office accommodation, transport, remuneration, per diem for counterpart staff, and other in-kind contributions. Appendix 2 provides details of the cost estimates and financing plan.

#### D. Implementation Arrangements

16. **Executing and implementing agencies.** DESCA will serve as the executing agency and the location of the PMO. Three project implementation units will be established at the following locations: (i) Kapuas Hulu, West Kalimantan; (ii) Melawi District, West Kalimantan; and (iii) Malinau and Nunukan, East Kalimantan to coordinate, supervise, and manage project activities in the four districts.<sup>25</sup> Authority will be delegated by the executing agency to the Ministry of Forestry conservation offices or national park offices to manage field activities as well as coordinate with HOB working groups at the provincial and district levels. The PMO may also engage universities, nongovernment organizations, private institutions, and/or companies to implement specific studies or activities. TA implementation is targeted from September 2013 to August 2016.

17. **Project management.** The PMO will comprise counterpart government professional staff, support staff services, and consultants deployed as part of the PMC. The PMC will assist the PMO in administering, managing, and supervising TA activities, and in providing technical direction for detailed TA planning and implementation. The PMC will also assist PMO in recruiting individual consultants and/or institutions. The PMO will establish links with the HOB National Working Group and liaise with relevant ADB units and/or offices. It will coordinate, manage, supervise, and implement TA activities through relevant government agencies in each of the four districts.

18. **Consulting services.** The TA will require international (39 person-months) and national (108 person-months) technical and management consulting services. ADB will recruit the consultants (through an international consulting firm that will serve as the PMC) using quality- and cost-based selection (80:20) in accordance with the Guidelines on the Use of Consultants (2010, as amended from time to time). Consultants will be engaged following a semi-delegated technical assistance in which ADB will be charged with consultant recruitment on behalf of the PMO and in accordance with the Guidelines on the Use of Consultants and other arrangements satisfactory to ADB for the hiring of consultants. All procurement and disbursements will follow ADB Procurement Guidelines (2010, as amended from time to time) and the *Technical Assistance Disbursement Handbook* (2010, as amended from time to time).<sup>26</sup> The outline terms of reference of the consultants are presented in Appendix 3, and the detailed terms of reference of the consultants are provided in a supplementary appendix.<sup>27</sup>

#### IV. THE PRESIDENT'S RECOMMENDATION

19. The President recommends that the Board approve (i) ADB administering a portion of technical assistance not exceeding the equivalent of \$2,527,273 to be financed on a grant basis by the Global Environment Facility, and (ii) ADB providing the balance not exceeding the equivalent of \$1,950,000 on a grant basis, to the Government of Indonesia for Sustainable Forest and Biodiversity Management in Borneo.

<sup>25</sup> The project implementation unit in East Kalimantan will be shared by Malinau and Nunukan districts. The location of the project implementation unit office will be determined during TA inception.

<sup>26</sup> Procured equipment will be handed over to the PMO after TA completion.

<sup>27</sup> Available on request.

### DESIGN AND MONITORING FRAMEWORK

Design Summary	Performance Targets and Indicators with Baselines <sup>1</sup>	Data Sources and Reporting Mechanisms	Assumptions and Risks
<p><b>Impact</b></p> <p>Sustainable use of forest resources in the HOB Indonesia</p>	<p><b>Compared to 2013 baseline by 2022:</b></p> <p>5% increase in forest cover</p> <p>14% increase in carbon sequestration capacity</p> <p>1.2% increase in the gross domestic product of villages within protected areas</p>	<p>Aerial photos and/or satellite images from the Ministry of Forestry</p> <p>National, provincial, and district reports</p> <p>Land use, land-use change, and forestry tracking tool reports</p> <p>National, provincial, and district census; and statistics reports and publications</p>	<p><b>Assumptions</b></p> <p>The Government of Indonesia and partner institutions remain committed to implementing the HOB National Strategic Plan of Action.</p> <p><b>Risk</b></p> <p>The government changes priority thrusts and programs.</p>
<p><b>Outcome</b></p> <p>Improved management of forest resources and biodiversity in four districts in HOB Indonesia</p>	<p><b>Compared to 2013 baseline by 2016:</b></p> <p>2% decrease in forest loss</p> <p>5% reduction in incidence of wildlife and biodiversity poaching (flagship species: rhinoceros, orangutan, and pygmy elephant)</p>	<p>GEF biodiversity tracking tools report</p> <p>Provincial and district agency reports on the status of forestry</p> <p>Consultant reports</p> <p>GEF biodiversity tracking tools reports</p> <p>Provincial and district agency reports on status of biodiversity</p> <p>Consultant reports</p>	<p><b>Assumptions</b></p> <p>Forest protection and biodiversity conservation programs and activities by national and local governments are strengthened and fully implemented.</p> <p><b>Risks</b></p> <p>Concerned private sector and local stakeholders comply poorly and/or do not adopt forestry and biodiversity policies and programs.</p>
<p><b>Outputs</b></p> <p>1. Policies and institutions for sustainable forest and biodiversity management strengthened</p>	<p>Draft national policy and institutional reform agenda for forest resource and protected area management enacted</p> <p>6% increase in effective area of habitat of flagship species in Kayan Mentarang National Park (compared to 2013 baseline by 2016)</p> <p>Four (one each per district) participatory patrol units established in the four project districts</p>	<p>Provincial and district agency reports</p> <p>GEF-ADB review and evaluation reports</p> <p>Consultant reports</p> <p>GEF-ADB review and evaluation reports and biodiversity tracking tools</p> <p>Consultant reports</p> <p>Provincial and district agency reports</p> <p>Consultant reports</p>	<p><b>Assumptions</b></p> <p>The government translates lessons and best practices derived from REDD+ demonstration sites into relevant policies and institutional capability programs.</p> <p><b>Risks</b></p> <p>Irrelevant policies and institutional strengthening programs are formulated due to political intervention.</p>

<sup>1</sup> Baseline and site-specific information on performance indicators will be collected by the consultants within the first 3 months of the launch of the technical assistance.

Design Summary	Performance Targets and Indicators with Baselines <sup>1</sup>	Data Sources and Reporting Mechanisms	Assumptions and Risks
2. Land use and forestry practices improved	<p>Four REDD+ demonstration projects on climate change mitigation showcased in Kayan Mentarang National Park (two sites) and one each in Melawi and Kapuas Hulu districts</p> <p>3% reduction in illegal logging activities (compared to 2013 baseline by 2016)</p>	<p>Provincial and district agency reports</p> <p>GEF-ADB review and evaluation reports</p> <p>Consultant reports</p> <p>GEF-ADB review and evaluation reports</p> <p>GEF land use, land-use change, and forestry tracking tool</p> <p>Consultant reports</p>	<p><b>Assumptions</b> Local government, park management authorities, and local communities are willing to engage in the implementation of REDD+ demonstration projects.</p> <p><b>Risks</b> Support from local communities and local and district government offices is inadequate.</p>
3. Potential PES and sustainable financing schemes for forest and biodiversity management identified and developed	<p>Four business case scenarios developed supporting implementation of two PES financing mechanisms</p> <p>Sustainable financing manual developed to support national and ecoregion PES expansion</p> <p>5% increase in income of local project cooperators (environmental service providers), where at least 30% are women (compared to 2013 baseline by 2016)</p>	<p>Provincial and district agency reports</p> <p>GEF-ADB review and evaluation reports</p> <p>Consultant reports</p> <p>PES manual</p> <p>Provincial and district agency reports</p> <p>GEF-ADB review and evaluation reports</p> <p>Consultant reports</p>	<p><b>Assumptions</b> The environmental service buyers and sellers in the PES schemes remain active during the entire pilot-testing period.</p> <p><b>Risks</b> Private sector and local communities are unwilling to participate in the TA.</p>
4. Project management services delivered	<p>Implementation of TA activities and corresponding disbursement and utilization of TA funds are as programmed for 2013–2016</p> <p>One monitoring, reporting, and verification system deployed for the HOB Indonesia</p> <p>Two knowledge products (one each for REDD+ preparedness and PES schemes) disseminated through national, regional, and global knowledge networks</p>	<p>Provincial and district agency reports</p> <p>GEF-ADB review and evaluation reports</p> <p>Consultant reports</p>	<p><b>Assumptions</b> The government provides counterpart technical staff.</p> <p><b>Risks</b> Counterpart technical staff turnover quickly due to resignation, promotion, or assignment to other government and/or private offices.</p>

Activities with Milestones	Inputs																										
<b>1. Output 1: Strengthened policy and institutions for sustainable forest and biodiversity management</b>	<b>Climate Change Fund and Regional Cooperation and Integration Fund: \$1.950 million</b>																										
1.1 Formulate policy and institutional reform agenda (months 6–36) 1.2 Conduct at least one tri-country roundtable dialogue with Brunei Darussalam, Indonesia, and Malaysia each year (months 6–30) 1.3 Conduct a training program and follow-up learning activities (months 6–30) 1.4 Support implementation of the Kayan Mentarang National Park management plan (months 6–36) 1.5 Improve the mechanisms and procedures to strengthen local cooperation and coordination in support of the HOB regional program (months 6–36)	<table border="1"> <thead> <tr> <th data-bbox="784 310 1161 342">Item</th> <th data-bbox="1161 310 1435 342">Amount (\$'000)</th> </tr> </thead> <tbody> <tr> <td data-bbox="784 342 1161 373">Consultants</td> <td data-bbox="1161 342 1435 373"></td> </tr> <tr> <td data-bbox="784 373 1161 405">  International</td> <td data-bbox="1161 373 1435 405">566.80</td> </tr> <tr> <td data-bbox="784 405 1161 436">  National</td> <td data-bbox="1161 405 1435 436">512.70</td> </tr> <tr> <td data-bbox="784 436 1161 468">  International and local travel</td> <td data-bbox="1161 436 1435 468">68.50</td> </tr> <tr> <td data-bbox="784 468 1161 499">  Reports and communication</td> <td data-bbox="1161 468 1435 499">78.00</td> </tr> <tr> <td data-bbox="784 499 1161 531">Supplies and materials</td> <td data-bbox="1161 499 1435 531">17.03</td> </tr> <tr> <td data-bbox="784 531 1161 562">Equipment</td> <td data-bbox="1161 531 1435 562">96.50</td> </tr> <tr> <td data-bbox="784 562 1161 594">Training, seminars, and conferences</td> <td data-bbox="1161 562 1435 594">20.00</td> </tr> <tr> <td data-bbox="784 594 1161 625">Surveys</td> <td data-bbox="1161 594 1435 625">90.30</td> </tr> <tr> <td data-bbox="784 625 1161 657">Miscellaneous administrative and support costs</td> <td data-bbox="1161 625 1435 657">398.79</td> </tr> <tr> <td data-bbox="784 657 1161 688">Representative for contract negotiations</td> <td data-bbox="1161 657 1435 688">6.00</td> </tr> <tr> <td data-bbox="784 688 1161 720">Contingencies</td> <td data-bbox="1161 688 1435 720">95.38</td> </tr> </tbody> </table>	Item	Amount (\$'000)	Consultants		International	566.80	National	512.70	International and local travel	68.50	Reports and communication	78.00	Supplies and materials	17.03	Equipment	96.50	Training, seminars, and conferences	20.00	Surveys	90.30	Miscellaneous administrative and support costs	398.79	Representative for contract negotiations	6.00	Contingencies	95.38
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Contingencies	95.38																										
<b>2. Output 2: Improved land use and forestry management</b>	<b>GEF: \$2.527 million</b>																										
2.1 Establish four REDD+ demonstration sites (months 3–36) 2.2 Identify potential investments for possible Forest Investment Program funding (months 6–36)	<table border="1"> <thead> <tr> <th data-bbox="784 873 1161 905">Item</th> <th data-bbox="1161 873 1435 905">Amount (\$'000)</th> </tr> </thead> <tbody> <tr> <td data-bbox="784 905 1161 936">Consultants</td> <td data-bbox="1161 905 1435 936"></td> </tr> <tr> <td data-bbox="784 936 1161 968">  International</td> <td data-bbox="1161 936 1435 968">283.40</td> </tr> <tr> <td data-bbox="784 968 1161 999">  Local</td> <td data-bbox="1161 968 1435 999">192.00</td> </tr> <tr> <td data-bbox="784 999 1161 1031">  International and local travel</td> <td data-bbox="1161 999 1435 1031">52.00</td> </tr> <tr> <td data-bbox="784 1031 1161 1062">  Reports and communications</td> <td data-bbox="1161 1031 1435 1062">15.00</td> </tr> <tr> <td data-bbox="784 1062 1161 1094">Supplies and materials</td> <td data-bbox="1161 1062 1435 1094">243.65</td> </tr> <tr> <td data-bbox="784 1094 1161 1125">Equipment</td> <td data-bbox="1161 1094 1435 1125">35.00</td> </tr> <tr> <td data-bbox="784 1125 1161 1157">Training, seminars, and conferences</td> <td data-bbox="1161 1125 1435 1157">418.71</td> </tr> <tr> <td data-bbox="784 1157 1161 1188">Surveys</td> <td data-bbox="1161 1157 1435 1188">1,159.58</td> </tr> <tr> <td data-bbox="784 1188 1161 1220">Representative for contract negotiations</td> <td data-bbox="1161 1188 1435 1220">3.00</td> </tr> <tr> <td data-bbox="784 1220 1161 1251">Contingencies</td> <td data-bbox="1161 1220 1435 1251">124.93</td> </tr> </tbody> </table>	Item	Amount (\$'000)	Consultants		International	283.40	Local	192.00	International and local travel	52.00	Reports and communications	15.00	Supplies and materials	243.65	Equipment	35.00	Training, seminars, and conferences	418.71	Surveys	1,159.58	Representative for contract negotiations	3.00	Contingencies	124.93		
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<b>3. Output 3: Potential PES and sustainable financing schemes for forest and biodiversity management</b>																											
3.1 Conduct in-depth supply chain studies of four industries (i.e., mining, palm oil, rubber, and tourism) as basis for design and pilot of two PES financing mechanisms (months 3–6) 3.2 Design and pilot two PES financing mechanisms to support the HOB; document lessons and best practices (months 6–36)	<p data-bbox="784 1423 1435 1507">Note: The government will provide counterpart support in the form of office accommodation, transport, remuneration, per diem for counterpart staff, and other in-kind contributions.</p>																										
<b>4. Output 4: Effective project management delivered</b>																											
4.1 Establish a project management office and three project implementation units (months 1–36) 4.2 Conduct in-country clinics (months 1–6) 4.3 Create an effective monitoring, reporting, and verification system (months 1–36) 4.4 Capture and disseminate TA knowledge and lessons through national, regional, and global knowledge networks (months 6–36)																											

ADB = Asian Development Bank; GEF = Global Environment Facility; HOB = Heart of Borneo; PES = payment for ecosystem services; REDD+ = reducing emissions from deforestation and forest degradation and carbon stock enhancement.

Source: Asian Development Bank estimates.

## COST ESTIMATES AND FINANCING PLAN

Item	Amount (\$'000)
<b>A. Climate Change Fund<sup>a</sup></b>	
1. Consultants	
a. Remuneration and per diem	
i. International consultants	348.80
ii. National consultants	488.70
b. International and local travel	24.50
c. Reports and communications	9.00
2. Equipment, supplies, and materials <sup>b</sup>	17.03
3. Training, seminars, and conferences <sup>c</sup>	20.00
4. Surveys <sup>d</sup>	90.30
5. Miscellaneous administration and support costs	211.79
6. Representative for contract negotiations	3.00
7. Contingencies <sup>e</sup>	36.88
<b>Subtotal (A)</b>	<b>1,250.00</b>
<b>B. Regional Cooperation and Integration Fund<sup>a</sup></b>	
1. Consultants	
a. Remuneration and per diem	
i. International consultants	218.00
ii. National consultants	24.00
b. International and local travel	44.00
c. Reports and communications <sup>f</sup>	69.00
2. Equipment <sup>g</sup>	96.50
3. Miscellaneous administration and support costs	187.00
4. Representative for contract negotiations	3.00
5. Contingencies <sup>e</sup>	58.50
<b>Subtotal (B)</b>	<b>700.00</b>
<b>C. Global Environment Facility<sup>h</sup></b>	
1. Consultants	
a. Remuneration and per diem	
i. International consultants	283.40
ii. National consultants	192.00
b. International and local travel	52.00
c. Reports and communications	15.00
2. Supplies and materials <sup>b</sup>	243.65
3. Equipment <sup>i</sup>	35.00
4. Training, seminars, and conferences <sup>c</sup>	418.71
5. Surveys <sup>j</sup>	1,159.58
6. Representative for contract negotiations	3.00
7. Contingencies <sup>e</sup>	124.93
<b>Subtotal (C)</b>	<b>2,527.27</b>
<b>Total</b>	<b>4,477.27</b>

Note: The government will provide support in the form of office accommodation, transport, remuneration, per diem for counterpart staff, and other in-kind contributions.

<sup>a</sup> Established by the Asian Development Bank.

<sup>b</sup> Includes supplies and materials for the implementation of demonstration projects.

<sup>c</sup> Includes training on (i) improved management of land use, land-use change, and forestry (Climate Change Fund); and (ii) institutional capacity building (Global Environment Facility). These will be carried out in Indonesia.

<sup>d</sup> Implementation of demonstration projects, which requires surveys and studies.

<sup>e</sup> 3.7% (Climate Change Fund), 8.1% (Regional Cooperation and Integration Fund), 4.9% (Global Environment Facility).

<sup>f</sup> Includes cost of annual external audit totaling \$60,000 over 3 years.

<sup>g</sup> Includes office equipment for the project management office and project implementation units such as computers and accessories, and printers. These will be turned over to the Directorate of Environmental Services and Conservation Areas upon TA completion.

<sup>h</sup> Administered by the Asian Development Bank.

<sup>i</sup> Includes computers, accessories, and materials for training communities; preparing and implementing plans of national parks, as well as demonstrating and pilot testing payment for ecosystem services mechanisms. These will be turned over to the concerned districts upon TA completion.

<sup>j</sup> Includes surveys and studies to prepare and support the implementation of national park operations management plans, and demonstration and pilot testing of payment for ecosystem service mechanisms.

Source: Asian Development Bank estimates.

## OUTLINE TERMS OF REFERENCE FOR CONSULTANTS

1. The technical assistance (TA) will require 39 person-months of international and 108 person-months of national consulting inputs, which include an unallocated 4 person-months. International and national consultants with the same specialization will work in tandem and collaborate with other specialists in tasks that require interdisciplinary cooperation. Table A3 presents the required consulting services and their corresponding fielding schedule.

**Table A3: Consulting Requirements and Fielding Schedule**  
(person-month)

Specialization	Funding	Year 1	Year 2	Year 3	Total
<b>A. International Consultants</b>					
1. Protect Area Specialist and Team Leader	GEF	3	3	3	9
2. Sustainable Financing and PES Specialist	GEF	2	1	1	4
3. REDD+ Specialist	CCF	4	4	2	10
4. Policy and Institutions Development Specialist	CCF	2	1	0	3
5. Financial Analyst and/or Economist	CCF	2	1	0	3
6. Training Development Specialist	RCIF	5	0	0	5
7. Land Use and Spatial Planning Specialist	RCIF	3	0	0	3
8. Monitoring, Reporting, and Verification Specialist	RCIF	1	0	1	2
<b>Subtotal (A)</b>		<b>22</b>	<b>10</b>	<b>7</b>	<b>39</b>
<b>B. National Consultants</b>					
1. Deputy Team Leader and REDD+ Advisor	CCF	9	9	8	26
2. Policy and Institutions Development Specialist	CCF	2	2	0	4
3. Public and Private Sector Partnership Specialist	CCF	2	2	1	5
4. Financial Analyst and/or Economist	CCF	3	2	0	5
5. Institutional Development and/or Training Specialist	CCF	2	2	0	4
6. Land Use and Spatial Planning Specialist	CCF	2	1	0	3
7. Monitoring, Reporting, and Verification Specialist	CCF	3	3	3	9
8. Geographic Information System and Information Technology Specialist	CCF	2	1	1	4
9. REDD+ Specialist	CCF	4	4	4	12
10. Protected Area Specialist	GEF	5	3	2	10
11. Social and Participation Specialist	GEF	1	1	1	3
12. Sustainable Financing and/or PES Specialist	GEF	1	2	1	4
13. TA Administrative Assistant	GEF	5	5	5	15
14. Unallocated Position	RCIF	2	1	1	4
<b>Subtotal (B)</b>		<b>43</b>	<b>38</b>	<b>27</b>	<b>108</b>
<b>Total</b>		<b>65</b>	<b>48</b>	<b>34</b>	<b>147</b>

CCF = Climate Change Fund, GEF = Global Environment Facility, PES = payment for ecosystem services, RCIF = Regional Cooperation and Investment Fund, REDD+ = reducing emissions from deforestation and forest degradation and carbon stock enhancement.

Source: Asian Development Bank.

2. The project management consultant (PMC), an international consulting firm, will provide day-to-day technical and administrative support to the project management office (PMO) and the project implementing units in East and West Kalimantan. This includes (i) preparation of a detailed work plan; (ii) conduct of training courses, seminars, conferences, and surveys; (iii) coordination of demonstration activities in selected demonstration sites; (iv) procurement of goods and services; (v) financial management; and (vi) documentation and reporting. The PMC will provide the services of an international protected area management specialist and team leader, who will be assisted by a national deputy team leader and reducing emissions from deforestation and forest degradation (REDD+) adviser, in supervising and managing TA inputs as well as in consolidating and submitting reports and documents (i.e., work plans, progress and financial reports, and statement of expenses) to the Heart of Borneo (HOB) National Working Group and the Asian Development Bank (ADB). The team leader and deputy team leader will work with a project administration assistant. Together, this core management team will supervise and manage the international and national consultants who will provide specialized inputs in the conduct of reviews, assessments, and various technical analyses and/or assistance.

3. The broad terms of reference of the consultants include the following:
- (i) Advise the HOB National Working Group Steering Committee and the PMO, and assist relevant government agencies at all levels, in facilitating policy, legislative, and institutional reforms for improving forest resource management and biodiversity conservation, reducing emissions from deforestation, reducing forest degradation, and enhancing carbon stock (REDD+) preparedness in the HOB;
  - (ii) Review the current structure of organizations, policies, and institutional arrangements for forest and protected area management and/or natural resource conservation in Indonesia; and formulate legal, policy, and institutional measures to increase the focus of forestry and protected area management and/or natural resource conservation on clearly stated conservation objectives;
  - (iii) Review and assess previous efforts on the management of forests and protected areas and/or natural resources, and biodiversity conservation initiatives in the HOB, the surrounding parts of Borneo Island, and other Indonesian islands to extract lessons to guide TA implementation and the selection of pilot and/or demonstration of best practices for REDD+ and payment for ecosystem services (PES) schemes, consistent with an integrated ecoregion management approach;
  - (iv) Prepare and conduct HOB tri-country dialogue with Brunei Darussalam, Indonesia, and Malaysia to facilitate the formulation of solutions on transborder management issues, including prevention and control of forest fires and illegal traffic of wildlife and endangered species, and enhancement of existing mechanisms and procedures for cooperation;
  - (v) Review the management plan of Kayan Mentarang National Park and identify specific areas of support required from the TA;
  - (vi) Assess local capacity in the four districts covered under the TA for implementing an improved forest and protected area management and/or nature conservation regime in the HOB, especially in relation to previous attempts toward local community-based management;
  - (vii) Collect baseline and site-specific information, including detailed background data on key biophysical parameters (e.g., climate parameters, soil data, terrain maps, forest cover features, species type and distribution, non-timber forest products, stream flows,) and socioeconomic data (e.g., population, poverty incidence, sources of livelihood) for planning and management decision-making processes in relation to improving HOB management;

- (viii) Identify and/or select demonstration sites for REDD+ preparedness and for the implementation of pilot investments in Kapuas Hulu and Melawi districts in West Kalimantan to demonstrate the roles of (a) sustainable forest management, (b) biodiversity conservation, and (c) increased forest carbon stocks in reducing emissions from deforestation and forest degradation;
- (ix) Provide advice and oversee the mainstreaming of integrated approaches for forest resource management and biodiversity conservation into national, provincial, and district medium-term development plans;
- (x) Identify critical management challenges in protected area management in the HOB, including fire prevention and control, and illegal traffic of wildlife and endangered species, as well as specific activities that are needed to address current challenges that confront management and conservation efforts;
- (xi) Estimate the costs and benefits of various PES schemes that may be piloted and/or demonstrated under the TA;
- (xii) Design an overall strategy for external fundraising and provide support for developing improved methods for fundraising and investing in forest and protected area management, with particular focus on potential possible investments that may be funded and implemented under the Forest Investment Program even after the 3-year TA period; and
- (xiii) Prepare the required documents in ADB and GEF formats, particularly the GEF biodiversity tracking tools, progress reports, and completion report.