# An initial sustainable financing scoping exercise for MPAs in the Sulu-Sulawesi Seas Marine Ecoregion - Indonesia



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For Sulu Sulawesi Marine Ecoregion SSME.

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**Starling Resources** 

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## **Glossary of Acronyms and Terms**

APBD Anggaran Pendapatan dan Belanja Daerah or regional revenue and expenditure

budgets (Government of Indonesia)

APBN Anggaran Pendapatan dan Belanja Negara or state (national) revenue and

expenditure budgets (Government of Indonesia)

ADD Alokasi Dana Desa or Village Allocation Fund

BAPPEDA Local Development Planning Agency

Benefits refers to both monetary and non-monetary values

BLUD Badan Layanan Umum Daerah or a Regional Public Services Agency

BNPMAB BNP Management Advisory Board or the Dewan Pengelolaan Taman Nasional

Bunaken (DPTNB)

CAPEX Capital expenditures

CCIF Conservation and Community Investment Forum

CTF Conservation Trust Fund

CTI Coral Triangle Initiative

CSR Corporate Social Responsibility

DANIDA Danish International Development Agency

DKP Dinas Kelautan dan Perikanan or Marine and Fisheries Agency

DPTNB Dewan Pengelolaan Taman Nasional Bunaken or the BNP Management

Advisory Board (BNPMAB)

Fund an account that serves to collect and disburse monetary benefits

GEF Global Environment Facility

ha Hectare

IDR Indonesia Rupiah

Kabupaten Regency

KKP Kawasan Konservasi Laut Daerah or Regional Marine Conservation Area

KKP Kawasan Konservasi Perairan or Aquatic Conservation Area

MMAF Ministry of Marine affairs and Fisheries

MOF Ministry of Finance

MoU Memorandum of Understanding

MPA Marine Protected Area

NGO Non-governmental Organization

PA Protected Area

Perda Peraturan daerah or a local government regulation

Permen Peraturan Menteri or a Ministerial regulation

PES Payments for Ecosystem Services

PHKA Direktorat Jenderal Perlindungan Hutan dan Konservasi Alam or Directorate

General of Forest Protection and Nature Conservation

PNPM Program Nasional Pemberdayaan Masyarakat or the National Program for

Community Empowerment (also known as PNPM Mandiri)

PP Peraturan Pemerintah or a government regulation (usually central government)

Raperda Local government regulation

REDD Reducing Emissions from Deforestation and Forest Degradation

RPoA Regional Plan of Action

SKPD Satuan Kerja Perangkat daerah or Regional Apparatus Working Unit (agency)

Source refers to sources of funds, including government funding (domestic),

multi-lateral initiatives and programs, bilateral initiatives and programs,

foundations, market finance, etc.

SSME Sulu Sulawesi Seas Marine Ecoregion

TNC The Nature Conservancy

TOR Term of Reference

UPTD Unit Pelaksana Teknis Daerah or Regional Implementing Unit (agency)

UU Undang-Undang or Acts of the Government of Indonesia

WWF World Wildlife Fund

## **Executive Summary**

## **Background**

The Coral Triangle Initiative (CTI) focuses on sustainable management of marine and coastal resources of the six Coral Triangle nations (CT6). The CT6 have agreed to *establish a comprehensive, ecologically representative and well-managed region-wide Coral Triangle MPA System (CTMPAS) in place - composed of prioritized individual MPAs and networks of MPAs that are connected, resilient, and sustainably financed.* 

Within the Coral Triangle, the Sulu Sulawesi Seas Marine Ecoregion (SSME) is spread among the islands of the Philippines, Indonesia, and Malaysia<sup>1</sup> and is a critical eco-region recognized as one of the CTI priority seascapes. Senior Officials of the three governments meet annually as part of the governance of the SSME. During The 4thTri-Com meeting in 2009, the three governments committed to develop the financial sustainability of SSME and requested support from WWF.

Specifically, the CTI nations and their partners in the non-governmental, multi-lateral and private sectors have committed to assess the resource (financial and otherwise) requirements for each country in the SSME necessary to maintain a national network of effective Marine Protected Areas (MPAs). Ultimately, the countries will develop, jointly, a comprehensive *Seascape Sustainable Financing Strategy* with an overall scheme for sourcing and managing specific investments across the 10 year timeframe of the CTI *Regional Plan of Action*.

The purpose of this initial financial feasibility assessment report is to review the current status of the MPAs in the Indonesia portion of the SSME, as well as the policies and enabling conditions, current government budget allocations and potential financial flows from various government, market-driven and donor sources. This report provides a preliminary view as to what long term sustainable financing and related needs and opportunities exist in Indonesia for MPAs in the SSME.

Protected Area Financial Sustainability may be defined as: "the ability to secure stable and sufficient long-term financial resources and to allocate them in a timely manner and appropriate form, to cover the full costs of protected areas (direct and indirect) and to ensure that PAs are managed effectively and efficiently." (CBD)

## **Approach**

Starling Resources conducted an initial financial feasibility assessment of specific conditions necessary to enable sustainable financing for two MPAs in Indonesia which are located within the SSME: Bunaken National Park (BNP) and Berua Marine Conservation Area (Berau KKP). While Bunaken is a long standing national park with formal and recurring administrative, management and funding structures, the Berau

<sup>&</sup>lt;sup>1</sup> The SSME specifically consists of consisting of the Sulu Sea, the Sulawesi Sea, and the Philippine inland seas (Visayan Sea, Bohol Sea, and Mindanao Sea).

KKP is a new, sub-national level MPA with a management body being put into place but not yet functional and no source of government finance to match limited NGO and donor funds. By examining the current status of each MPA, along with the specific policies and options for improving the management and financing directed toward these and others like them in Indonesia, we attempt to highlight the critical gaps in both the necessary funding and capacities required to ensure long term sustainability. Various government and non-government organizations cooperated with data and information on the financing situation and the potential for introducing new financing mechanisms.

The Conservation and Community Investment Forum (CCIF) Protected Area Financial Model (Model) was utilized for this project. The Model provides a framework that captures both the costs of providing ongoing conservation programs as well as the current and potential revenue and funding sources to cover these costs. It provides clear analysis and guidance for both practitioners and funders to assist in the development and implementation of successful protected areas, and associated management and financial plans, over the long run.

## **Legal and Institutional Framework**

The Berau KKP faces large challenges: a formal management plan has not been developed yet; the area is approximately 1.27 million ha and under local (300,000 ha), province and national authority, depending on location; the implementing agency is not yet clearly defined (a joint task force and advisory management entity exists, yet is not the formal authority).

In Bunaken, the *Dewan Pengelolaan Taman Nasional Bunaken* (DPTNB) or the BNP Management Advisory Board (BNPMAB) has been a coordinating and advisory forum for BNP management since 2000.

## **Financial Assessment**

Berau KKP and BNP have very different cost and revenue profiles.

Utilizing current cost structures as well as estimates of future plans, the cost to manage the Berau KKP at a basic level is \$534,079 in 2011. Over the projection period of 2011-2020, the average cost per year is \$685,382. Financing for Berau comes primarily from NGOs and donors. In 2010, The Nature Conservancy (TNC) and the World Wide Fund for Nature (WWF) coordinated over US\$400,000 from donors such as WWF-Netherlands, the Danish International Development Agency (DANIDA) and the David & Lucile Packard Foundation. That amount is set to drop substantially going forward leaving a large funding gap to cover expected costs for the Berau KKP – which will remain high in this initiation phase.

The cost to manage BNP at a basic level is \$1,180,534 in 2011. Over the projection period of 2011-2020, the average cost is \$1,417,723/year. BNP is assumed to be in a relatively steady-state. In other words, the current personnel and level of activities represents the level required into the indefinite future. For this reason, most year-to-year cost increases are due solely to inflation. Bunaken National Park financing originates from the state budget (approximately US\$658,000 per year), an entrance fee and management board system in place which receives approximately US\$164,000 per year in entrance fee

revenues, and donor funding (WWF also supports the National Park and the management board, co-financing WWF staff and their staff, amounting to approximately US\$26,000 per year).

## **Key Issues & Recommendations**

#### Berau KKP

A significant challenge facing the Berau KKP is that its formal legal status is not yet determined and it is therefore politically weak. A second challenge lies in the design of the governance structure of the management unit that will be responsible for the Berau KKP.

It is recommended that the Joint Program continue to facilitate discussions between the *kabupaten* and MMAF to secure a firm KKP legal status for the full 1.2 million ha area. Once this legal status has been confirmed, the Berau KKP can establish a management unit responsible for managing the KKP. While a BLUD is likely the best legal structure for the management unit, additional analyses need to take place to fully understand the short and long-term implications of pursuing such a mechanism, particularly related to the level and sustainability of government financing.

Cost reduction opportunities identified include transferring some of the Berau KKP functional efforts to private sector parties. It is recommended that PT Berau Coal be engaged and, over time, that they assume responsibility for the Economic Development function. Using current figures, this would reduce the cost to the Berau KKP an average of US\$28,590 per year from 2011 through 2020.

It is also recommended that the Tourism Industry assume responsibility of all Tourism Management functions. Using current figures, this would reduce the cost to the Berau KKP an average of US\$19,229 per year from 2011 through 2020.

In addition to careful review and implementation of cost reduction opportunities, it will also be necessary for the Berau KKP to pursue a diverse set of financing sources. It is recommended that the following sources be the focus of financing efforts:

- Securing government direct allocation (APBN/APBD),
- Improving and implementing market-driven entrance Fees (Semama and Sangalaki Island and the full KKP), and
- Securing market-driven Fisheries revenue (Permits & Taxes as well as Penalties & Fines).

#### **Bunaken National Park**

Ten years after its establishment, the BNPMAB has gained a mixed reputation. The key issues and problems lie in the poor administration and management of both the BNPMAB (which is unable to fund their full mandate for community work, among other activities) as well as the BNP *Balai* (which lacks effective and adaptive management capacity – and now requires a review and overall improvement of the BNP management plan). Efforts to improve both the overall governance and operational strategy across the BNP are required to improve the institutional structure.

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The cost to manage BNP in 2011 is \$1,180,534. Over the projection period of 2011-2020, the average cost is \$1,417,723/year. BNP is assumed to be in a relatively steady-state. In other words, the current personnel and level of activities represents the level required into the indefinite future. For this reason, most year-to-year cost increases are due solely to inflation. In 2011 a gap of \$289,677 is currently projected. The average gap is \$436,529 per year and is as large at \$736,511 (2020). This need will need to be met from a variety of government, donor and market-driven sources. Cost reduction would also result in a lower net funding required.

Two cost reduction opportunities identified include improving the efficiency of the entrance fee system and improving coordination with other relevant government agencies.

In addition to careful review and implementation of cost reduction opportunities, it will also be necessary for the BNP to pursue a diverse set of financing sources. It is recommended that the following sources be the focus of financing efforts:

- Increasing the government direct allocation (APBN/APBD),
- Securing funding from the Global Environment Facility,
- Improving the entrance fee system.

#### General

In Indonesia, Protected Areas management plans are rarely developed to incorporate and include a clear, well-structured, and appropriate set of management functions and operations in which to base sound budget decisions. The overall management efficiency and effectiveness of national PAs is unknown. Conducting a full assessment of current practices and developing new planning systems and management and operational plan templates is required. The current budget process must be revised to include important budgeting systems and practices and training for PA staff. In particular, PA managers need training in management planning and budgeting approaches to promote efficient and optimal use of resources (financial and otherwise) against a comprehensive and sound management plan.

At the sub-national level the focus should be on the long term sustainability of the KKP/KKPs, including the necessary governance capacity to manage, enforce and fund such a system of sub-national marine management areas. Such an investment should also encourage adoption of ecosystem-based management principles in Indonesian fisheries policies and provide leverage throughout provincial and national level government agencies in areas of policy and planning integration. Ultimately, efforts in the SSME and elsewhere in the CTI should focus on providing direct support and evidence for the practical use of TURF + reserve networks across Indonesia. (See Appendix 5. A statement on fisheries management and marine conservation in Indonesia).

A number of priority recommendations need to be considered for strengthening the national parks and sub-national KKP/KKP approach and mechanisms in Indonesia. These include:

- Assess proper set-up requirements of local KKP/KKP agencies, including technical capacity and institutional development needs.
- Assess sub-national policies and planning practices for public expenditures.
- Conduct a detailed cost analysis to determine the short and long-term implications of implementing an integrated investment plan across the SSME.

## 1. Introduction

#### Sections

 Background and Objectives

#### **Summary**

- The Sulu-Sulawesi Seas Marine Ecoregion (SSME) is a critical eco-region recognized as one of the Coral Triangle Initiative (CTI) priority seascapes.
- During The 4<sup>th</sup> Tri-Com meeting in 2009, the three governments committed to develop the financial sustainability of SSME and requested support from WWF.
   This feasibility assessment is an input to developing financial sustainable mechanisms for meeting the projected funding needs and gaps of MPAs in the Indonesian part of the SSME.
- The main objectives of this report are to assess the financing gaps of the two MPAs within SSME, identify sustainable financing mechanism and their enabling conditions.
- WWF, along with their CTI partners, have committed to review the resource requirements necessary to maintain effective MPAs in each country and to develop a three-country Seascape Investment Plan.
- This financial feasibility assessment should be viewed as a first step in the larger process of developing a three-country SSME *Seascape Sustainable Financing Strategy*.

## 1.1 Background

The Coral Triangle Initiative (CTI) focuses on sustainable management of marine and coastal resources of the six Coral Triangle nations<sup>2</sup> who formally adopted a *Regional Plan of Action*, covering: seascapes, ecosystem approach to fisheries, MPAs, climate adaptation, and threatened species. A set of priority seascapes across the Coral Triangle are designated to serve as the geographic focus of major investments and action during 2010-2020.

The Sulu-Sulawesi Seas Marine Ecoregion (SSME) is spread among the islands of the Philippines, Indonesia, and Malaysia<sup>3</sup> and is a critical eco-region recognized as one of the CTI priority seascapes. The SSME is known to contain more than 2,000 species of marine fish, at least 400 known species of marine algae, 16 species of sea grass, 33 species of mangroves, at least 400 species of corals, five of the world's seven species of sea turtles, and at least 22 species of marine mammals, including the endangered Dugong dugon and the rare Irrawaddy dolphin.<sup>4</sup>

<sup>&</sup>lt;sup>2</sup> Indonesia, the Philippines, Malaysia, Papua New Guinea, the Solomon Islands and Timor Leste.

<sup>&</sup>lt;sup>3</sup> The SSME specifically consists of consisting of the Sulu Sea, the Sulawesi Sea, and the Philippine inland seas (Visayan Sea, Bohol Sea, and Mindanao Sea).

<sup>4</sup> http://assets.panda.org/downloads/sulusulawesi.pdf.

The feasibility assessment on sustainable financing mechanisms is based on the CTI Regional Plan of Action's (RPoA) and SSME goals related to MPAs (see Box 1 for Goal #3 and Principle #4). Findings from the study will be communicated at the next SSME Tri-Com meeting for decision to further develop some of the recommendations. Excerpts from the CTI Regional Plan of Action:

- Goal #3 (on MPAs) states that the CT6 governments are committed to achieving, by 2020, the
  following target: "A comprehensive, ecologically representative and well-managed region-wide
  Coral Triangle MPA System (CTMPAS) in place composed of prioritized individual MPAs and
  networks of MPAs that are connected, resilient, and sustainably financed."
- Principle #4 in the RPoA, states that "Relevant existing forums should be used to implement actions under the CTI. These include the tri-national commissions on the Sulu Sulawesi Seas (SSME)."

The CTI nations and their partners in the non-governmental, multi-lateral and private sectors have committed to review the resource (financial and otherwise) requirements for each country in the SSME necessary to maintain a national network of effective MPAs. Ultimately, the countries will develop a comprehensive *Seascape Investment Plan* with an overall scheme for sourcing and managing specific investments across the 10 year timeframe of the CTI *Regional Plan of Action*.

## 1.2 Objectives

WWF is leading the current effort with CTI partners to compile assessments for the three SSME nations to document these resource requirements and has retained Starling Resources to conduct an *initial* sustainable financing scoping exercise for MPAs in the SSME- Indonesia, using two MPAs in the Sulu Sulawesi Sea as references<sup>5</sup>: the Berau Marine Conservation Area (Berau KKP) in East Kalimantan and Bunaken Marine Park (BNP) in North Sulawesi.

Protected Area Financial Sustainability: "the ability to secure stable and sufficient long-term financial resources and to allocate them in a timely manner and appropriate form, to cover the full costs of protected areas (direct and indirect) and to ensure that PAs are managed effectively and efficiently." (CBD)

The purpose of this initial financial feasibility assessment is to present the current status of the MPAs in the Indonesia portion of the SSME, as well as the policies and enabling conditions, current government budget allocations and potential financial flows from various government financing, market-driven and donor sources. This report provides a preliminary view as to what long term sustainable financing and related needs and opportunities exist in Indonesia for MPAs in the SSME. It should be viewed as a first step in the larger process of developing a three-country SSME Seascape Sustainable Financing Strategy.

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<sup>&</sup>lt;sup>5</sup> In Indonesia, the critical ecosystems include the Berau Delta in East Kalimantan, and the areas including and surrounding Bunaken Marine Park in North Sulawesi.

The original objectives of this scoping exercise include the following. (See Appendix 1 for a detailed term of reference.)

- 1. Review the status of specific enabling conditions (policy and institutional) and options related to effective design and implementation of sustainable financing for MPAs in Indonesia, and current financial flows directed toward MPAs in Indonesia (national and sub-national levels).
- 2. Determine general cost structures and capacity needs of two target MPAs in the Sulu-Sulawesi Sea (Berau KKP and BNP).
- 3. Assess and identify short list of sustainable finance mechanisms and key government financing options necessary and feasible for MPAs in Indonesia (national and sub-national levels).
- 4. Highlight institution, and partner, capacity issues to be resolved.

This document provides an overview of the findings from this assignment, including a review of the nature of the national protected area system in Indonesia generally and the status of the two critical MPAs within the Indonesia portion of the SSME, Berau KKP and BNP.

The contents of this document are based research, workshops and structured meetings and interviews, as well as financial and cost analysis of the two MPAs conducted from August through October 2010. This report provides a preliminary view as to what long term sustainable financing and related needs and opportunities exist in Indonesia for MPAs in the SSME. It should be viewed as a first step in the larger process of developing a three-country SSME Seascape Sustainable Financing Strategy.

## 2. Indonesian Marine Protected Areas

#### **Sections**

- Overview
- Protected Area Legal & Institutional
   Framework
- Protected Area Financing
- A Framework for Developing Sustainable MPAs

#### **Summary**

- Indonesia has established a protected area system covering more than 30 million hectares of terrestrial and marine areas, however less than 2% of the total marine environment is currently covered. Two MPAs are part of the Sulu Sulawesi Marine Ecoregion and constitute the Indonesian part of this tri-national agreement.
- Indonesia has expansion plans to almost triple marine coverage to 20 million hectares from the current 7.3 million by the year 2020; mainly through the development and use of local marine conservation areas and marine reserves at the sub-national *kabupaten* (local) levels. There are currently no formal budget measures in place to provide for direct government funding of MPAs at the subnational level.
- Protected area financial sustainability may be defined as "the ability to secure stable and sufficient long-term financial resources and to allocate them in a timely manner and appropriate form, to cover the full costs of protected areas (direct and indirect) and to ensure that PAs are managed effectively and efficiently".
- It is clear that achieving financial sustainability will require major changes in the way that funding is conceptualized, captured and used. Gaps in both capacity and financing remain with different issues between the national PA (park) system and the emerging sub national areas. Optimal funding for the entire PA system in 2006 left a shortfall of US\$81.94 million without accounting for the investments needed to develop current and future district-level MPAs.
- Addressing shortfalls in capacity and funding at both the regional, national and sub national levels, and developing a proper portfolio of responses, including strengthening institutional capacity and management, optimizing the use of available resources, and increasing access to diversified sources of funding including government financing through appropriate financing mechanisms are the priority.

#### 2.1 Overview

The Government of Indonesia (GoI) has established a PA system covering more than 30 million hectares (ha) of terrestrial and marine areas. A study completed in 2006, *Protected Area Funding in Indonesia*<sup>6</sup>, states that the PA system includes seven national PA classifications. These classifications, their IUCN-

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<sup>&</sup>lt;sup>6</sup> This study was initiated by Ministry of Environment as an activity of the National Implementation Support Partnership (NISP), a collaborative partnership of the Government of Indonesia and numerous non-governmental conservation organizations.

equivalent categories, and percentage representation of the total protected area are presented in table 1.

Table 1. National Level PA system (terrestrial and marine) statistics, Indonesia (2006)

| Туре                    | IUCN category | % coverage |
|-------------------------|---------------|------------|
| National Parks          | Category 2    | 54.6       |
| Nature Reserves         | Category 1    | 15.1       |
| Wildlife Reserves       | Category 4    | 18.1       |
| Nature Recreation Parks | Category 5    | 3.7        |
| Forest Parks            | Category 5    | 0.9        |
| Hunting Parks           | Category 5    | 0.8        |
| Marine Protected Areas  | Category 6    | 6.7        |

It is clear that the current Indonesia PA system has an imbalance towards the terrestrial environment: current PA coverage for the terrestrial environment is approximately 10% of the total land area in Indonesia, however less than 2% of the total marine environment is similarly established as protected areas. Marine coverage includes eight nationally established marine National Parks, including BNP in North Sulawesi.

## 2.2 Protected Area Legal & Institutional Framework

Specific policies, laws and regulations governing MPAs are important to understand, as are the specific institutions and capacity to properly implement and fund MPAs.

Table 2. Indonesian Regulations regarding MPAs (non-exhaustive)

| Туре                            | Regulation & Subject  |  |
|---------------------------------|---|--|
| Ocean jurisdiction claims       | • Act No 6/1996 – Indonesian Waters   |  |
|                                 | Act No 5/1983 – Indonesian exclusive economic zone  |  |
|                                 | <ul> <li>Act No 1/1973 – Indonesian continental shelf</li> </ul>                          |  |
| Ocean resources and activities  | • Act No 21/1992 – Shipping   |  |
| on the sea                      | <ul> <li>Act No 11/1967 – Basic provisions for mining</li> </ul>                          |  |
| Terrestrial spatial and general | <ul> <li>Act No 24/1992 – Spatial use management</li> </ul>                               |  |
| planning laws                   | • Act No 9/1990 – Tourism   |  |
| Coastal and marine resource     | Act No 27/2007 – Coastal and small island management                                      |  |
| management                      | • Act No 31/2004 – Fisheries  |  |
|                                 | • Act No 41/1999 – Forestry   |  |
| General legislation of          | Act No 23/1997 – Environmental management   |  |
| environmental management        | • Act No 5/1990 – Conservation of biological resources and their ecosystems               |  |
| Legislation of decentralization | Act No 32/2004 – Regional government (Autonomy Act)                                       |  |
|                                 | • Act No 33/2004 – Financial distribution between central and regional                    |  |
|                                 | government  |  |
| International level             | Act No 17/1985 – Ratification of UN convention on law of the sea                          |  |
|                                 | <ul> <li>Act No 5/1994 – Ratification of UN convention on biological diversity</li> </ul> |  |

In Indonesia much of the existing MPA network are part of the national protected area system established by the Gol. The eight national marine parks that currently exist are managed under the *Direktorat Jenderal Perlindungan Hutan dan Konservasi Alam* (PHKA) or the Directorate General of Forest Protection and Nature Conservation, Ministry of Forestry - in growing collaboration with Ministry of Marine Affairs and Fisheries (MMAF). It is important to understand how well the national PA system under PHKA and MMAF performs with regards to management planning, and optimally utilizing annual budget allocations to implement MPA management.

Common and systemic weaknesses in both management plans and the overall administration and management of the National Parks are a persistent problem in the national PA system. These stem from a lack of effective and adaptive management capacity, poor planning and budget skills and processes, and overall underutilization of collaborative partnerships with communities and other stakeholders (e.g. private sector).

The designation of MPAs at the sub-national level is important for the expansion of the overall MPA system in Indonesia, however it comes with challenges: there are currently no formal budget measures in place to provide for direct government funding of MPAs at the sub-national level and the guidelines for KKLD/KKP establishment have not been formalized by the MMAF.

## 2.2 Protected Area Financing

While this study did not look at the total Indonesia PA or MPA system from a cost or funding standpoint, relatively good data does exist for the national level PA system (especially National Parks). The level of funding for all identified PAs in Indonesia in a 2006 *Protected Area Funding in Indonesia* report was estimated at US\$53.37 million.<sup>7</sup>

Table 3. MPA funding sources, 20068

| Funding Source      | Targets                          | Amount         |
|---------------------|----------------------------------|----------------|
|                     |                                  | (USD millions) |
| National government | National Parks                   | 16.55          |
|                     | Other PAs (BKSDA)                | 17.07          |
|                     | Marine PAs (KKP/KKP)             | 2.37           |
|                     | TOTAL                            | 35.99          |
| Local government    | Marine PAs (KKP/KKP)             | 0.12           |
|                     | Provincial conservation programs | 1.90           |
|                     | TOTAL                            | 2.02           |
| Donors (estimated)  |                                  |                |
| Non-governmental    | NA                               | 11.51          |
| organizations       |                                  |                |
| Donor agencies      | NA                               | 3.85           |

<sup>&</sup>lt;sup>7</sup> Protected Area Funding in Indonesia (Ministry of Environment, 2006).

<sup>&</sup>lt;sup>8</sup> PA Funding in Indonesia, Ministry of Environment, 2006.

| TOTAL       | 15.36 |
|-------------|-------|
| GRAND TOTAL | 53.37 |

For the most part, National Parks and other national PAs are relatively well funded from the Ministry of Forestry PHKA budget (see appendix 7 for description of PHKA budget process).

Aside from the specific Ministry of Forestry PHKA budgets for national parks, MPAs receive very little funds directly from the Gol. This is especially true for the emerging sub-national marine conservation areas (KKLD or KKP), such as the Berau Marine Conservation Area in East Kalimantan (and part of the SSME). No on-treasury/on-budget annual state budgets are made directly available to these sub-national MPAs so it is extremely critical to understand the existing pathways to Gol financing that can be made available for financing these MPAs in Indonesia. These sub-national MPAs, for various reasons, also stand very little chance of securing meaningful entrance fees in the short-term as a result of low visitor numbers (driven by poor logistics and infrastructure) as well as a lack of awareness and clear guidelines for establishing and properly diverting such entrance fees to appropriate uses.

There are other reasons for this lack of government funding for MPAs, including: competing interests and priorities for government financing as the GoI is an emerging economy with more than 240 million people – where education, health, and economic development is prioritized without an appreciation for the value of critical terrestrial and marine ecosystems and habitats and how the sustainable management and conservation of these will actually support these priorities; poor planning and budget skills for those involved in managing protected areas; poorly coordinated government agencies, policies, and plans; and corruption. Budget matters remain murky in Indonesia, as there are low levels of transparency and sparse audit reports on government expenditures, budget performance or fund allocation.

## 2.3 A Framework for Developing Sustainable MPAs

The MMAF has expansion plans to almost triple marine coverage to 20 million hectares from the current 7.3 million by the year 2020. Doing so would provide a marine PA (MPA) system that covers 3.5% of the total marine area. While this falls short of the international commitments made under the Convention on Biodiversity (CBD) it is still an highly ambitious plan that must be backed by increased institutional capacity, stronger policies and legislation (particularly related to the integration, or improved coordination, of fisheries management, spatial planning and economic development), and an increase in government financing that is difficult to imagine at present.

Most of this expansion will be through use of sub-national directives and mandates allowing for the designation of locally managed marine areas generally referred to as local marine conservation areas (kawasan konservasi laut daerah, or KKLD) and other forms of marine reserves (e.g. kawasan konservasi perairan or KKP) at the kabupaten (local) levels. New spatial planning and marine conservation regulations (see Appendix 4,) make this possible.

According to the 2006 study on PA Funding, "optimal" funding for the entire PA system in 2006 was approximately US \$135.31 million – leaving a shortfall, or "gap," of US\$81.94 million. This shortfall is further exacerbated when the level of capital investment and infrastructure development for this planned expansion. For example, current and future sub-national, district-level MPAs (KKLD, KKP, etc.) do not yet have sufficient management capacity, resources, infrastructure, or vessels, etc. It is difficult to estimate with existing data, but it is clear that many millions of US dollars will be required as initial one time investments to ensure that these KKPs are adequately launched and managed.

Understanding and addressing shortfalls in capacity and funding at both the national and sub-national levels, and developing a portfolio of responses which includes strengthening institutional capacity and overall management plans, as well as optimizing the use of available resources and developing finance mechanisms to cover MPAs needs where possible should constitute the priority. It is clear that achieving financial sustainability will require major changes in the way that funding is conceptualized, captured and used.

The sources of financing span three general categories: government, donor and market-driven (e.g., entrance fees, fisheries taxes). While significant funds can be generated from outside sources, the priority must be on increasing GoI capacity to manage their sovereign responsibilities and increasing flows of government funding. An illustration of the framework for developing sustainable MPAs can be found in Figure 1.

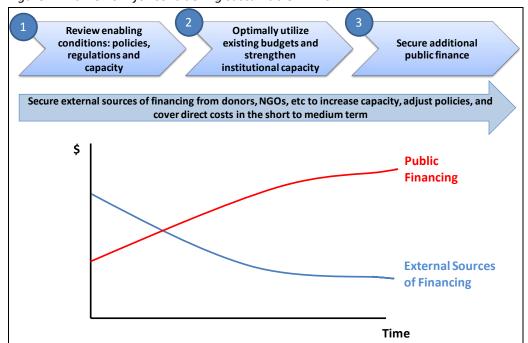


Figure 1. Framework for considering sustainable MPAs

## 3. Modeling Costs and Financing Requirements for MPAs

#### **Sections**

- Overview
- Approach
- Assumptions
- Process

#### Summary

- The Conservation and Community Investment Forum (CCIF) Protected Area Financial Model (Model) was utilized for this project. CCIF has worked for a number of years with leading practitioners, scientists, policy makers, funders and investors to design comprehensive, bottom-up budgeting and cost forecasting models for individual MPAs as well as networks of MPAs, and the financing strategies to support them.
- The Model has been utilized, and further refined, through work in several MPAs and PAs within Indonesia, Cambodia, Fiji, the Philippines, Papua New Guinea (PNG) and Thailand.
- The Model provides a framework to captures costs and the current and potential revenue and funding sources to cover these costs. It provides clear analysis and guidance to assist in the development and implementation of successful MPAs and associated management and financial plans. It was designed to maximize both simplicity and ease of use while documenting MPA activities in a comprehensive manner.

## 3.1 Overview

The Conservation and Community Investment Forum (CCIF) Protected Area Financial Model (Model) was utilized for the financial assessment component of this project. CCIF has worked for a number of years with leading practitioners, scientists, policy makers, funders and investors to design comprehensive, bottom-up budgeting and cost forecasting models for individual MPAs as well as networks of MPAs, and the financing strategies to support them. The Model has been utilized, and further refined, through work in several MPAs and PAs within Indonesia, Cambodia, Fiji, the Philippines, Papua New Guinea (PNG) and Thailand.

## 3.2 Approach

Designing MPAs requires an understanding of three important parameters:

- 1. The science required for proper zoning, delineation, and resources management,
- 2. The necessary cultural and political support required to effectively implement the MPA, and
- 3. The operational and financial requirements essential to realize the required level of actual protection and management.

The former parameters are increasingly well understood. The latter parameter generally remains difficult to assess and pursue in an optimal way. This difficulty stems from the fact that operating an

MPA resembles running a complex, logistically intensive business – a business with objectives that revolve around, and that seeks to deliver on, three equally significant and interrelated outcomes:

- Conserving critically important biodiversity (species, habitats, etc),
- Protecting ecosystems and seascapes and the service they afford to local, national, and international communities, and
- Assisting communities in meeting their needs in an effective, efficient, democratic and sustainable manner including but not limited to: food security, natural resources utilization, cultural, recreational and spiritual.

In order to ensure that these objectives are met, it is important to design complete and factual management plans and parallel financial plans which effectively define and address the complexity inherent in running a fully functional and sustainable MPA. The necessary detailed and systematic financial forecasting for MPAs requires a rigorous approach to understanding all aspects of MPA management in detail, and is thus an excellent guiding "operational framework" for MPA planning and management as well.

The Model was designed to maximize both simplicity and ease of use while also documenting MPA activities in a comprehensive manner. The Model is a generic template flexible enough to accommodate for differences in MPAs around the world, yet detailed enough to reflect the most developed MPA that provides a high level of service. The Model is built on a framework of common MPA functions and budget categories that are representative of the operational components of a typical MPA (note that the functions are fully adjustable based on agreement of stakeholders). The Model allows users to design and project MPA management plan costs and financing needs in an integrated way, defining costs at two levels: functional components and budget categories. During the input of cost data, users are able to think about how to optimally design and maintain the MPA and its functions so that objectives can be realized over time. Cost information is captured across the categories listed in Table 4.

Table 4. CCIF Model Budget Categories

| <b>Budget Category</b> | Overview  |  |
|------------------------|---|--|
| Staff/Personnel        | Personnel are the individuals that are actively involved in one or more functions         |  |
|                        | within the MPA.   |  |
| Contractors            | External contractors and consultants that are hired to fulfill specific functions for a   |  |
|                        | finite amount of time.  |  |
| Capital Assets         | Assets with useful lives greater than one year.   |  |
| Asset Maintenance      | Yearly maintenance cost associated with maintaining capital assets over time. The         |  |
|                        | maintenance cost is captured as a percentage of the original value of the asset (e.g., if |  |
|                        | an asset was purchased for \$1,000 and you forecast the yearly maintenance expense        |  |
|                        | to be \$50, then the maintenance cost is 5%) or as an actual amount (e.g., if you know    |  |
|                        | exactly how much the yearly maintenance cost is).   |  |
| Fuel                   | The cost of the fuel necessary to run the fuel-burning assets (e.g., boats, vehicles).    |  |
| Occupancy              | Costs associated with occupying certain buildings and spaces. It also includes the        |  |

|                      | costs involved in the activities that go inside of these spaces. For example: rent, utility |  |  |
|----------------------|---|--|--|
|                      | costs, internet/email costs.  |  |  |
| Travel               | Travel for MPA-specific activities.   |  |  |
| Supplies & Materials | Consumable and expendable supplies and materials. Example: pens, batteries,                 |  |  |
|                      | paper, other office supplies.   |  |  |
| Miscellaneous        | Costs that cannot be defined as one of the other budget categories.                         |  |  |

The model assumes and allocates costs across the MPA functions and activities as described in Tables 5 and 6.

Table 5. CCIF Model Functions

| Function             | Overview   |  |  |
|----------------------|--|--|--|
| Policy & Planning    | Policy refers to the efforts related to securing support from the local, regional, and     |  |  |
|                      | national governments. Policy work is generally centered on relationship-building with      |  |  |
|                      | government authorities, advocating certain policies, and generally supporting the          |  |  |
|                      | creation and implementation of PA law. Planning refers to the decision making              |  |  |
|                      | processes that set the strategic vision and translate the vision into day-to-day           |  |  |
|                      | activities of the PA. It is the development and periodic review of the actual              |  |  |
|                      | management and financial plan through systematic monitoring and evaluation of a            |  |  |
|                      | PA's indicators of success in achieving its objectives.                                    |  |  |
| Design & Zoning      | Zones are delineated areas where selected areas can take place. Zoning provides the        |  |  |
|                      | basis for management and enforcement of the MPA.   |  |  |
| Enforcement          | The enforcement team, which should have sufficient training, resources, and supplies,      |  |  |
|                      | enforces the MPA and ensures that MPA laws are upheld.                                     |  |  |
| Science & Monitoring | Science and monitoring refers to the collection and analysis of social, economic,          |  |  |
|                      | ecological, and biophysical data. This information should be used to identify              |  |  |
|                      | ecosystem and community dynamics and to prescribe priorities for conservation              |  |  |
|                      | activities. This data collection is ideally linked to the MPA program monitoring and       |  |  |
|                      | evaluation component to help quantify the realization of MPA objectives and goals.         |  |  |
| Education,           | Education and Communication is the dissemination of information and the creation           |  |  |
| Communication &      | and operation of awareness-building activities that communicate critical messages to       |  |  |
| Community            | the MPA's stakeholders, including local communities and governmental                       |  |  |
| Engagement           | organizations, as well as national and International communities. Community                |  |  |
|                      | engagement includes working with communities to improve overall community                  |  |  |
|                      | welfare.   |  |  |
| Economic             | Economic Development refers to developing conservation-enabling livelihoods that           |  |  |
| Development          | are financially feasible and whose viability is assured by the sustained use of natural    |  |  |
|                      | resources. This involved identifying, developing, and supporting current and               |  |  |
|                      | additional community-driven livelihood activities. Community engagement and                |  |  |
|                      | livelihoods may also involve the development of incentive agreement structures.            |  |  |
| Tourism Management   | Tourism management refers to activities that enable the MPA to generate revenues           |  |  |
|                      | from tourism, such as developing marketing materials or advertising campaigns to           |  |  |
|                      | attract visitors, constructing facilities to be used by tourists (e.g. visitor/educational |  |  |
|                      | centers, trails, restrooms, picnic tables, etc.), and encouraging environmentally-         |  |  |
|                      | friendly business practices among tourism businesses.                                      |  |  |

| Administration &     | Administration and financial management is responsible for budgets, operations,      |
|----------------------|--|
| Financial Management | logistics, and general administrative functions, including human resource functions. |

Table 6. Model Activities

| Activities                   |   |
|------------------------------|---|
| Office / field operation     | <ul> <li>Survey / Monitoring</li> </ul> |
| Meeting                      | <ul> <li>Demarcation</li> </ul>         |
| Training                     | <ul> <li>Reporting</li> </ul>           |
| <ul> <li>Workshop</li> </ul> | <ul> <li>Fundraising</li> </ul>         |
| Patrol                       |   |

The activity-related costs include travel, supplies, fuel and miscellaneous.

In addition to capturing cost data related to budget categories and functions, the Model documents the secured and potential cash sources utilized to cover the MPA costs. The exercise of thinking through the current and potential cash sources assists in the long-term planning of the MPA, and helps practitioners understand how they might bridge the gap between need (as defined by the cost inputs) and current available financial resources.

In order to populate the Model, Starling Resources collected relevant work plans, budgets and other reports, and also engaged in meetings with relevant stakeholders. (A full list of references and meeting details can be found in the Appendix 2.)

## 3.3 Assumptions

In order to make the projections over a ten year period (2011-2020), the following financial and economic assumptions were made:

Table 7. Financial & Economic Assumptions

|                         | Assumption | Explanation  |
|-------------------------|------------|--|
| Inflation rate (IDR)    | 4.8%       | Inflation figures are based on the International Monetary Fund       |
| Inflation rate (USD)    | 2.04%      | (IMF) outlook from 2011-2015. For cost projection purposes, the      |
|                         |            | inflation in the output currency is referenced to reflect purchasing |
|                         |            | power parity (PPP).  |
| Annual salary raise     | 5.0%       | Personnel (staff and contractors) receive yearly salary increases to |
|                         |            | reflect inflation and performance.                                   |
| Exchange rate (IDR/USD) | 9,123      | Average exchange rate from 1/1/10 to 12/31/10.                       |

## 3.4 Process

In the SSME, the Model was utilized to capture the costs and resources (e.g., revenue and funding) for two MPAs: Berau KKP and BNP. Information was collected from existing work plans, budgets, other reports and through interviews with relevant partners. See Appendix 2 for a full list of interviewees.

## 4. Berau Marine Conservation Area, East Kalimantan

#### **Sections**

- Overview
- Legal & Institutional Framework
- Financial Assessment
- Key Issues and Recommendations
- Conclusion

#### Summary

- The sub-national, 1.2 million hectare Berau Marine Conservation Area (KKP) was declared by the local government in 2005.
- As a newly established conservation area, governance, undefined boundaries and legal set up are among the issues that need to be understood up front.
- A Berau Joint Marine Secretariat was established through an agreement between the *kabupaten* Berau, WWF, The Nature Conservancy and other partners.
- The cost to manage the Berau KKP in 2011 is \$534,079. Over the projection period of 2011-2020, the average cost per year is \$685,382.
- Current finance/revenues consist primarily of funding sourced by the NGO partners (approximately US\$400,000 per year) and a small amount from the government.
- The net funding required is fairly minimal in the short-term but then increases significantly after 2013; the net funding required averages US\$31,044 between 2011 and 2013 and US\$643,693 between 2014 and 2020.
- Cost reduction opportunities include transferring economic development responsibilities to PT Berau Coal and over time and transferring Tourism Management responsibilities to the Tourism Industry.
- Financing options span government, donor and market-driven. Efforts to increase government direct allocations as well as policies supportive of MPAs retaining self-generated revenue (e.g., fisheries taxes, entrance fees) should be the priorities.

## 4.1 Overview

Located in East Kalimantan, Indonesia in the *kabupaten* (regency) of Berau, the 1.2 million ha Berau *Kawasan Konservasi Perairan* (KKP, Marine Conservation Area) was declared by the local government in 2005. The Berau KKP encompasses a diverse range of marine ecosystems—from mangroves and sea grass beds to coral reefs. The 31 islands possess one of the highest levels of coral diversity in Indonesia. In addition, the area is the largest feeding and nesting ground for green turtles in all of Southeast Asia.

The Starling team worked with the Berau KKP Steering Committee for Collaborative Management, the Fishery Agency of Berau, and the *Balai Konservasi Sumber Daya Alam* (BKSDA, the Nature Conservation Agency at the *kabupaten* level), as well as the Joint Program<sup>10</sup> to understand the current status of the

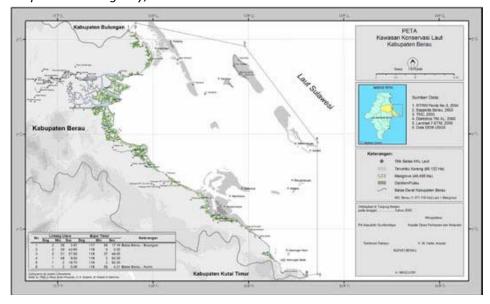
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<sup>&</sup>lt;sup>9</sup> Berau Kabupaten Decree #31/2005.

<sup>&</sup>lt;sup>10</sup> The Joint Program is composed of the World Wide Fund for Nature (WWF) and the Nature Conservancy (TNC).

specific cost and revenues for the Berau KKP and to project future needs. We also sought to understand the management issues and options for sustainable finance. While the focus has been on the Berau KKP, many of these issues and recommendations are applicable to other sub-national (e.g., KKP and KKLDs) in Indonesia.



Map 1. Berau Regency, East Kalimantan

The Berau KKP declaration was the result of efforts by several government and partner stakeholders. A Steering Committee for Collaborative Management<sup>11</sup> was established in May 2004 between government and non-government partners to facilitate completion and socialization of the draft of local government regulation (*Perda*) on the community based integrated management of coastal area resources in the *kabupaten* Berau. The Steering Committee for Collaborative Management consists of:

- Head of the Marine and Fisheries Agency (DKP), Kabupaten Berau (Chairman)
- Head of Local Development Planning Agency (Bappeda), Kabupaten Berau (Vice Chairman)
- Head of Marine & Fisheries Agency (DKP), Kabupaten Berau (Secretary)
- Marine and Fisheries Agency (DKP), Kabupaten Berau
- Local Development Planning Agency (Bappeda), Kabupaten Berau
- Culture and Tourism Agency, Kabupaten Berau
- Environmental Monitoring Agency, Kabupaten Berau
- Nature Conservation Agency (BKSDA), Berau Unit
- Forestry Agency, Kabupaten Berau, and
- NGOs, including WWF, TNC, Bestari, Kalbu, Mitra Pesisir, & KEHATI.

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<sup>&</sup>lt;sup>11</sup> The Berau KKP Steering Committee for Collaborative Management (Tim Pengarah Pengelolaan Sumberdaya Pesisir dan Laut Kabupaten) was established based on Bupati Decree No225/2004.

A Berau Joint Marine Secretariat was further established through a Memorandum of Understanding (MoU) among the Berau government authorities and their conservation partners at the Joint Program. <sup>12</sup>

## 4.2 Legal & Institutional Framework

There are a number of issues with regards to the Berau KKP institutional and legal framework that need to be understood up front. While it was declared a KKP in 2005, its formal legal status, as recognized by the central government, is not yet determined. This is due to a number of issues, including the fact that not all of this 1.2 million ha is under *kabupaten* authority; approximately 300,000 ha is under *kabupaten* authority and 900,000 ha is under provincial and central government authority. The MMAF would like the entire 1.2 million ha to be classified as a KKP but the local government proposes to reduce the area of the KKP to 300,000 so that it lies only within their jurisdiction.

Further complicating the issue of size is the fact that two islands in the proposed Berau KKP have previously been established as conservation areas under central government jurisdiction (managed by BKSDA East Kalimantan), including Semama Island as a Nature Reserve and Sangalaki Island as a Tourism Park. The total area is small – representing only 500 ha – yet these islands attract the majority of the tourists within the Berau KKP. Tourism activity fees in Semama Island and Sangalaki Island (entrance, diving, snorkeling, video making, photo taking, etc.) are collected by BKSDA and all fees collected are transferred to the central government. The current entrance fees for visiting the two Islands are IDR2,000 (domestic tourists) and IDR15,000 (international tourists).

In addition to an unclear legal status, there is no formal management unit or management plan in place. The existing Berau KKP Steering Committee for Collaborative Management serves as an advisory board rather than as an independent management body with the mandate to manage the Berau KKP. The new Berau *kabupaten* head is proposing the formation of Berau KKP manager that is dominated by a government agency. NGO partners currently resist this idea and suggest that the composition should be more balanced between government and civil society; the NGOs want to avoid the problems that have arisen in Bunaken National Park (see next chapter). Efforts to develop these have been underway since 2008. It is currently expected that the MPA management unit will be established by 2013 (e.g., by the end of the current work plan that will end in 2013).

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<sup>&</sup>lt;sup>12</sup> The Steering Committee was established based on a Berau Regent Decree No. 225/2004. The steering committee is mandated to facilitate and socialize district regulations on integrated coastal resources management, facilitate the formation of a Joint Committee for the management of a marine protected area, and serve as a communications, consultation and coordination vehicle in integrated coastal and marine management. The Team comprises the regent of Berau, deputy regent of Berau, district secretary, head of the Berau Office for Fisheries and Marine Affairs, Head of the District Planning Office, tourism and cultural office, Bapelda Berau, BKSDA Berau, Berau Forestry office, and Joint Secretariat consisting of NGOs Bestari, Kalbu, Mitra Pesisir, WWF, TNC and Kehati.

<sup>13</sup> Ministery of Agriculture decree number 604/Kpts/Um/8/1982.

As noted above, the Berau Joint Marine Secretariat was established through an agreement between the *kabupaten* Berau, WWF, and The Nature Conservancy (TNC) and other partners (CRMP II/Mitra Pesisir, Kehati, Bestari, and Kalbu). Currently, only TNC and WWF are still active in this Secretariat.<sup>14</sup>

Currently, the Joint Program has 16 staff and maintains the following four programs:

- · Management Planning and Design,
- Surveillance on-Site Management,
- Outreach & community empowerment, and
- Impact monitoring for Adaptive Management.

There are several entities involved in the implementation of the Berau KKP, including the Joint Program, government and contractors. For the purpose of the cost data and projects presented in this chapter, it was also assumed that the staff presented in the table below will be in place in 2013 and beyond.

Table 8. Berau KKP Staff and Contractors

| Category                   | Start year | Title   |   |
|----------------------------|------------|---|---|
| Management Unit            | 2013       | <ul> <li>Executive Director</li> <li>Finance Manager</li> <li>Research &amp; Surveillance Manager</li> <li>Business Manager</li> </ul>  | <ul> <li>Personnel and Administration         Manager     </li> <li>Community Development         Manager     </li> </ul>   |
| Joint Program<br>(WWF-TNC) | 2011       | <ul> <li>Project Leader</li> <li>Turtle Program Coordinator</li> <li>Policy Coordinator</li> <li>Finance &amp; Administration<br/>Coordinator</li> <li>Monitoring Officer</li> <li>Community Empowerment<br/>Coordinator</li> </ul> | <ul> <li>Administration &amp; Finance Officer</li> <li>Fisheries Officer</li> <li>Socio-economic Officer</li> <li>Administration Assistant</li> <li>Speedboat R2R Captain</li> <li>Speedboat Pesut Berau Captain</li> <li>Boat Assistance (2)</li> <li>FSS Captain</li> <li>FSS Crew (4)</li> </ul> |
| Government                 | 2011       | <ul> <li>Head of Fishery Agency (DKP)</li> <li>Secretary of Fishery Agency</li> <li>Department Head of Marine and Fishery Resources</li> <li>Department Head of Personnel</li> </ul>  | <ul> <li>Department Head of Finance</li> <li>Section Head of Conservation<br/>and Coastal Area Development</li> <li>Section Head of Monitoring and<br/>Control</li> <li>Section Head of Data and<br/>Statistics</li> </ul>  |
| Contractors                | 2011       | Legal Aid Consultant  |   |

 $<sup>^{\</sup>rm 14}$  It is expected that TNC will be exit from the joint program in 2011.

#### 4.3 Financial Assessment

A financial assessment was conducted to understand the costs to achieve a basic level of conservation objectives. A review of secured resources, including funding and revenue, were also documented to calculate the net funding required (e.g., the gap between the costs and resources). The data regarding costs and resources was captured through a review of available budgets and plans, as well as structured interviews. A full list of interviews conducted is included in Appendix 2.

#### Costs

Utilizing current cost structures as well as estimates of future plans, the cost to manage the Berau KKP in 2011 is \$534,079. Over the projection period of 2011-2020, the average cost per year is \$685,382.

The personnel costs in 2011 and 2012 are around \$250,000 per year and then when the Management Unit starts in 2013 the average personnel expenditure raises to \$391,000 per year. The use of contractors is assumed be quite minimal and only account for approximately \$1,400 per year. Capital asset requirements vary depending on when the current assets were purchased as well as whether or not additional assets are required; the capital asset investment requirements range from \$9,000 in 2011 to \$282,000 in 2016.

Asset maintenance, fuel and occupancy costs remain consistent over time and only increase by inflation. Travel needs depend on the level of activity assumed and generally decline over time. Similarly, supply and materials requirements also depend on the level of activity assumed and also decline over time. Miscellaneous costs, including insurance and fees, incentive payments for BKSDA staff, and activity-related costs, varies from year-to-year, primarily depending on the miscellaneous activity cost requirements.

Table 9. Berau KKP Costs by Budget Category

|                      | <u>2011</u> | 2012      | 2013      | <u>2014</u> | <u>2015</u> | <u>2016</u> | 2017      | <u>2018</u> | <u>2019</u> | 2020      |
|----------------------|-------------|-----------|-----------|-------------|-------------|-------------|-----------|-------------|-------------|-----------|
|                      | \$534,079   | \$559,347 | \$826,124 | \$711,283   | \$746,606   | \$851,464   | \$618,790 | \$630,552   | \$657,616   | \$717,962 |
| Personnel            | \$242,185   | \$254,294 | \$411,449 | \$432,022   | \$453,623   | \$331,897   | \$348,492 | \$365,917   | \$384,213   | \$403,423 |
| Contractors          | \$1,096     | \$1,151   | \$1,208   | \$1,269     | \$1,332     | \$1,399     | \$1,469   | \$1,542     | \$1,619     | \$1,700   |
| Capital Assets       | \$9,034     | \$22,234  | \$94,924  | \$19,882    | \$40,397    | \$282,213   | \$28,061  | \$17,413    | \$21,093    | \$57,033  |
| Asset Maintenance    | \$22,657    | \$23,119  | \$23,591  | \$24,072    | \$24,563    | \$25,064    | \$25,575  | \$26,097    | \$26,629    | \$27,173  |
| Fuel                 | \$27,184    | \$27,738  | \$28,304  | \$23,990    | \$24,480    | \$24,979    | \$25,489  | \$26,009    | \$26,539    | \$27,081  |
| Occupancy            | \$31,678    | \$32,324  | \$32,983  | \$33,656    | \$34,343    | \$35,043    | \$35,758  | \$36,488    | \$37,232    | \$37,992  |
| Travel               | \$69,006    | \$66,645  | \$93,912  | \$53,481    | \$51,957    | \$42,007    | \$42,864  | \$43,739    | \$44,631    | \$45,541  |
| Supplies & Materials | \$63,194    | \$62,666  | \$65,913  | \$57,999    | \$53,241    | \$50,477    | \$51,507  | \$52,558    | \$53,630    | \$54,724  |
| Miscellaneous        | \$68,045    | \$69,176  | \$73,840  | \$64,912    | \$62,671    | \$58,384    | \$59,575  | \$60,790    | \$62,030    | \$63,296  |

Table 10. Berau KKP Costs by Function

|                                 | <u>2011</u> | <u>2012</u> | <u>2013</u> | <u>2014</u> | <u>2015</u> | <u>2016</u> | <u>2017</u> | <u>2018</u> | <u>2019</u> | <u>2020</u> |
|---------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
|                                 | \$534,079   | \$559,347   | \$826,124   | \$711,283   | \$746,606   | \$851,464   | \$618,790   | \$630,552   | \$657,616   | \$717,962   |
| Policy & Planning               | \$57,238    | \$54,958    | \$76,864    | \$60,396    | \$56,974    | \$29,254    | \$21,232    | \$21,463    | \$23,275    | \$23,225    |
| Design & Zoning                 | \$34,824    | \$32,845    | \$53,744    | \$36,221    | \$31,693    | \$29,254    | \$21,232    | \$21,463    | \$23,275    | \$23,225    |
| Enforecement                    | \$104,944   | \$116,551   | \$148,720   | \$124,139   | \$155,475   | \$297,919   | \$140,725   | \$136,138   | \$140,345   | \$176,186   |
| Science & Monitoring            | \$141,120   | \$153,641   | \$193,322   | \$158,598   | \$163,645   | \$161,853   | \$147,354   | \$151,976   | \$156,753   | \$162,426   |
| Education, Comm & Comm Eng      | \$96,474    | \$98,654    | \$159,065   | \$136,526   | \$136,566   | \$125,126   | \$112,072   | \$114,991   | \$119,588   | \$131,098   |
| Economic Development            | \$19,759    | \$20,233    | \$35,663    | \$28,401    | \$29,062    | \$48,236    | \$25,420    | \$25,308    | \$26,574    | \$27,247    |
| Tourism Management              | \$6,371     | \$6,690     | \$22,617    | \$23,748    | \$24,936    | \$19,532    | \$20,509    | \$21,534    | \$22,611    | \$23,741    |
| Administration & Financial Mgmt | \$73,348    | \$75,776    | \$136,129   | \$143,256   | \$148,255   | \$140,289   | \$130,246   | \$137,679   | \$145,195   | \$150,814   |
| Other                           | -           | -           | -           | -           | -           | -           | -           | -           | -           | -           |

#### **Activities**

A range of activities across each of the functional components are currently being implemented by the partners. The activities implemented by the Joint Program and Yayasan Penyu Berau were captured through in-person interviews and review of existing work plans. The 2011 activity-related costs amount to \$223,495 and average \$198,103 over the projection period.

Table 11. Berau KKP Costs by Activity Type

|                        | <u>2011</u> | 2012      | 2013      | 2014      | <u>2015</u> | <u>2016</u> | 2017      | <u>2018</u> | <u>2019</u> | 2020      |
|------------------------|-------------|-----------|-----------|-----------|-------------|-------------|-----------|-------------|-------------|-----------|
|                        | \$223,495   | \$222,210 | \$257,872 | \$196,201 | \$188,083   | \$171,494   | \$174,992 | \$178,562   | \$182,205   | \$185,922 |
| Office/field Operation | \$57,659    | \$58,836  | \$91,165  | \$54,361  | \$43,349    | \$41,444    | \$42,289  | \$43,152    | \$44,032    | \$44,931  |
| Meeting                | \$44,329    | \$42,767  | \$43,640  | \$42,218  | \$43,079    | \$34,118    | \$34,814  | \$35,524    | \$36,249    | \$36,989  |
| Training               | \$4,001     | \$2,796   | \$2,853   | \$2,911   | \$2,971     | \$3,031     | \$3,093   | \$3,156     | \$3,221     | \$3,286   |
| Workshop               | \$15,916    | \$14,149  | \$14,437  | \$13,998  | \$14,284    | \$11,022    | \$11,247  | \$11,477    | \$11,711    | \$11,950  |
| Patrol                 | \$16,284    | \$16,616  | \$16,955  | \$17,301  | \$17,654    | \$18,014    | \$18,381  | \$18,756    | \$19,139    | \$19,530  |
| Survey/Monitoring      | \$65,624    | \$66,963  | \$68,329  | \$44,501  | \$45,409    | \$46,335    | \$47,280  | \$48,245    | \$49,229    | \$50,233  |
| Demarcation            | -           | -         | -         | -         | -           | -           | -         | -           | -           | -         |
| Reporting              | \$2,137     | \$2,181   | \$2,226   | \$2,271   | \$2,317     | \$2,365     | \$2,413   | \$2,462     | \$2,512     | \$2,563   |
| Fundraising            | -           | -         | -         | -         | -           | -           | -         | -           | -           | -         |
| Other                  | \$16,996    | \$17,343  | \$17,697  | \$18,058  | \$18,426    | \$15,164    | \$15,474  | \$15,789    | \$16,112    | \$16,440  |

Table 12. Berau KKP Activity Costs by Function

|                                 | 2011      | 2012      | <u>2013</u> | 2014      | <u>2015</u> | <u>2016</u> | 2017      | <u>2018</u> | <u>2019</u> | 2020      |
|---------------------------------|-----------|-----------|-------------|-----------|-------------|-------------|-----------|-------------|-------------|-----------|
|                                 | \$223,495 | \$222,210 | \$257,872   | \$196,201 | \$188,083   | \$171,494   | \$174,992 | \$178,562   | \$182,205   | \$185,922 |
| Policy & Planning               | \$26,658  | \$23,636  | \$28,555    | \$18,046  | \$13,978    | \$4,353     | \$4,442   | \$4,533     | \$4,625     | \$4,719   |
| Design & Zoning                 | \$22,109  | \$20,281  | \$25,131    | \$14,552  | \$10,413    | \$4,353     | \$4,442   | \$4,533     | \$4,625     | \$4,719   |
| Enforecement                    | \$23,960  | \$24,449  | \$24,948    | \$25,456  | \$25,976    | \$26,506    | \$27,046  | \$27,598    | \$28,161    | \$28,736  |
| Science & Monitoring            | \$75,584  | \$77,126  | \$78,700    | \$55,083  | \$56,207    | \$57,354    | \$58,524  | \$59,717    | \$60,936    | \$62,179  |
| Education, Comm & Comm Eng      | \$62,716  | \$63,995  | \$87,556    | \$69,816  | \$67,992    | \$65,742    | \$67,083  | \$68,451    | \$69,848    | \$71,272  |
| Economic Development            | \$8,522   | \$8,696   | \$8,874     | \$9,055   | \$9,239     | \$9,428     | \$9,620   | \$9,816     | \$10,017    | \$10,221  |
| Tourism Management              | -         | -         | -           | -         | -           | -           | -         | -           | -           | -         |
| Administration & Financial Mgmt | \$3,946   | \$4,027   | \$4,109     | \$4,192   | \$4,278     | \$3,759     | \$3,836   | \$3,914     | \$3,994     | \$4,075   |
| Other                           | -         | -         | -           | -         | -           | -           | -         | -           | -           | -         |

#### **Key cost drivers**

Key cost drivers for the Berau KKP include the following:

- Personnel costs account for approximately 50% of total costs over the projection period.
- Science & Monitoring represent the largest functional focus, accounting for about 25% of total costs.
- Capital assets are relatively new and additional short-term needs are minimal. Several assets will need to be replaced in 2016 which will require approximately \$282,213.
- Activity costs are driven by supplies & materials and travel requirements. The activity type requiring
  the largest budget is survey/monitoring followed by office/field operation. At a functional level,
  Science & Monitoring and Education, Communication & Community Engagement represents the
  largest focus areas in terms of cost.

#### Resources

Current resources, including funding and revenue, consist primarily of funding sourced by the NGO partners through a number of donors as well as a small amount from the government. The Joint

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<sup>&</sup>lt;sup>15</sup> It was not possible to secure activity-level costs for the government or Yayasan Penyu Berau.

Program coordinates most of the existing funds from donors. A list of these sources for 2010 is provided in Table 13.

Table 13. Primary Donor finance for Berau KKP in 2010

| Donor source 2010  | Amount (US\$) |  |  |  |  |
|--------------------|---------------|--|--|--|--|
| TNC                | 168,000       |  |  |  |  |
| DANIDA             | 101,836       |  |  |  |  |
| Packard Foundation | 81,400        |  |  |  |  |
| WWF Netherlands    | 71,561        |  |  |  |  |
| Total              | 422,797       |  |  |  |  |

In terms of projecting the funding and revenue for 2011 and beyond, a number of assumptions were made. In regards to the Joint Program, it was assumed that all costs would be covered by donors through 2013, the timeframe of which the Program has currently committed; the amount of money that the Joint Program has effectively committed to is US\$486,989, US\$493,176 and US\$742,308 in 2011, 2012 and 2013. This money will likely come from a range of international foundations and bi/multilaterals.

Yayasan Penyu Berau anticipates a total budget of IDR 45 million in 2011. It is assumed that they do not have any funding beyond 2011.

In terms of the government, it was assumed that the funding amounts to the total personnel costs as well as the amount required for asset repurchases over the projection period. This assumption was made because the only costs assumed in the model are those related to personnel and assets (other data was not available).<sup>16</sup>

A summary of the projected government and donor funding are presented in Table 14.

Table 14. Berau KKP Resources by Type

|            | <u>2011</u> | <u>2012</u> | <u>2013</u> | <u>2014</u> | <u>2015</u> | <u>2016</u> | <u>2017</u> | <u>2018</u> | <u>2019</u> | 2020     |
|------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|----------|
|            | \$509,835   | \$528,232   | \$788,351   | \$19,032    | \$47,940    | \$233,520   | \$33,212    | \$20,633    | \$21,054    | \$53,034 |
| Government | \$17,913    | \$35,056    | \$46,042    | \$19,032    | \$47,940    | \$233,520   | \$33,212    | \$20,633    | \$21,054    | \$53,034 |
| Donor      | \$491,922   | \$493,176   | \$742,308   | -           | -           | -           | -           | -           | -           | -        |

## **Net Funding Required**

Given the assumptions regarding current and potential funding and revenue, the net funding required averages US\$31,044 between 2011 and 2013 and US\$643,693 between 2014 and 2020. The large jump between 2013 and 2014 is due to the projected withdrawal of the Joint Program (donor-funded) and entrance of the Management Unit (likely government and donor-funded).

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<sup>&</sup>lt;sup>16</sup> Actual government funding for personnel, capital assets, and other costs in 2010 included: DKP (IDR425 million, approximately US\$46,585) and BKSDA (IDR96 million, or US\$10,522).

Table 15. Berau KKP Financial Summary

|                      | <u>2011</u> | <u>2012</u> | <u>2013</u> | <u>2014</u> | <u>2015</u> | <u>2016</u> | <u>2017</u> | <u>2018</u> | <u>2019</u> | <u>2020</u> |
|----------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Funding & Revenue    | \$509,835   | \$528,232   | \$788,351   | \$19,032    | \$47,940    | \$233,520   | \$33,212    | \$20,633    | \$21,054    | \$53,034    |
| Expenses             | \$525,045   | \$537,113   | \$731,201   | \$691,401   | \$706,210   | \$569,250   | \$590,729   | \$613,138   | \$636,523   | \$660,929   |
| CAPEX                | \$9,034     | \$22,234    | \$94,924    | \$19,882    | \$40,397    | \$282,213   | \$28,061    | \$17,413    | \$21,093    | \$57,033    |
| Net funding required | \$24,244    | \$31,116    | \$37,773    | \$692,251   | \$698,666   | \$617,943   | \$585,577   | \$609,919   | \$636,562   | \$664,929   |

## 4.4 Key Issues and Recommendations

There are several key issues and recommendations from the analysis of the Berau KKP. While the focus has been on the Berau KKP, many of these issues and recommendations are applicable to other KKP and KKLDs in Indonesia.

## **Legal & Institutional**

A significant challenge facing the Berau KKP is that its formal legal status is not yet determined and it is therefore politically weak. A second challenge lies in the design of the governance structure of the management unit that will be responsible for the Berau KKP.

It is recommended that the Joint Program continue to facilitate discussions between the *kabupaten* and MMAF to secure a firm KKP legal status for the full 1.2 million ha area. Once this legal status has been confirmed, the Berau KKP can establish a management unit responsible for managing the KKP. There are four options for the legal set-up of the Berau KKP management unit:

- Private company (PT),
- Local government owned enterprises (Perusda),
- Foundation / NGO (Yayasan), or
- Badan Layanan Umum Daerah (BLUD).

The 2008 Berau KKP Management Plan suggested BLUD as the legal status of the management unit.

**Badan Layanan Umum Daerah (BLUD, Local Public Service Agency)** is a regional working unit (Satuan Kerja Perangkat Daerah, SKPD) or a local technical implementing unit (Unit Pelaksana Teknis Daerah, UPTD) under an SKPD, established to deliver services to the public by providing goods and/or services in a not-for-profit manner. Its operation will be based on efficiency and productivity principles.

There are several key requirements for BLUDs, including that it is:

- Jointly financed by government and investors,
- Managed by professionals who implement an agreed-upon plan (standard operational plan),
- Focused entirely on implementing the plan and does not divert efforts,
- Properly integrated with appropriate government agencies, and
- Fully transparent financially.

There are currently two kinds of regional government service units (SKPD) within local government agencies, the BLUD-SKPD (SKPD which applies the BLUD financial management model or the PPK-BLUD) and the general SKPD (SKPD that does not apply the PPK-BLUD). A comparison between the non-BLUD SKPD and BLUD-SKPD is provided in Table 16.

Table 16. Aspects of Flexibility – comparison between general SKPD and BLUD SKPD

| Aspects of Flexibility                      | SKPD   | BLUD-SKPD  |
|---|--|--|
| Aspects of Flexibility Financial Management | <ul> <li>Revenue deposited in a regional government account (Kas Daerah); not accessible to SKPD</li> <li>May not receive grants</li> <li>May not spend beyond approved budget</li> <li>May not have investments</li> <li>May not to write off assets</li> <li>Financial reports based on Gol accountancy standard (Standar Akuntansi Pemerintah)</li> </ul> | <ul> <li>Revenue deposited in a BLUD account; accessible by SKPD-BLUD</li> <li>May receive grants<sup>17</sup></li> <li>May spend beyond approved budget within certain threshold<sup>18</sup> (flexible budget)</li> <li>Allowed to have investments, based on regional head approval</li> <li>May hold long term debt with approval of the head of region</li> <li>May write off non-fixed assets</li> <li>Financial reporting based on Generally Accepted Accounting Principles/GAAP and Gol</li> </ul> |
| Staffing                                    | All are civil servant government employees   | <ul> <li>accountancy standard (Standar Akuntansi Keuangan)</li> <li>Both civil servant government employees and non-civil servant employees, with an exception for the post of Financial Officer which must be civil servant.</li> </ul>   |
| Partnership                                 | Not allowed to initiate partnership  | Allowed to establish partnerships with other entities  |
| Procurement                                 | Must comply with Presidential Decree<br>80/2003 (regulated bidding)  | Use of non-APBN fund for procurement does not have to comply with Presidential Decree 80/2003  |
| Governance                                  | No Board   | Supervisory Board recruitment<br>based on assets (>Rp75 billion) and<br>or revenue (>Rp15 billion)   |
| Remuneration                                | Based on government civil-servant<br>employee standard   | While civil servant remuneration is<br>in line with government civil-  |

 $<sup>^{17}</sup>$  According to MoHA Regulation 61/2007 Chapter X Article 60 and 61, BLUD can receive grants, both conditional and unconditional.

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<sup>&</sup>lt;sup>18</sup> The percentage of the threshold is proposed by the Head of BLUD, reviewed by TAPD (The Regional Government Budgeting Team) and approved by the PPKD (The Regional Financial Management Office). The threshold is calculated based on the BLUD financial performance over the last three years.

|                         |   |  |   | servant employee standards, it may |
|-------------------------|---|--|---|------------------------------------|
|                         |   |  |   | vary based on the size of overall  |
|                         |   |  |   | assets and revenues                |
| Establishment of Tariff | • | Based on <i>Perda</i> (Regional Regulation). | • | Based on appropriate regulation.   |

While the BLUD mechanism offers a way for the Joint Program to transfer some of its staff to essentially a public-private effort, there are several issues that must be understood. Among these are that BLUD requires:

- A complicated 1-2 year establishment process,
- Government financing at the beginning but generally aims to reduce government financing over time as other sources of revenue are secured,
- Donor grants to be classified as "revenue" but use of this money can be restricted during the early years if the BLUD is only given "partial BLUD" status,
- All revenue must be integrated into the provincial or national budgets, meaning that donor funding must channel through government budgets before (potentially) being utilized within the KKP, and
- Annual GAAP and GoI audits, but not third party audits.

The flow and use of donor funds within the BLUD mechanism are of primary concern, as is the fact that government financing generally declines over time. In the case of other BLUDs, namely hospitals and educational facilities, these issues are less critical as they have clear revenue streams, but for KKPs that are located in remote areas with limited revenue potential, this could pose a significant barrier to long-term sustainability. That said, the BLUD mechanism requires that civil servant salaries be paid for by the government, ensuring consistent staff, and that "stipends" may also be paid to further incentivize them. The BLUD mechanism also allows it retain all revenues under its authority (e.g., entrance fees).

The Berau KKP Steering Committee for Collaborative Management is still studying the process of the establishment of a BLUD-designated agency. It will be important to further understand the operational and finance issues of BLUD before fully committing to development of this model for the management unit (see Appendix 6 for a further review of some of these issues).

## Sustainable Financing

As noted earlier, the projected net funding required averages US\$31,044 between 2011 and 2013 and US\$643,693 between 2014 and 2020. This need will need to be met from a variety of government, donor and market-driven sources. Cost reduction would also result in a lower net funding required. Opportunities for cost reduction as well as financing sources are reviewed further below.

## **Cost Reduction Opportunities**

There are a number of opportunities for the Berau KKP to reduce its costs. These reductions would both reduce the net funding required as well as allow existing resources to focus on the most critical areas requiring attention.

## Engage with PT Berau Coal and transfer economic development responsibilities over time

PT Berau Coal is a coal company operating in the district. Since 2000, PT Berau Coal has been active in community development through its foundation, Yayasan Dharma Bhakti Berau Coal. This initiative, called ComDev, was driven top-down with seed funding for the foundation coming from the Corporation. The Corporate Support Director oversees the program and is also Chairman of the foundation. The ComDev department has a manager, coordinator, 3 community officers, and 3 community development support officers. All employees are currently paid for by the company, though eventually the foundation will fund them. The ComDev's funding sources come directly from the company and from voluntary employee contributions. The contribution by PT Berau Coal is determined by a donation of 7 cents per ton of coal produced each year, which is equivalent to the reclamation tax required by the Indonesian government.

The foundation's goal is to empower communities to improve their welfare through a strategy that transitions from initial corporate giving to ultimate self-reliance. Its timeframe over 20 years is to seed self-reliance through: giving (years 0-5), involvement (years 6-10), sharing (years 11-15), and participation (years 16-20). Working in 29 villages, it focuses on 4 areas: 1) education and science; 2) health and nutrition; 3) environment; and 4) social contribution (e.g., infrastructure and sustainable livelihoods). Its sustainable livelihood programs, which currently benefit 110 community groups, range from the establishment of agriculture, aquaculture and poultry cooperatives to training and marketing support for ancillary community goods and services (e.g. tailoring clothes, river transportation). It has also established a micro-finance loan administered by BRI at a minimal interest rate of 4%.

Given the direct and indirect impacts of PT Berau Coal's business and foundation activities, the Berau KKP should make an effort to engage the company. Initial areas of discussion could focus on sharing best practices on sustainable livelihood activities and initiating collaborative programs. If the Berau KKP is successful at creating partnerships with PT Berau Coal in sustainable livelihoods, these could develop into more formal funding arrangements. Along the way, the Berau KKP could begin to educate the company on its impacts to downstream watershed services and make the argument that PT Berau Coal should consider supporting marine environments as well, given sediment impacts to water quality, barge traffic, and potential risks of coal spills or accidents in Berau KKP-designated waters. A potential financing mechanism would be to establish a fee for every coal barge that passes through the Berau KKP or for every ton of coal transported through the Berau KKP; money raised from this could be used to fund emergency clean-up efforts in the event of a spill during coal transport or transfer, or could be allocated to economic development opportunities within and around the Berau KKP.

If PT Berau Coal would assume all economic development activities currently included within the Model, this would amount to an average of US\$28,590 per year from 2011 through 2020.

#### Engage with the Tourism Industry and transfer all Tourism Management responsibility

By virtue of their on-the-ground and water presence, tourism operators can share in the responsibility of managing the Berau KKP for very little additional costs. For example, tourism operators can supplement existing efforts by providing:

- Additional enforcement capacity during their normal boating activities (e.g. when they are transporting clients to and from their resorts and dive spots);
- Science and educational activities for clients (e.g. assisting with species identification and teaching proper scuba and snorkeling skills and responsible trash, recycling, and energy use);
- Opportunities for sustainable livelihoods (e.g. employing local residents; purchasing local food, souvenirs, and services; creating student scholarships), and
- Support for implementation of entrance fees (e.g. providing input on entrance fee levels, socializing and assisting with fee collection).

If the Tourism Industry would assume all Tourism Management activities currently included within the Model, this would amount to an average of US\$19,229 per year from 2011 through 2020.

## Sustainable Financing Sources

In addition to careful review and implementation of cost reduction opportunities, it will also be necessary for the Berau KKP to pursue a diverse set of financing sources. According to PP No 60/2007, financing for sub-national MPAs can be secured from the following sources:

- APBN/APBD (state budgets),
- Fisheries sector levies (e.g., fisheries permits, fines and taxes),
- Conservational service fees (e.g., entrance fees, payments for ecosystem services),
- Grants or loans (e.g., donor support), and
- Other legal, non-binding sources (e.g., Corporate Social Responsibility funds).

Table 17 provides a review of the specific sources as well as their feasibility (e.g., measure of likelihood of implementation), potential scale (e.g., measure of funding or revenue potential), sustainability (e.g., measure of long-term consistency of implementation). While each specific source is then reviewed further, it is recommended that the following sources be the focus of financing efforts:

- Government direct allocation (APBN/APBD),
- Market-driven entrance Fees (Semama and Sangalaki Island and the full KKP), and
- Market-driven Fisheries revenue (Permits & Taxes as well as Penalties & Fines).

Table 17. Berau KKP Sustainable Financing Options

| Category   | Source                          | Feasibility | Potential Scale | Sustainability |
|------------|---------------------------------|-------------|-----------------|----------------|
| Government | Direct allocation (APBN/APBD)   | High        | High            | High           |
| Donor      | Foundations                     | Moderate    | Moderate        | Low            |
|            | Bi-lateral / Multi-lateral      | Moderate    | Moderate        | Low            |
| Market-    | Entrance Fees – Semama Island   | High        | Moderate        | Moderate       |
| driven     | and Sangalaki Island            |             |                 |                |
|            | Entrance Fees –KKP              | High        | Low             | Moderate       |
|            | Fisheries Permits & Taxes       | Moderate    | High            | High           |
|            | Fisheries Penalties & Fines     | Moderate    | Moderate        | High           |
|            | Carbon Finance                  | Low         | Moderate        | High           |
|            | Biodiversity Offsets & Payments | Low         | Moderate        | High           |
|            | for Ecosystem Services (PES)    |             |                 |                |
|            | Corporate Social Responsibility | Low         | Low             | Moderate       |
|            | (CSR) Funds                     |             |                 |                |

#### **Government**

In 2010, the government contributed approximately US\$55,000 through DKP and BKSDA. The DKP has requested IDR1.3 billion (approximately US\$142,500) for 2011, though the approved amount will likely be closer to the IDR425 million it received in 2010.

These budget allocation sizes are currently not linked to *kabupaten* revenues (e.g., fisheries tax revenue, entrance fee revenue) or to actual need (e.g., an understanding of the true and necessary costs for the Berau KKP).

Increasing government funding over time will require that the Berau KKP establish a full and recognized – locally and nationally – legal status as a KKP. It will also require that a management unit be established as a BLUD or otherwise, and that this unit has the capacity to:

- Develop management plan budgets,
- Understand how to access government financing,
- Make the case for why specific revenues should remain in their control (e.g., fisheries revenues),
- Secure government financing, and
- Manage budgets and deliver the Berau KKP objectives.

Government support through direct allocations and policies (e.g., regarding the flow of fisheries revenues and entrance fees) should be the main, long-term focus of the Berau KKP financing efforts.

#### Donor

In 2010, TNC and WWF coordinated over US\$400,000 from donors. This amount is set to drop substantially once the Joint Program leaves in 2013, leaving a large funding gap to cover expected costs of the Berau KKP.

In anticipation of this funding gap, it is recommended that the Joint Program pursue increased cofinancing by bi/multilaterals (e.g., USAID/CTI) and align specific long-term objectives with that of the SSME MPA network. Co-financing by bi/multilaterals as well as alignment with the larger SSME MPA network will increase the Berau KKP's international recognition and hopefully secure additional donor support. As government support increases, donor support should gradually and naturally decrease over time.

#### Market-driven

## Entrance Fees - Semama Island and Sangalaki Island

As mentioned earlier, tourism fees in Semama Island and Sangalaki Island (entrance, diving, snorkeling, video making, photo taking, etc.) are collected by BKSDA and all fees collected are transferred to the central government. The current entrance fees for visiting the two Islands are IDR 2,000 (domestic tourists) and IDR 15,000 (international tourists).

Two issues should be address: the fee level and the flow-of-funds. In terms of the fee level, a willingness-to-pay survey should be conducted to refine the system. Specific steps include:

- 1. Establish a willingness-to-pay figure,
- 2. Establish an appropriate entrance fee schedule which accommodates such a willingness-to-pay figure, and yields meaningful revenues,
- 3. Invest necessary authority in the appropriate body to manage entrance fee collection, and
- 4. Determine the allocation of entrance fee revenue among the relevant agencies who will be contributing to MPA management (e.g., local, regional and national governments).

The tourism fee structure in Raja Ampat, West Papua, Indonesia should be referenced as a potential model. In this case, the entrance fee is IDR 500,000 (approximately US\$55) for foreign visitors and IDR 250,000 (approximately US\$28) for domestic visitors. Looking more closely at the foreign visitor fee, IDR 150,000 represents the tourism management fee and enters the coffers of the Raja Ampat tourism department and is targeted at improving tourism management in Raja Ampat. The remaining IDR 350,000 goes towards conservation and community development: 40% for community development fund for activities within the 92 villages/sub-villages in Raja Ampat, 40% for the conservation and enforcement fund, and 20% for management of the fee system.

In terms of the flow-of-funds issue, efforts should be made to understand how the Berau KKP could retain the revenues rather than send them to the central government.

#### Entrance Fees - KKP

An entrance fee mechanism should be developed for the full KKP using the same approach as described above. In addition, the KKP will also need to further understand how the current existence of fees for both Semama and Sangalaki Island influence the ability for the full KKP to implement a separate fee.

If an entrance fee is to be developed, its success is dependent on cooperation between tourism operators and the Tourism Department to provide and collect tourism arrival information and monies.

#### Fisheries Permits & Taxes

The one-year permit prices differ depending on the origin of the boat (e.g., domestic or foreign), the type of boat (e.g., shrimp trawling, tuna long line), and the boat weight (e.g., gross tonnages). For domestic boats the price ranges from IDR 10,000 to IDR 109,500 per gross ton. For foreign boats the per gross tonnage price ranges from US\$54 to US\$247.<sup>19</sup>

It is advised that these permit prices be reviewed further, including comparison of these fees with those of other countries. Depending on the findings, it may be recommended that the GoI consider increasing these amounts.

According to a review of the 2006 Berau budget, fisheries tax collection amounted to IDR 112 million (approximately US\$12,277). It is assumed that the bulk of this tax revenue was from the primary fisheries in Berau: grouper and pomfret (bawal). Using the tax rate of 2%, this implies a fisheries industry value of IDR 5.6 billion (approximately US\$613,833). There are three issues that need to be addressed regarding fisheries taxes:

- 1. Tax structure,
- 2. Leakage of tax revenue to other districts, and
- 3. Flow of tax revenue to central government.

The current structures for the primary fisheries in Berau are described below for both local (from district) and non-local (from outside of the district) fishermen:

- Local: The process of tax collection for grouper occurs at the end of a long and complicated supply chain: local fishermen sell their fish to middlemen/traders who hold the fish in live cages; outside fishing boats then purchase the fish from the live cages. These live cages are located close enough to the Fisheries Department post station so that the Fisheries Officer can see when the sale is occurring. The Fisheries Officer then goes out to the live cages, the point of sale, to record the value of the sale and calculate the 2% tax payment, which is applied to the approximate value of the total boat capacity. In the case of boats for bawal, the Fisheries Department assumes that they can collect a total fish value of 1,200,000 rupiah, so the Fisheries Department collects 25,000 rupiah from every bawal boat.
- Non-local: The Fisheries Department allows 50 of their boats per fishing cycle, of which there are 2 cycles per month: dark moon (issued blue card) and full moon (issued orange card). When the outside fishermen arrive in Berau, they are supposed to report to the Fisheries Department to pay the 2% tax. And because it is assumed that they already have a permit to fish from their own area, they do not need to purchase a permit from Berau.

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<sup>&</sup>lt;sup>19</sup> Ministerial Decree 22/Men/2004.

A progressive tax system would increase tax rates as more fish are caught; this would serve to discourage excessive fishing and force fishermen to make rational decisions to undertake marginal fishing trips. A tax that increases as catch volume increases forces the fisherman to re-consider his decision to fish as much as he possibly can; he would need to balance the trade-off between the extra money he would receive by selling more fish against the cost to fish longer and the additional taxes he would pay.

In terms of leakage, it appears that Berau is losing potential fisheries tax revenue to other districts. According to the United Nations Food and Agricultural Organization (UN FAO), East Kalimantan's contribution to Indonesia's fishery on a production tonnage basis in 2004 was 3.44%. The value of Indonesia's capture fisheries in 2004 was \$3.1 billion on 4.5 million tons, implying the value of East Kalimantan's fisheries was \$108 million (if it can be assumed that prices per ton in East Kalimantan were not significantly different from average prices for the rest of Indonesia). Comparing this to the implied \$615,000 value of Berau's fisheries (derived from the IDR 112 million in tax revenues) means that Berau contributed just a little over half a percentage point to East Kalimantan's fishing industry. This low value is likely due to leakage to other districts, especially Tarakan. Moving forward, it will be important for the Berau KKP to ensure that it secures their fair and appropriate share of tax receipts. Actual implementation of this, however, will be difficult as most taxes are levied at the point of landing and boats generally proceed from Berau (where they capture fish) to Tarakan (where they unload the fish).

In terms of the issue regarding the flow-of-revenue, it currently flows to the central government and is then re-allocated to sub-national governments as part of the yearly budgeting process. However, there is no direct link between sub-national revenues (e.g., fisheries tax revenue) and sub-national budgets (e.g., budget allocated by the central government).

The NGOs should coordinate a review of the current laws (particularly UU 31 and 27) and design a pilot effort to secure revenue from the fisheries sector. This would likely need to be a multi-year effort.

#### Fisheries Penalties & Fines

To enforce against Illegal, Unreported and Unregulated (IUU) fishing, the Fisheries Department requires fishermen to possess fishing permits and to properly report their landings. According to Fisheries Law 45/2009, there are a number of fines, including:

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<sup>&</sup>lt;sup>20</sup> It is important to note that fisheries tax revenue is ultimately sent to the central government and there is no direct link between the revenue and the ultimate government yearly allocation to the *kabupaten* governments (this will be discussed in more detail next). That being said, the *kabupaten* government's ability to secure higher allocations from the central government should, in theory, be linked to their level of revenue (e.g., fisheries tax revenue).

<sup>&</sup>lt;sup>21</sup> FAO. http://www.fao.org/fi/oldsite/FCP/en/idn/profile.htm.

Table x. Example Fisheries Fines (according to UU 45/2009)

| Infraction  | Fine                                     |  |  |
|---|--|--|--|
| Any person who knowingly possesses, controls, carrying, and / oruse | Punished with a maximum                  |  |  |
| of fishing equipment and / or fishing tools that disrupt and damage | imprisonment of 5(five) years and a fine |  |  |
| the sustainability of fish resources in fishing vessels in the      | of not more IDR 2 billion.               |  |  |
| fishery management area.  |  |  |  |
| Any person who operates the Indonesian-flagged fishing vessel in    | Punished with imprisonment of 6 years    |  |  |
| the fishery management area of the Republic of Indonesia, which     | and a fine of not more IDR 2 billion.    |  |  |
| does not carry the original permit.                                 |  |  |  |
| A person who forged and / or is using a false permit.               | Punished with imprisonment of 7 years    |  |  |
|   | and a fine of not more IDR 3 billion.    |  |  |

While the fines are appropriately high, the actual enforcement of these fines is unknown. It is critical that violators do in fact pay the fine or serve jail time. A deterrent effect can only be created if there is a credible expectation by would-be violators that their actions have real consequences. It does not make sense to spend money on fuel and salaries for enforcement patrols without the sincere intention to punish violators. Fees assessed and collected under this type of enforcement regime would provide revenue for paying for the actual enforcement.

It is recommended that additional analysis be undertaken to understand whether these fines have been assessed and, if so, how the fine receipts are then spent (e.g., do they go to the general government budget or are they allocated to MPA enforcement).

#### Carbon Finance

TNC, in collaboration with the Forestry agency, has developed a working group on REDD. One of the objectives of this working group is to explore the possibility of carbon financing from conserving or rehabilitating the forest, including mangroves. This might be utilized to conserve aspects of the coastal mangroves around Berau. At this point the feasibility of this contributing significantly to financing the Berau KKP is very low.

# Biodiversity Offsets & Payments for Ecosystem Services (PES)

Based on a study conducted by an academic research team from Bogor Agriculture Institute (IPB), there is a possibility to collect environmental service fees from businesses and other users (e.g., water pollution surcharge on the coal mining companies, water transportation tax for vessels travelling through the conservation area, etc.) This is still primarily a theoretical idea; a feasibility assessment regarding actual practical implementation has not been conducted.

Related to the above, an opportunity exists to collaborate with PT Berau Coal on a range of issues (these are discussed in the Cost Reduction Opportunities section).

# Corporate Social Responsibility (CSR) Funds

Based on the new Corporation Law, all corporations have an obligation to allocate CSR funds. There are a few big companies which operated in Berau district, such as PT Berau Coal. Efforts should be made to engage each of these companies.

#### 4.5 Conclusion

A significant challenge facing the Berau KKP is that its formal legal status is not yet determined and it is therefore politically weak. A second challenge lies in the design of the governance structure of the management unit that will be responsible for the Berau KKP.

It is recommended that the Joint Program continue to facilitate discussions between the *kabupaten* and MMAF to secure a firm KKP legal status for the full 1.2 million ha area. Once this legal status has been confirmed, the Berau KKP can establish a management unit responsible for managing the KKP. While a BLUD is likely the best legal structure for the management unit, additional analyses need to take place to fully understand the short and long-term implications of pursuing such a mechanism, particularly related to the level and sustainability of government financing.

Utilizing current cost structures as well as estimates of future plans, the cost to manage the Berau KKP in 2011 is \$534,079. Over the projection period of 2011-2020, the average cost per year is \$685,382. The projected net funding required averages US\$31,044 between 2011 and 2013 and US\$643,693 between 2014 and 2020. This need will need to be met from a variety of government, donor and market-driven sources. Cost reduction would also result in a lower net funding required.

Two cost reduction opportunities identified include transferring some of the Berau KKP functional efforts to private sector parties. It is recommended that PT Berau Coal be engaged and, over time, that they assume responsibility for the Economic Development function. Using current figures, this would reduce the cost to the Berau KKP an average of US\$28,590 per year from 2011 through 2020.

It is also recommended that the Tourism Industry assume responsibility of all Tourism Management functions. Using current figures, this would reduce the cost to the Berau KKP an average of US\$19,229 per year from 2011 through 2020.

In addition to careful review and implementation of cost reduction opportunities, it will also be necessary for the Berau KKP to pursue a diverse set of financing sources. It is recommended that the following sources be the focus of financing efforts:

- Securing government direct allocation (APBN/APBD),
- Improving and implementing market-driven entrance Fees (Semama and Sangalaki Island and the full KKP), and
- Securing market-driven Fisheries revenue (Permits & Taxes as well as Penalties & Fines).

# 5. Bunaken National Park, North Sulawesi

#### **Sections**

- Overview
- Legal & Institutional Framework
- Financial Assessment
- Key Issues and Recommendations
- Conclusion

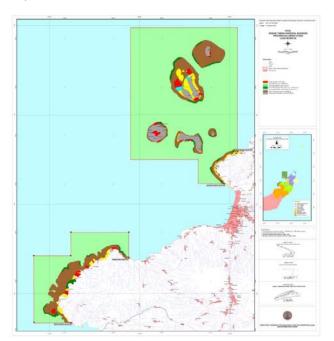
#### **Summary**

- The Bunaken National Park, covering 89,000 ha, is an important conservation area globally with a wide range of coastal and marine ecosystems.
- Since 2000 the *Dewan Pengelolaan Taman Nasional Bunaken* (DPTNB) or the BNP Management Advisory Board (BNPMAB) has been a coordinating and advisory forum for BNP management.
- Ten years after its establishment, the BNPMAB has gained a mixed reputation. To
  those more familiar with the workings of BNPMAB, it is clear that it has not
  reached its full potential in ensuring effective collaborative management in BNP
  as shown by the range of internal management problems that it is currently faces.
- The cost to manage Bunaken in 2011 is US\$1,180,534. Over the projection period of 2011-2020, the average cost is US\$1,417,723/year. Bunaken is assumed to be in a relatively steady-state (e.g., most of the cost increases are strictly due to inflation).
- A fairly large net funding requirement is projected over the next ten years. In 2011 a gap of US\$289,677 is currently projected. The average gap is US\$436,529 per year and is as large at US\$736,511 (2020).
- There are three primary sources of revenue and funding: entrance fees, central government allocations (APBN) and donor. *Balai Taman Nasional* Budget (Ministry of Forestry PHKA) national park budget (from APBD) allocation is approximately IDR 6 billion per year (US\$658,000) each year. Entrance fee annual revenues from tag system are approximately IDR 1.5 billion (US\$164,000) per year. The primary other source of funding come from WWF with approximately IDR 240 million (US\$26,000) each year for the past several years.
- The key issues and problems lie in the poor administration and management of both the BNPMAB (which is unable to fund their full mandate for community work, among other activities) as well as the BNP *Balai* (which lacks effective and adaptive management capacity and now requires a review and overall improvement of the BNP management plan).
- Financing strategy efforts should focus on entrance fee revisions, securing GEF funds, and securing sub-national and additional APBD funds.

#### 5.1 Overview

The BNP is an important conservation area globally with a wide range of coastal and marine ecosystems. Unlike other marine national parks, the BNP is located in close proximity to a large population center. At approximately 89,000 ha, BNP's marine biodiversity and accessible location have presented both opportunities (e.g., marine tourism industry) as well as threats (e.g., stress on ecosystem by multiple

users, etc.). To effectively manage its resources, BNP needs to balance its conservation and socioeconomic goals and secure full support from its stakeholders.



Map 2. Bunaken National Park, North Sulawesi

The Starling team worked with the key stakeholders including the Bunaken National Park Management Advisory Board, the *Balai Taman Nasional Bunaken* (National Park office), *Dinas Kelautan dan Perikanan* (Marine and Fisheries Agency), and the local tourism agency, as well as staff from WWF to understand the current status of the specific cost and revenues for the National Park and to project future needs. We also sought to understand the management issues and options for sustainable finance.<sup>22</sup>

# **5.2 Legal & Institutional Framework**

The *Balai Taman Nasional or Balai* (Bunaken National Park Authority) is the park management authority under the Ministry of Forestry.<sup>23</sup> The Balai has 68 staff, including 27 rangers, and two main programs: Natural Resources Protection and Conservation (conservation area management, biodiversity and species conservation, and forest protection and conservation, as well as improvement of quality and access to natural resource information (forests, institution and ecotourism)).

<sup>&</sup>lt;sup>22</sup>On August 11, 2010 Team convened a consultations meeting Manado with the Bunaken National Park Management Advisory Board (BNPMAP) and followed by an in-depth interview on 12-13 August 2010 with key stakeholders who attend the consultation meeting as well as who didn't attend the meeting. Lists of meeting participants and interviewees are attached to this memo.

<sup>&</sup>lt;sup>23</sup>Latest regulation governing mandate and organization of *Balai* is Ministry of Forestry decree number P.03/Menhut-II/2009 dated 1 February 2009.

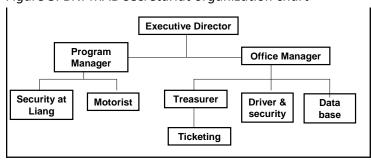
Figure 2. Bunaken National Park Authority organization chart



Since 2000 the *Dewan Pengelolaan Taman Nasional Bunaken* (DPTNB) or the BNP Management Advisory Board (BNPMAB) has been a coordinating and advisory forum for BNP management.<sup>24</sup> The BNPMAB is the de facto governing and management body for BNP, and possesses the following functions:

- Coordinate the activities and policies of the various government agencies;
- Patrol and enforcement;
- Community development (it was allocated 30% of the total revenue);
- Solid waste / trash clean-up in the park;
- Institutional development;
- Coordination and oversight of the BNP entrance fee "tag" system; and,
- Information and education.<sup>25</sup>

Figure 3. BNPMAB Secretariat organization chart



The BNPMAB current governance structure is similar to the one of a legislative body. This is shown by the prominent place that members' meetings occupy in the BNPMAB decision making process while the role of the executive secretariat is to focus on day-to-day management of BNPMAB. The BNPMAB statute states that there are four types of members meetings with varying degrees of decision making authority.

<sup>&</sup>lt;sup>24</sup> The legal basis of the establishment of BNPMAP is the North Sulawesi Governor decree number 233/2000.

<sup>&</sup>lt;sup>25</sup> The cost of this program is supported by Culture & Tourism Agency, Bunaken National Park Authority, and WWF.

- General members meeting (rapat umum anggota) This meeting is held once every three years
  and has the powers to elect the leadership (chair, vice chair and secretary) and new members of
  BNPMAB, evaluate BNPMAB's performance, develop strategic plan and 3-year workplan, make
  changes in the BNPMAB statute and standard operating procedures, and temporarily dissolve
  the BNPMAB.
- Extraordinary general member meeting (rapat umum anggota luar biasa) This meeting has the same status as regular general members meeting and is convened when two thirds BNPMAB members request it.
- **Annual meeting** (rapat tahunan) This meeting has the authority to evaluate BNPMAB's performance, develop annual workplan and budget, decide on other operational matters.
- **Monthly working meeting** (rapat kerja bulanan) to evaluate activities funded by the BNPMAB, evaluate the performance of the executive secretariat, invite other stakeholders to present activities that are related to BNP, form working groups on specific issues as necessary, and agree on activities that are outside the work plan.

The partners within the BNP also include: the Balai Taman National Bunaken and contractors. WWF, the key NGO partner, has not yet renewed its commitment going forward as it waits to see the latest BNP *Balai* management plan as well as an independent financial audit of BNPMAP (note that WWF is paying for the cost of this audit). Neither the plan nor the audit is complete.

Table 18. Bunaken Partners

| Category            | Start year | Titles                          |                                 |
|---------------------|------------|---------------------------------|---------------------------------|
| Balai Taman         | 2011       | • Staff (68)                    |                                 |
| National Bunaken    |            |                                 |                                 |
| BNPMAB              | 2011       | Members (19)                    | Data Analysis                   |
|                     |            | Director                        | Driver                          |
|                     |            | Program Manager                 | • Ticket Counter Keeper (4)     |
|                     |            | Office Manager                  | Asset Guard at Liang Island     |
|                     |            | Treasurer                       | Security                        |
|                     |            | Accountant                      | Motorist (9)                    |
| Contractors –       | 2011       | Pooh Poopoh region (10)         | Bunaken region (4)              |
| Community Patrol    |            | Pesisir Molas Tiwoho region (6) | Manado Tua region (4)           |
|                     |            |                                 | Mantehage region (7)            |
| Contractors – Joint | 2011       | Rangers incentive (4)           | Field Coordinator incentive (3) |
| Patrol              |            | Police incentive (3)            | Vice Chairman incentive         |
| Implementing Unit   |            |                                 | Chairman incentive              |
| WWF                 | 2011       | Coordinator                     | Finance and Administration      |
|                     |            |                                 | Coordinator Facilitator         |

#### **5.3 Financial Assessment**

A financial assessment was conducted to understand the costs to achieve a basic level of conservation objectives. A review of secured resources, including funding and revenue, were also documented to calculate the net funding required (e.g., the gap between the costs and resources). The data regarding costs and resources was captured through a review of available budgets and plans, as well as structured interviews. A full list of interviews conducted is included in Appendix 2.

#### Costs

The cost to manage BNP in 2011 is \$1,180,534. Over the projection period of 2011-2020, the average cost is \$1,417,723/year. BNP is assumed to be in a relatively steady-state. In other words, the current personnel and level of activities represents the level required into the indefinite future. For this reason, most year-to-year cost increases are due solely to inflation. Capital asset needs, however, vary depending on the length of assets useful lives and repurchase schedule. Miscellaneous costs range from \$376,000 in 2011 to \$451,000 in 2020 and include insurance and fees as well as activity-related costs.

Table 19. Bunaken Costs by Budget Category

|                      | <u>2011</u> | 2012        | <u>2013</u> | <u>2014</u> | <u>2015</u> | <u>2016</u> | <u>2017</u> | <u>2018</u> | <u>2019</u> | 2020        |
|----------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
|                      | \$1,180,534 | \$1,213,289 | \$1,480,181 | \$1,294,096 | \$1,335,902 | \$1,413,124 | \$1,425,875 | \$1,473,554 | \$1,523,844 | \$1,836,833 |
| Personnel            | \$396,739   | \$416,576   | \$437,405   | \$459,275   | \$482,238   | \$506,350   | \$531,668   | \$558,251   | \$586,164   | \$615,472   |
| Contractors          | \$71,944    | \$75,541    | \$79,318    | \$83,284    | \$87,448    | \$91,820    | \$96,411    | \$101,232   | \$106,293   | \$111,608   |
| Capital Assets       | \$254,852   | \$254,850   | \$487,623   | \$265,995   | \$270,767   | \$309,398   | \$281,927   | \$287,679   | \$294,256   | \$561,665   |
| Asset Maintenance    | \$35,646    | \$36,373    | \$37,115    | \$37,872    | \$38,645    | \$39,433    | \$40,237    | \$41,058    | \$41,896    | \$42,750    |
| Fuel                 | \$16,527    | \$16,864    | \$17,208    | \$17,559    | \$17,917    | \$18,283    | \$18,656    | \$19,036    | \$19,424    | \$19,821    |
| Occupancy            | \$3,946     | \$4,027     | \$4,109     | \$4,192     | \$4,278     | \$4,365     | \$4,454     | \$4,545     | \$4,638     | \$4,733     |
| Travel               | \$3,749     | \$3,825     | \$3,903     | \$3,983     | \$4,064     | \$4,147     | \$4,232     | \$4,318     | \$4,406     | \$4,496     |
| Supplies & Materials | \$20,802    | \$21,226    | \$21,659    | \$22,101    | \$22,552    | \$23,012    | \$23,481    | \$23,960    | \$24,449    | \$24,948    |
| Miscellaneous        | \$376,331   | \$384,008   | \$391,842   | \$399,836   | \$407,992   | \$416,316   | \$424,808   | \$433,474   | \$442,317   | \$451,341   |

Table 20. Bunaken Costs by Function

|                                 | <u>2011</u> | 2012        | 2013        | <u>2014</u> | <u>2015</u> | <u>2016</u> | <u>2017</u> | <u>2018</u> | <u>2019</u> | 2020        |
|---------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
|                                 | \$1,180,534 | \$1,213,289 | \$1,480,181 | \$1,294,096 | \$1,335,902 | \$1,413,124 | \$1,425,875 | \$1,473,554 | \$1,523,844 | \$1,836,833 |
| Policy & Planning               | \$36,167    | \$37,620    | \$39,138    | \$40,725    | \$42,383    | \$44,117    | \$45,930    | \$47,825    | \$49,807    | \$51,879    |
| Design & Zoning                 | -           | -           | -           | -           | -           | -           | -           | -           | -           | -           |
| Enforecement                    | \$317,120   | \$326,226   | \$413,328   | \$349,386   | \$361,355   | \$377,395   | \$387,247   | \$401,003   | \$415,569   | \$517,639   |
| Science & Monitoring            | \$130,600   | \$134,299   | \$138,125   | \$142,084   | \$146,181   | \$150,421   | \$154,811   | \$159,356   | \$164,063   | \$168,939   |
| Education, Comm & Comm Eng      | \$137,864   | \$140,370   | \$220,590   | \$149,472   | \$153,956   | \$167,846   | \$163,893   | \$169,149   | \$174,844   | \$267,655   |
| Economic Development            | \$101,986   | \$105,101   | \$108,332   | \$111,683   | \$115,159   | \$118,767   | \$122,511   | \$126,397   | \$130,432   | \$134,622   |
| Tourism Management              | \$311,457   | \$319,435   | \$405,336   | \$340,115   | \$350,723   | \$377,037   | \$373,629   | \$385,751   | \$398,581   | \$498,809   |
| Administration & Financial Mgmt | \$145,341   | \$150,238   | \$155,332   | \$160,631   | \$166,145   | \$177,542   | \$177,856   | \$184,074   | \$190,548   | \$197,290   |
| Other                           | -           | -           | -           | -           | -           | -           | -           | -           | -           | -           |

#### Activities

There are a number of activities currently being implemented in BNP. For the purpose of this study, work plans and interviews were conducted to determine the activities of the BTNB and the BNPMAB. The total activity cost in 2011 is projected to be \$410,996, or approximately 35% of the total costs.

Table 21. Bunaken Costs by Activity Type

|                        | 2011      | 2012      | 2013      | 2014      | 2015      | 2016      | 2017      | 2018      | 2019      | 2020      |
|------------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
|                        | \$410,996 | \$419,380 | \$427,936 | \$436,666 | \$445,574 | \$454,663 | \$463,938 | \$473,403 | \$483,060 | \$492,915 |
| Office/field Operation | \$189,845 | \$193,718 | \$197,670 | \$201,702 | \$205,817 | \$210,015 | \$214,300 | \$218,671 | \$223,132 | \$227,684 |
| Meeting                | \$73,340  | \$74,836  | \$76,363  | \$77,921  | \$79,510  | \$81,132  | \$82,787  | \$84,476  | \$86,199  | \$87,958  |
| Training               | \$29,595  | \$30,199  | \$30,815  | \$31,444  | \$32,085  | \$32,740  | \$33,407  | \$34,089  | \$34,784  | \$35,494  |
| Workshop               | \$7,628   | \$7,783   | \$7,942   | \$8,104   | \$8,270   | \$8,438   | \$8,610   | \$8,786   | \$8,965   | \$9,148   |
| Patrol                 | \$52,165  | \$53,229  | \$54,315  | \$55,423  | \$56,554  | \$57,708  | \$58,885  | \$60,086  | \$61,312  | \$62,563  |
| Survey/Monitoring      | \$43,297  | \$44,180  | \$45,081  | \$46,001  | \$46,939  | \$47,897  | \$48,874  | \$49,871  | \$50,888  | \$51,926  |
| Demarcation            | \$5,481   | \$5,592   | \$5,706   | \$5,823   | \$5,942   | \$6,063   | \$6,187   | \$6,313   | \$6,442   | \$6,573   |
| Reporting              | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         |
| Fundraising            | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         |
| Other                  | \$9,646   | \$9,843   | \$10,043  | \$10,248  | \$10,457  | \$10,671  | \$10,888  | \$11,110  | \$11,337  | \$11,568  |

Table 22. Bunaken Activity Costs by Function

|                                 | <u>2011</u> | <u>2012</u> | <u>2013</u> | <u>2014</u> | <u>2015</u> | <u>2016</u> | <u>2017</u> | <u>2018</u> | <u>2019</u> | <u>2020</u> |
|---------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
|                                 | \$410,996   | \$419,380   | \$427,936   | \$436,666   | \$445,574   | \$454,663   | \$463,938   | \$473,403   | \$483,060   | \$492,915   |
| Policy & Planning               | \$11,022    | \$11,247    | \$11,477    | \$11,711    | \$11,950    | \$12,193    | \$12,442    | \$12,696    | \$12,955    | \$13,219    |
| Design & Zoning                 | -           | -           | -           | -           | -           | -           | -           | -           | -           | -           |
| Enforecement                    | \$94,104    | \$96,023    | \$97,982    | \$99,981    | \$102,021   | \$104,102   | \$106,226   | \$108,393   | \$110,604   | \$112,860   |
| Science & Monitoring            | \$81,658    | \$83,323    | \$85,023    | \$86,758    | \$88,528    | \$90,334    | \$92,176    | \$94,057    | \$95,976    | \$97,933    |
| Education, Comm & Comm Eng      | \$70,113    | \$71,544    | \$73,003    | \$74,492    | \$76,012    | \$77,563    | \$79,145    | \$80,760    | \$82,407    | \$84,088    |
| Economic Development            | \$67,020    | \$68,387    | \$69,782    | \$71,205    | \$72,658    | \$74,140    | \$75,653    | \$77,196    | \$78,771    | \$80,378    |
| Tourism Management              | \$24,324    | \$24,820    | \$25,326    | \$25,843    | \$26,370    | \$26,908    | \$27,457    | \$28,017    | \$28,589    | \$29,172    |
| Administration & Financial Mgmt | \$62,756    | \$64,036    | \$65,342    | \$66,675    | \$68,035    | \$69,423    | \$70,840    | \$72,285    | \$73,759    | \$75,264    |
| Other                           | -           | -           | -           | -           | -           | -           | -           | -           | -           | -           |

# **Key Cost Drivers**

Key cost drivers for BNP include the following:

- Personnel costs account for approximately 35% of total costs over the projection period.
- Enforcement and Tourism Management represent the highest cost functions, both requiring about 27% of the budget per year.
- Capital asset requirements are projected to be quite high over the next ten years. On average, \$326,901 will be required per year to fulfill capital asset requirements.
- Activity costs are driven by office and field operation. Approximately half of the activity costs go towards field and office operation.

#### Resources

There are three primary sources of revenue and funding: entrance fees, central government (APBN) and donor.

Table 23. Bunaken Resources by Type

|               | <u>2011</u><br>\$890,858 | 2012<br>\$889.949 | 2013<br>\$913,427 | 2014<br>\$937.650 | 2015<br>\$962.646 | 2016<br>\$988,446 | 2017<br>\$1.015.081 | 2018<br>\$1.042.582 | 2019<br>\$1.070.984 | 2020<br>\$1,100,322 |
|---------------|--------------------------|-------------------|-------------------|-------------------|-------------------|-------------------|---------------------|---------------------|---------------------|---------------------|
| Government    | \$695,921                | \$710,117         | \$724,604         | \$739,386         | \$754,469         | \$769,860         | \$785,565           |                     | \$817,943           | \$834,630           |
| Donor         | \$23,669                 | -                 | -                 | -                 | -                 | -                 | -                   | -                   | -                   | -                   |
| Entrance fees | \$171,268                | \$179,831         | \$188,823         | \$198,264         | \$208,177         | \$218,586         | \$229,515           | \$240,991           | \$253,041           | \$265,693           |

Balai Taman Nasional Budget (Ministry of Forestry PHKA) national park budget (from APBD) allocation is approximately IDR 6 billion per year (US\$658,000) each year. As with all PHKA budgets in national parks across Indonesia this budget is based on historic norms versus actual needs of a functioning national park. It covers salaries for all staff as well as various projects. The budget is typically dispersed late in the fiscal year in which it is meant cover costs and therefore is generally poorly administered and spent.

It is also less than what is typically requested by the *Balai*. The proposed *Balai* budget for fiscal year 2011 is shown in the Table 24. It is expected that the requested IDR 9.3 billion will be dispersed in an amount closer to IDR 6 billion. (See Appendix 7 for a review of the PHKA budgeting process).

Table 24. Proposed Bunaken National Park Balai budget for fiscal year 2011

| Activities  | Budget (IDR)  | %    |
|---|---------------|------|
| Biodiversity and Essential Ecosystem Development  | 895,000,000   | 10%  |
| Species and Genetic Conservation                  | 290,000,000   | 3%   |
| Forest Investigations and Protection              | 476,600,000   | 5%   |
| Forest Fire Control                               | 50,000,000    | 1%   |
| Environmental Services and Ecotourism Development | 3,040,000,000 | 33%  |
| Management and Other Technical Support            |               |      |
| Salary and Benefits                               | 3,130,000,000 | 34%  |
| Administration and Operating Expenses             | 1,444,500,000 | 15%  |
| TOTAL   | 9,326,100,000 | 100% |

Entrance fee<sup>26</sup> annual revenues from tag system are approximately IDR 1.5 billion (US\$164,000) per year. This past year was especially high (IDR 1.9 billion) because the World Ocean's Conference was held in Manado.

Table 25. Bunaken Entrance Fees

| Туре              | Annual Tag(IDR) | Daily(IDR) |
|-------------------|-----------------|------------|
| Foreign Visitors  | 150,000         | 50,000     |
| Domestic Visitors | na              | 2,500      |
| Domestic Students | na              | 1,000      |

The primary other source of funding is WWF which has spent approximately IDR 240 million (or approximately US \$26,000) each year for the past number of years. In 2009, Conservation International (CI) also contributed US\$7,000 to produce the entrance fee tags to be sold (as the BNPMAB had spent its entire budget by the end of that year and had not reserved enough to produce the tags for the following year).

Various other fundraising activities by the BNPMAB, including contributions in a donation box, meeting room rentals, and merchandise selling, were virtually ineffective (and probably cost more money than was raised), netting approximately US\$400 in 2009.

<sup>&</sup>lt;sup>26</sup> Based on Governor Regulation number 22/2007 and Perda no 14/2000 and Provincial Law (peraturan daerah) Number 9 of 2002. This legal basis is weak, because based on the current regulations that entrance fee to national park is treated as a non-tax government revenue and it has to be collected by the national park authority (Balai) and transferred to the central government.

# Net funding required

A fairly large net funding requirement is projected over the next ten years. In 2011 a gap of \$289,677 is currently projected. The average gap is \$436,529 per year and is as large at \$736,511 (2020).

Table 26. Bunaken Financial Summary

|                      | <u>2011</u> | 2012      | <u>2013</u> | <u>2014</u> | <u>2015</u> | <u>2016</u> | <u>2017</u> | <u>2018</u> | <u>2019</u> | 2020        |
|----------------------|-------------|-----------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Funding & Revenue    | \$890,858   | \$889,949 | \$913,427   | \$937,650   | \$962,646   | \$988,446   | \$1,015,081 | \$1,042,582 | \$1,070,984 | \$1,100,322 |
| Expenses             | \$925,682   | \$958,439 | \$992,558   | \$1,028,101 | \$1,065,134 | \$1,103,726 | \$1,143,947 | \$1,185,875 | \$1,229,588 | \$1,275,168 |
| CAPEX                | \$254,852   | \$254,850 | \$487,623   | \$265,995   | \$270,767   | \$309,398   | \$281,927   | \$287,679   | \$294,256   | \$561,665   |
| Net funding required | \$289,677   | \$323,341 | \$566,754   | \$356,446   | \$373,255   | \$424,677   | \$410,794   | \$430,972   | \$452,860   | \$736,511   |

# 5.4 Key Issues and Recommendations

There are several key issues and recommendations from the analysis of the BNP. While the focus has been on the BNP, many of these issues and recommendations are applicable to other National Parks in Indonesia.

## **Legal & Institutional**

The degree of BNPMAB's authority as collaborative management body in BNP has been a source of controversy since its establishment. Established by the North Sulawesi Governor's Decree, BNPMAB was viewed at that time as an attempt to "pilot" a collaborative management scheme where local governments and other stakeholders take a more active role in managing National Parks. Traditionally, the management of the National Parks in Indonesia has been the sole responsibility of the Ministry of Forestry with the *Balai Taman Nasional* (National Park management unit) as the *unit pelaksana teknis* (technical implementing unit) on the ground. The BNPMAB was designed so that the *Balai* can access resources that are available locally through its members. This provides a degree of flexibility that complements the Ministry of Forestry formal budgeting processes.

Ten years after its establishment, the BNPMAB has gained a mixed reputation. On one hand, it has been lauded as an example of collaborative management of National Parks and, as a result, it has become a popular case study in the subject. On the other hand, to those more familiar with the workings of BNPMAB, it is clear that it has not reached its full potential in ensuring effective collaborative management in BNP as shown by the range of internal management problems that it currently faces. Examples of current issues include:

• Unclear definition of roles and responsibilities between BNPMAB Members and the Secretariat:

The monthly working meeting has become the forum for most decision making concerning BNPMAB activities at various levels ranging from prioritizing program activities to troubleshooting. As a result, this practice has made the roles and responsibilities between the board members and the executive secretariat indistinguishable when it comes to the day-to-day management of the organization. Overshadowed by the members in the monthly meeting, the executive secretariat has habitually resorted to assuming a very passive role. In addition, the BNPMAB currently does not report to the Balai, but rather the Vice Governor of North Sulawesi (who is on the board and ranks higher than the Balai.) making it difficult to coordinate and optimize needs of BNP.

- Ineffective member representation in meetings: The monthly working meetings are rarely attended by the heads of government agencies, the ex officio members of BNPMAB. They instead send their staff members as their representatives. It is often the case that they are either not familiar with the BNPMAB activities or not hold not senior enough positions to make any decisions on behalf of their respective agencies. There have also been incidences where meeting results are not communicated back to their superiors making the overall effort to share information and coordinate activities difficult. As a result, the planning of BNPMAB budget and activities is conducted in isolation of planning of the Balai and other agencies budget and activities.
- **Weak Secretariat management:** this consistently results in poorly developed work plans and budgets for the BNPMAB which exceeds available funds, resulting in limited, if any, funds being dispersed to the community in recent years (which is meant to receive 30%).
- **Submittal of two different annual reports**: The Secretariat Recently submitted one to the communities and one to the government. Financial reporting within the two were not consistent discrepancies in amounts and usage were evident. Independent third party audits, which are supposed to be mandatory, are not occurring.
- Weak relationship with communities: Since its establishment, the BNPMAB is not widely recognized among community members who live within the park boundaries. What is relatively more known of BNPMAB is its reputed inability to translate the entrance fee revenue into a tangible community development program. If this issue is not dealt with in the near future, it will reinforce to the growing notion among the community members that it is not possible for them to link conservation benefits to improvement in their quality of life.

The key governance issues and problems lie in the poor administration and management of both the BNPMAB (which is unable to fund their full mandate for community work, among other activities) as well as the BNP *Balai* (which lacks effective and adaptive management capacity – and now requires a review and overall improvement of the BNP management plan).

It is also clear that the BNPMAB does not have a clear operating strategy with well defined objectives and indicators of success. It is important to define the focus of BNPMAB's core operating strategy to be both consistent with the original mandate of the BNPMAB whose primary functions are coordination, consultation and fundraising (e.g., through the entrance fee collection), and at the same time actionable.

Both the governance structure and operating strategy require improvements to strengthen the institutional capacity of the BNP. Specific recommendations include:

Limit the frequency of BNPMAB meetings: Limit the number of working meetings (e.g., from
monthly to every four or six months). Less frequent meeting will help ensure the attendance of
key decision makers resulting in more productive meetings. While the members' meeting will
focus on setting out broad strategy, the BNPMAB secretariat will be fully in charge of day-to-day
activities demonstrating a clear focus amidst competing priorities. To replace the monthly

- meeting, the executive director should send out a monthly update in a format similar to the meeting agenda and together with the monthly monitoring and evaluation report. To ensure coordinated activities, the executive director should also play an active lobbying role by visiting the offices of BNPMAB members to give them personal face-to-face briefings.
- Invest in a comprehensive financial management system: The BNPMAB urgently needs to invest in a comprehensive management system to track its revenues and expenditures in a transparent and efficient manner. At the minimum, this would include revenue tracking, financial accounting and inventory management systems. The entrance fee collection system needs to be improved; the current system, that relies on manual recording of pins and tickets sales, is still fraught with problems such as a single pin or ticket being sold multiple times. A computerized tracking system that automatically link pin and ticket sales data to the BNPMAB financial system will enable BNPMAB to analyze revenue level in real time and reduce the risk for manipulation. On the expenditure tracking side, BNPMAB needs to improve its accounting system to ensure proper cost allocation and record keeping procedures. The system should ensure that up-to-date reports on revenues, costs and expenses, the cash balance, and inventory situation are prepared to be included in the monthly update to members in a simple format. The BNPMAB members can utilize the system to analyze efficiency in BNPMAB activities as part of the annual evaluation cycle.
- Invest in a Monitoring & Evaluation (M&E) system: BNPMAB needs to develop a comprehensive M&E system to systematically collect and analyze data on specified indicators to document progress and achievement of objectives of BNPMAB core activities. This evaluation should provide information that is credible and useful, enabling the incorporation of lessons learned into the decision-making process of BNPMAB members. In addition, the M&E information can be used for BNPMAB external communication materials. A successfully managed M&E program will provide BNPMAB with: (1) information and analysis needed to guide its activities towards achieving the identified goals and objectives; (2) a common framework for mutual understanding and performance monitoring among and between BNPMAB members; (3) a fully integrated record of activities to keep those involved informed of the status of the BNPMAB activities.
- Improve coordination: BNPMAB has to be able to leverage its own resources (e.g., entrance fee revenues) against its members (e.g., government budgeted programs). In this context, the BNPMAB's operating strategy must be categorized into core and non-core activities where the funds for its core activities should come from the revenues generated by entrance fee so the BNPMAB can have the power to coordinate more assertively. The funding of non-core activities, on the other hand, should come mostly from its members' operating budgets. In this case, BNPMAB does not fully control the activities but acts more a facilitator to ensure that its members are working in synergy.<sup>27</sup>

<sup>&</sup>lt;sup>27</sup> CCIF report on BNPMAB 2007.

• Develop a stronger economic development program and ensure proper allocation of Village Conservation Fund: Communities living within the national park boundaries play an important role in the effective management of BNP. The Village Conservation Fund is supposed to receive 30% of the annual BNPMAB budget, but it hasn't received any money in recent years – it appears that Board uses these funds to cover salaries and operating expenses. This has lead to unrest within the communities and needs to be addressed in the near future. Specific community development activities that should be considered include: provision of basic services (e.g., clean water, sanitation and waste management), improvement in educational standards, and development of revolving funds for micro enterprise with training and mentoring for business development.

Going forward, it is recommended that the BNPMAB Secretariat track the following indicators.

Table 27. Bunaken National Park Indicators of Success

| General Monitoring & Evaluation  | Financial Management   | Community / Economic  |
|--|--|---|
|  |  | Development   |
| <ul> <li>Quality of M&amp;E reports (e.g., timeliness, specificity of data)</li> <li>Contribution of M&amp;E data to policy and program design</li> <li>Increased level of productivity of BNPMAB Secretariat staff (e.g., number of staff vs ability</li> </ul> | <ul> <li>Improved quality of entrance<br/>fee data (e.g., name, nationality)</li> <li>Reduction of leakage of<br/>entrance fees (e.g., number of<br/>tourists visiting BNP vs entrance<br/>fee collected)</li> <li>Improved overall tracking of</li> </ul> | <ul> <li>Level and access to education</li> <li>Type of income source (e.g., seasonality, obtained within and outside the park)</li> <li>Level and amount of income</li> <li>Growth in assets and savings</li> <li>Improved access to clean water,</li> </ul> |
| to achieve objectives)  Reduction in meeting expenses  Level of awareness of BNPMAB activities among heads of agencies that are members  | entrance fees (e.g., pin validity period enforcement)  Improved financial audits over time  Improved financial analysis (e.g., budget vs actual tracking)  | sanitation facilities, etc.  • Availability of funds to support micro-enterprise activities  • Amount of growth of small enterprises  |

# Sustainable Financing

As noted earlier, the projected net funding required is \$289,677 in 2011 and the average gap is \$436,529 per year from 2011-2020. This need will need to be met from a variety of government, donor and market-driven sources. Cost reduction would also result in a lower net funding required. Opportunities for cost reduction as well as financing sources are reviewed further below.

# **Cost Reduction Opportunities**

There are a number of opportunities for the BNP to reduce its costs. These reductions would both reduce the net funding required as well as allow existing resources to focus on the most critical areas requiring attention.

# Improve efficiency of entrance fee system

Currently the BNPMAB keeps 80% of the entrance fee revenue while 5% and 15% of the revenue goes to the central and local government treasuries respectively. This 80% then goes to fund many

functional activities, as well as management of the fee system itself. The management system, and checks and balances in place, are currently lacking. Improving this system will help to reduce Tourism Management costs.

# Improve coordination with other relevant agencies

It appears that the local district has a mandate for some of the costs currently on the plans of the BNPMAB. For example, the local district has the mandate to ensure municipal trash clean-up. This is especially important given the current issue with trash in BNP; the solid waste problem in BNP is a strategic issue because of its high visibility to visitors. If the BNPMAB can better coordinate with relevant agencies it will allow it to focus its efforts on the most pressing conservation needs.

#### Sustainable Finance Sources

In addition to careful review and implementation of cost reduction opportunities, it will also be necessary for the BNP to pursue a diverse set of financing sources.

Table 28 provides a review of the specific sources as well as their feasibility (e.g., measure of likelihood of implementation), potential scale (e.g., measure of funding or revenue potential), sustainability (e.g., measure of long-term consistency of implementation). While each specific source is then reviewed further, it is recommended that the following sources be the focus of financing efforts:

- Government direct allocation (APBN/APBD),
- Global Environment Facility,
- Entrance fee system.

Table 28. BNP Sustainable Financing Options

| Category   | Source                            | Feasibility | Potential Scale | Sustainability |
|------------|-----------------------------------|-------------|-----------------|----------------|
| Government | Direct allocation (APBN/APBD)     | High        | High            | High           |
| Donor      | Foundations                       | Moderate    | Moderate        | Low            |
|            | Bi-lateral / Multi-lateral (e.g., | High        | High            | Low            |
|            | GEF)                              |             |                 |                |
| Market-    | Entrance Fees                     | High        | Moderate        | Moderate       |
| driven     |                                   |             |                 |                |

# Government

The current PHKA budgeting process (see Appendix 7) is long and bureaucratic and the actual allocation is dispensed near the end of the second quarter or later in the year it is intended to be utilized. This imbalanced, short time frame results in less than optimum management plan implementation.

Secure sub-national and additional funds from APBD (regional budgets) sources, including for issues such as solid waste management and community development issues. Pathways to securing such government financing needs to be understood and implemented, and direct funds secured to offset other PHKA and entrance fee funding, allowing these latter funds to be utilized elsewhere.

develop management and finance capacity and systems strengthening at both the Balai, sub-national and national PHKA levels.

#### Donor

On the Donor side, WWF has contributed approximately US\$26,000 per year for the past several years. Moving forward, the BNPMAB needs to focus on bi/multilateral funding. First, the BNPMAB should utilize GEF funds to improve and strengthen PHKA management planning, and budgeting processes. A necessary component of any national park investment strategy in Indonesia must be to focus on the improvement of the operational and financial plan and budgeting processes and capacity of each *Balai* and PHKA as a whole. The current GEF Tranche 5 round of funding for Indonesia Biodiversity and the current Convention of Biodiversity Program of Work on Protected Areas should be harnessed for this purpose. Despite the BNPMAB participatory management system having been declared as one of the "national learning sites" by PHKA for implementing collaborative management with the PHKA system, the BNPMAB remains in a transitional phase and continues to face organizational and development challenges. The challenges to be addressed include: clearly defining roles and responsibilities for the Executive Secretariat, local government agencies and NGOs; and the development and implementation of a long-term management plan. The management plan for BNP needs to address all functions of an effective MPA: resource protection, scientific research, community development and outreach, sustainable tourism, and monitoring and evaluation.

#### Market-driven

The market-driven source in BNP is the entrance fee system. The entrance fee tag system should be reviewed and fees re-assessed (increased) to account for the overall cost increase due to inflation and overall management cost increases in the park. This process will require engaging the tourism sector as well; a willingness-to-pay survey should be conducted to refine the system. The tourism fee structure in Raja Ampat, West Papua, Indonesia should be referenced as a potential model (see Berau KKP chapter for more details).

Also, better checks and balances should be put in place to ensure that tour operators can't re-sell tags.

#### 5.5 Conclusion

Ten years after its establishment, the BNPMAB has gained a mixed reputation. The key issues and problems lie in the poor administration and management of both the BNPMAB (which is unable to fund their full mandate for community work, among other activities) as well as the BNP Balai (which lacks effective and adaptive management capacity — and now requires a review and overall improvement of the BNP management plan). Efforts to improve both the overall governance and operational strategy across the BNP are required to improve the institutional structure.

The cost to manage BNP in 2011 is \$1,180,534. Over the projection period of 2011-2020, the average cost is \$1,417,723/year. BNP is assumed to be in a relatively steady-state. In other words, the current personnel and level of activities represents the level required into the indefinite future. For this reason, most year-to-year cost increases are due solely to inflation. In 2011 a gap of \$289,677 is currently

projected. The average gap is \$436,529 per year and is as large at \$736,511 (2020). This need will need to be met from a variety of government, donor and market-driven sources. Cost reduction would also result in a lower net funding required.

Two cost reduction opportunities identified include improving the efficiency of the entrance fee system and improving coordination with other relevant government agencies.

In addition to careful review and implementation of cost reduction opportunities, it will also be necessary for the BNP to pursue a diverse set of financing sources. It is recommended that the following sources be the focus of financing efforts:

- Increasing the government direct allocation (APBN/APBD),
- Securing funding from the Global Environment Facility,
- Improving the entrance fee system.

If shared in an honest and constructive manner, the lessons from the BNP experience could be very valuable to other MPAs in the Coral Triangle.

#### 6. Conclusion & Recommendations

The purpose of this initial financial feasibility assessment is to present the current status of the MPAs in the Indonesia portion of the SSME, as well as the policies and enabling conditions, current government budget allocations and potential sustainable financing mechanisms to channel funding from various government financing, market-driven and donor sources. This financial feasibility assessment should be viewed as a first step in the larger process of developing a three-country SSME *Seascape Investment Plan*.

Protected Area Financial Sustainability may be defined as: "the ability to secure stable and sufficient long-term financial resources and to allocate them in a timely manner and appropriate form, to cover the full costs of protected areas (direct and indirect) and to ensure that PAs are managed effectively and efficiently." (CBD)

This chapter provides a summary of the key issues and recommendations specifically related to management capacity and finance of each of the two SSME MPAs (Berau and Bunaken) examined in this report as well related to MPAs in Indonesia generally.

#### 6.1 Berau KKP and Bunaken National Park

Utilizing current cost structures as well as estimates of future plans, the cost to manage the Berau KKP at a basic level is \$534,079 in 2011. Over the projection period of 2011-2020, the average cost per year is \$685,382. Financing for Berau comes primarily from NGOs and donors. In 2010, The Nature Conservancy (TNC) and the World Wide Fund for Nature (WWF) coordinated over US\$400,000 from donors such as WWF-Netherlands, the Danish International Development Agency (DANIDA) and the David & Lucile Packard Foundation. That amount is set to drop substantially going forward leaving a large funding gap to cover expected costs for the Berau KKP – which will remain high in this initiation phase.

The cost to manage BNP at a basic level is \$1,180,534 in 2011. Over the projection period of 2011-2020, the average cost is \$1,417,723/year. BNP is assumed to be in a relatively steady-state. In other words, the current personnel and level of activities represents the level required into the indefinite future. For this reason, most year-to-year cost increases are due solely to inflation. Bunaken National Park financing originates from the state budget (approximately US\$658,000 per year), an entrance fee and management board system in place which receives approximately US\$164,000 per year in entrance fee revenues, and donor funding (WWF also supports the National Park and the management board, co-financing WWF staff and their staff, amounting to approximately US\$26,000 per year).

A review of the key recommendations for Berau KKP and BNP are presented in Table 29.

Table 29. Summary of Berau KKP and BNP recommendations

|                    | Berau KKP                                    | BNP                                       |
|--------------------|--|---|
| Legal &            | • The Joint Program should continue to       | • Limit the frequency of BNPMAB           |
| Institutional      | facilitate discussions between the           | meetings,                                 |
|                    | kabupaten and MMAF to secure a firm          | • Invest in comprehensive financial       |
|                    | KKP legal status for the full 1.2 million ha | management and M&E systems, and           |
|                    | area. Once this legal status has been        | Develop stronger economic development     |
|                    | confirmed, the Berau KKP can establish a     | program and ensure allocation of Village  |
|                    | management unit responsible for              | Conservation Fund.                        |
|                    | managing the KKP.                            |   |
|                    | While a BLUD is likely the best legal        |   |
|                    | structure for the management unit,           |   |
|                    | additional analyses need to take place to    |   |
|                    | fully understand the short and long-term     |   |
|                    | implications of pursuing such a              |   |
|                    | mechanism, particularly related to the       |   |
|                    | level and sustainability of government       |   |
|                    | financing.                                   |   |
| Sustainable        | Engage with PT Berau Coal and transfer       | Improve efficiency of entrance fee system |
| Finance – Cost     | economic development responsibilities        | Improve coordination with other relevant  |
| Reduction          | over time.                                   | agencies (e.g., for trash clean-up)       |
|                    | Engage with the Tourism Industry and         |   |
|                    | transfer all Tourism Management              |   |
|                    | responsibility.                              |   |
| Sustainable        | Secure government direct allocation          | Increase government direct allocations    |
| Finance – Priority | (APBN/APBD),                                 | (APBN/APBD),                              |
| Finance Sources    | Increase and implement market-driven         | Secure Global Environment Facility funds, |
|                    | entrance Fees (Semama and Sangalaki          | and                                       |
|                    | Island and the full KKP), and                | Entrance fee system improvement.          |
|                    | Secure market-driven Fisheries revenues      |   |
|                    | (Permits & taxes as well as Penalties &      |   |
|                    | Fines).                                      |   |

#### 6.2 General

While significant funds can be generated from outside sources, the priority must be on increasing Gol capacity to manage their sovereign responsibilities and increasing flows of government funding. In Indonesia PA and MPA management plans are rarely developed to incorporate and include a clear, well developed, and appropriate set of management functions and operations in which to base sound budget decisions. The overall management efficiency and effectiveness of national PAs is unknown. Conducting a full assessment of current practices and developing new planning systems and management and operational plan templates are required. The current budget process must be revised to include important budgeting systems and practices and training for PA staff. In particular, PA managers need training in management planning and budgeting approaches to promote efficient and optimal use of resources (financial and otherwise) against a comprehensive and sound management plan.

At the sub-national level the focus must be on the long term sustainability of the KKP/KKPs, including the necessary governance capacity to manage, enforce and fund such a system of sub-national marine management areas. Such an investment should also encourage adoption of ecosystem-based management principles in Indonesian fisheries policies and provide leverage throughout provincial and national level government agencies in areas of policy and planning integration. Ultimately, efforts in the SSME and elsewhere in the CTI should focus on providing direct support and evidence for the practical use of TURF + reserve networks across Indonesia. (See Appendix 5. *A statement on fisheries management and marine conservation in Indonesia*).

A number of priority recommendations need to be considered for strengthening the national parks and sub-national KKP/KKP approach and mechanisms in Indonesia. These include:

• Assess proper set-up requirements of local KKP/KKP agencies, including technical capacity and institutional development needs. Assess specific needs for developing the district level (UPTD/BLUD) agency business plan, staffing plans and specific capacities to implement MPA operations and integrated planning, etc. Even with a functioning set of policies and regulations, a complete and successful start-up of KKPs and KKPs is challenged by the lack of local capacity. This remains true for the Berau KKP.

Specific priorities to focus on include:

- a. Assess the current plans for the local implementing agency, including issues related to staffing, financing, governance and overall transparency.
- b. Consider the most effective way to design and develop long term and sustained capacity of the agency in terms of managing marine areas and interacting with provincial and national agencies on issues related to zoning, planning and budgets, among others. Capacity building efforts and activities would ultimately need to address various competency and regulatory requirements.
- Sub-national policy assessment and planning for government expenditure review and analyses. Alongside the capacity building requirements presented above, it will be important to consider critical needs at the sub-national / provincial level, including, 1) policy integration requirements for planning, zonation, and fisheries management and 2) specific pathways and solutions for government funding of KKPs. Related to the second issue on financing, the focus should be on understanding existing pathways for government financing through direct government budget allocations and/or redirecting subsidies to appropriate marine conservation and fisheries management.

Specific priorities to focus on include:

- a. Map and understand the relevant policies and legal frameworks referenced above, as well as assess institutional roles, responsibilities and capacity issues required. This will provide a basis for developing local agency capacity and development plans which ultimately will allow for alignment and integration of policies at all levels, and identifying specific levers, forums and pathways for doing so.
- b. Assess opportunities to conduct a government expenditure review at the province level, which will ultimately be necessary to direct future government finance toward sustained fishery management, conservation and related sustainable economic development efforts in Raja Ampat, and across sub-national systems in Indonesia. The World Bank has a useful Public Expenditure Analysis and Capacity Harmonization (PEACH) initiative that is deployed in a few progressive regions, including in Papua. We will include a close review and assessment of whether and how to ultimately coordinate with the World Bank on the use of this method / approach, assuming the West Papua provincial and Raja Ampat district governments would commit to a full government expenditure review. 29
- Conduct a detailed cost analysis to determine the short and long-term implications of
  implementing an integrated investment plan across the SSME. This will require an assessment of
  government activities and requirements as they related to SSME, including objectives and activities,
  which Ministries and entities should be involved, and what capacity needs are required.

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<sup>&</sup>lt;sup>28</sup> Currently there are pathways available to secure public funding for the BHS and related initiatives. According to PP No 60/2007, financing for local fishery management or marine conservation areas can be secured from: state budgets (APBN / APBD), fisheries sector levies, conservation service or entrance fees, grants or loans, and other sources. A problem is that without a concerted effort to help the various levels of government coordinate the implementation of these laws and argue for these budget allocations – which requires clarity of expenditure patterns and decisions - there is very little chance that any public funds would be used effectively for these purposes, if at all.

<sup>&</sup>lt;sup>29</sup> If they did not to commit to this type of review it would be extremely difficult to fully develop future public funding pathways. This will be a critical part of our assessment.

# 7. Appendices

| Appendix 1. | Terms of Reference   |
|-------------|--|
| Appendix 2. | Meetings and Interviews list   |
| Appendix 3. | Key marine policy and legislation –Government of Indonesia                 |
| Appendix 4. | A summary of Regional marine conservation areas in Indonesia (KKP and KKP) |
| Appendix 5. | A statement on fisheries management and marine conservation in Indonesia   |
| Appendix 6. | Badan Layanan Usaha Daerah (BLUD): Concept, Design and Implementation      |
| Appendix 7. | National Park (PHKA) Budgeting Process                                     |

# **Appendix 1. Terms of Reference**

The Coral Triangle Initiative focuses on sustainable management of marine and coastal resources of the six Coral Triangle nations who formally adopted a Regional Plan of Action, covering: seascapes, ecosystem approach to fisheries, marine protected areas (MPAs), climate adaptation, and threatened species. Throughout the Regional Plan of Action, including in the section containing the MPA goals, the governments made strong commitments to sustainable financing.

Starling Resources was retained by WWF to complete an initial sustainable financing scoping assignment for MPAs in Indonesia, using two MPAs in the Sulu Sulawesi Sea as references.

The Objectives of this *initial sustainable financing scoping exercise for MPAs in the SSME – Indonesia*, include:

- 5. Gain an understanding of the status of specific enabling conditions (policy and institutional) related to design and implementation of sustainable financing for MPAs in Indonesia, and current financial flows directed toward MPAs in Indonesia (national and sub-national levels).
- 6. Review specific policies and options for improving the management and financing of MPAs in Indonesia (national and sub-national levels).
- 7. Assess and identify short list of sustainable finance mechanisms which are generally suitable and feasible for MPAs in Indonesia (national and sub-national levels).
- 8. Determine general cost structures and capacity needs of two target MPAs in the Sulu Sulawesi Sea (Bunaken and Berau).
- 9. Assess and highlight discrepancies between available funds, needs (gaps), and absorptive capacity of institutions and partners in Indonesia generally, and within two target MPAs (national and subnational levels).

The Activities of this assignment include the following in the list below.

- Assess key regulations, policies, and institutional capacities related to financing marine protected areas in Indonesia (national and sub-national levels).
- Review existing and potential financial flows within target MPAs and network capabilities to absorb funds (national and sub-national levels and Bunaken and Berau).
- Conduct basic cost modeling against existing management plans and a gap analysis within target MPAs (Bunaken and Berau).
- Conduct financing options assessment focusing on how to strengthen existing sources and identifying the most important and likely new government, private/market, and donor sources (national and sub-national levels).
- Articulate clear recommendations for improving MPA financing in Indonesia (national and subnational levels).

The Starling Team worked with WWF staff in Bali on this assignment. Initial and final meetings were held in Bali, Indonesia to develop and report on deliverables. The Starling Team made one (1) trip to Jakarta, one (1) trip to Berau, Kalimantan and one (1) trip to Manado, Sulawesi for 2-3 days each for coordinated consultation visits. The remainder of the assignment consisted of research and analysis from our office in Bali.

Outputs and deliverables for the assignment include the following:

- 1. A final report with following details and information included:
- a) A review of the institutions within Indonesia with mandate for managing and financing MPAs (national and sub-national levels).
- b) A situation analysis summarizing policies and regulations which enable and or constrain MPA financing in Indonesia generally (national and sub-national levels).
- c) A summary of capacity gaps and issues for the institutions (national and sub-national levels).
- d) A summary of existing financial flows to the national MPA system (national level).
- e) A summary of most effective existing and future financing mechanisms options (government, market, and donor source), and initial recommendations for how to pursue the strengthening or development of these (national and sub-national levels).
- f) A situation analysis summarizing costs, cost drivers, financial flows, and policies which enable and or constrain MPA financing, in the two target MPAs (Bunaken and Berau).
- g) A summary of insights and recommendations for strengthening financing of MPAs in Indonesia— and how this affects CTI implementation strategies (national and sub-national levels).
- h) List of key stakeholders involved in consultations.
- 2. A power point presentation summarizing above report, general findings, and recommendations.

# **Appendix 2. Meetings and Interviews List**

- 1. WWF Indonesia Marine Program, July 20, 2010 (WWF, Jakarta): Bapak Wawan Ridwan
- 2. BNP Workshop, Manado, Sulawesi (August 11, 2010, BNPMAB offices)

| Name               | Institution                        | Contact                                    |
|--------------------|------------------------------------|--|
| Angelique Batuna   | NSWA/Executive Director BNPMAB     | 08124303770 / angelique@murexdive.com      |
| Immanuel Jaya Lihu | Balai TNI Bunaken                  | 085240733632 / <u>jayalihu@yahoo.co.id</u> |
| Lucky Sangoendang  | FMPTNB                             |  |
| Boyke Toloh        | FPIK – University of Sam Ratulangi | 081244661956 /                             |
|                    |                                    | boykeherman@yahoo.com                      |
| Jefri Passinaung   | WWF Contractor                     | 0811434667                                 |
| Hani Gamis         | FMPTNB                             | 085298691027                               |
| Bapak Roy          | WWF                                | WWF office                                 |

3. Other persons interviewed, Manado, Sulawesi (August 12-13, 2010)

| Name               | Institution                       | Contact                              |
|--------------------|-----------------------------------|--------------------------------------|
| Ibu Arma           | Balai TN Bunaken                  | 08114300127                          |
| Joy Korah          | DKP North Sulawesi Province       | 081340021928                         |
| Johanis M.J. Wowor | Province Culture & Tourism Agency | 081523633612 / budparsulut@yahoo.com |

4. Berau KKP Workshop, Tanjung Redeb, Kalimantan (August 24, 2010, DKP Berau offices)

| Name           | Institution           | Contact                                      |
|----------------|-----------------------|--|
| Fuadi          | Sekretaris DKP        | 0554 -2028063                                |
| Jen Mohamad    | Kasie WasDal DKP      | 0812 583 8267 / jenmakner@yahoo.co.id        |
| Yogi Yanuar    | BPSPL Pontianak       | 0856 1079613 / yogiyanuar@gmail.com          |
| A. Muh Ishak   | BPSPL Pontianak       | 0812 423 3979 / <u>aissaky@yahoo.com</u>     |
| Didik Eko      | BPSPL Pontianak       | 0812 525 8282 / <u>didik-eko-p@yahoo.com</u> |
| Asti Wasistini | TNC-WWF Joint Program | 0811 540 3836 / wbaitoningsih@tnc.org        |
| Abidzar        | TNC-WWF Joint Program | 0811 540 7882 / <u>algiffari@wwf.or.id</u>   |
| Juhriansyah    | Bestari               | 0813 508 12513                               |
|                |                       | /Izoeh_bawa70@yahoo.com                      |
| Hamzah         | Dishut Berau          | 085246666668 / <u>hazbrou@gmail.com</u>      |
| Rachmad        | Yayasan Penyu Berau   | 0878 111 52237/                              |
|                |                       | arjuna_bingung@yahoo.com                     |
| Isnani         | DisBudPar             | 0813 47883131                                |
| Lita Handini   | BLH                   | 0812 583 8433                                |
| Budy Harianto  | Kasie Konservasi –DKP | 0813 477 445 44 /                            |
|                |                       | budy_fish95@yahoo.co.id                      |

# 5. Other persons interviewed, Tanjung Redeb, Kalimantan (August 23-26, 2010)

| Name            | Institution                | Tel and email                |
|-----------------|----------------------------|------------------------------|
| Sujadi          | Kabid Sumberdaya DKP Berau |                              |
| Ir. M. Zaidi    | Kasie KSDA Berau           | 08126703667                  |
| Heri            | Staff KSDA Berau           |                              |
| Fakhrizal Nashr | TNC Berau Program Manager  | 0554 22230/08125408141 /     |
|                 |                            | fnashr@tnc.org               |
| Mark Paul       | TNC-WWF Joint Program      | TNC-WWF Joint Program office |
| Rusli Andar     | TNC-WWF Joint Program      | TNC-WWF Joint Program office |

6. WWF Indonesia Marine Program, October 21, 2010 (WWF, Jakarta): Bapak Wedha

# Appendix 3. Key Marine Policy and Legislation - Government of Indonesia

Key legislation affecting coral reef and other marine resources management:

| Туре                            | Regulation & Subject  |  |
|---------------------------------|---|--|
| Ocean jurisdiction claims       | Act No 6/1996 – Indonesian Waters   |  |
|                                 | Act No 5/1983 – Indonesian exclusive economic zone  |  |
|                                 | <ul> <li>Act No 1/1973 – Indonesian continental shelf</li> </ul>                              |  |
| Ocean resources and activities  | • Act No 21/1992 – Shipping   |  |
| on the sea                      | Act No 11/1967 – Basic provisions for mining  |  |
| Terrestrial spatial and general | Act No 24/1992 – Spatial use management   |  |
| planning laws                   | • Act No 9/1990 – Tourism   |  |
| Coastal and marine resource     | Act No 27/2007 – Coastal and small island management  |  |
| management                      | Act No 31/2004 – Fisheries  |  |
|                                 | • Act No 41/1999 – Forestry   |  |
| General legislation of          | Act No 23/1997 – Environmental management   |  |
| environmental management        | <ul> <li>Act No 5/1990 – Conservation of biological resources and their ecosystems</li> </ul> |  |
| Legislation of decentralization | Act No 32/2004 – Regional government (Autonomy Act)   |  |
|                                 | • Act No 33/2004 – Financial distribution between central and regional                        |  |
|                                 | government  |  |
| International level             | • Act No 17/1985 – Ratification of UN convention on law of the sea                            |  |
|                                 | <ul> <li>Act No 5/1994 – Ratification of UN convention on biological diversity</li> </ul>     |  |

# Ocean jurisdiction claims

- Act No 6/1996 Indonesian Waters Established that the waters of Indonesian territorial sea comprise archipelagic waters and inland waters. The Indonesian territorial sea extends seawards for a distance of 12 nautical miles measured from the Indonesian archipelagic baseline. Article 23 establishes that all coastal and marine resources are under the central government's jurisdiction, which may now be in conflict with the Act of Regional Government (Autonomy Act).
- Act No 5/1983 Indonesian exclusive economic zone Grants Indonesia sovereign rights for exploring, exploiting, conserving and managing natural resources in its EEZ.
- Act No 1/1973 Indonesian continental shelf Grants Indonesia the rights of exploitation and exploration for natural resources on the seabed and subsoil beyond its territorial sea.

# Laws on ocean activities management

- Act No 21/1992 Shipping Deals with maritime transportation, including navigation, port management, loading, shipping accidents, investigation, shipping lines and seafarer safety.
- Act No 11/1967 Basic provisions for mining No specific article of this Act addresses marine resource management planning, but it notes the requirement for the prevention of negative impacts of mining activities on marine and coastal resource management.

### Laws on terrestrial spatial and other general planning activities

- Act No 26/2007 Spatial planning Replaces Act No 24/1992. It stipulates explicitly the authority of provincial governments and of district governments) in spatial planning. Such provision is not stipulated in the previous spatial planning law. In the previous law, the central government is responsible for spatial plan that covers areas in two or more provinces and the provincial government is responsible for spatial plan consisting of areas in two or more districts. In the new law, spatial planning consisting of two or more provinces becomes the authority of respective provinces and should be used as a coordination tool for both provinces. The central government is no longer authorized to coordinate the spatial plan in the areas consisting of two or more provinces. The similar rule also applies to spatial planning covering two or more districts. The Spatial Planning Law 26/2007 has one new principle of the spatial planning that is not included in the previous law. The principle of accountability is included in the new law and it is presumably to correspond with the enthusiasm of Indonesian people for more transparent and accountable system of government.
- Act No 9/1990 Tourism Basic rule for tourist industry development. Article 16 and 18 defines three types of tourist attractions natural, cultural and specific tourist developments that can be potentially managed specifically for tourist industry purposes.

### Coastal and marine resource management

- Act No 27/2007 Coastal and small island management Provides the legal basis for integrated coastal management (ICM) in Indonesia. It streamlines the institutional framework for ICM in Indonesia. The Ministry of Marine Affairs and Fishery (MMAF) is the responsible authority at central level, with offices dealing with marine and fishery issues at provincial and regency levels.
- Act No 31/2004 Fisheries Replaces former fisheries Act 9/1985. Provides the legal basis for fisheries management in Indonesia. It prohibits the use of illegal fishing materials and equipment that pollute and degrade the fish and its ecosystems (Articles 8-14) with maximum penalties of six years in prison and a fine of up to Rp 1.2 billion.
- Act No 41/1999 Forestry Addresses forestry activity in Indonesia including management, planning, inventory, conservation, rehabilitation and reclamation of forests. It includes mangroves, important for fisheries management, in the definition of forests.

#### **General legislation of environmental management**

- Act No 23/1997 Environmental management Comprehensive law on environmental management in Indonesia. Aims to create environmentally sustainable development through planning policies and rational exploitation, development, maintenance, restoration, supervision and control.
- Act No 5/1990 Conservation of biological resources and their ecosystems Influences the use and management of coral reefs in Indonesia. It establishes basic principles and general rules for the management, conservation, and use of biological resources, natural habitats and protected areas.

### **Legislation of decentralization**

- Act No 32/2004 Regional government (Autonomy Act) Grants authority to regional governments to manage their own natural resources and to maintain environmental preservation pursuant to the law. Establishes that the territorial sea under the jurisdiction of the province extends up to 12 nautical miles from the coastal shoreline and one-third of its territory belongs to district or city governments. The authority of regional governments (province, district, city) includes: (i) exploration, exploitation, conservation and management of coastal resources of the sea areas; (ii) administrative affairs; (iii) spatial planning; (iv) conducting law enforcement activities in regard to local regulations and regulations that have been decentralized by the central government; (v) actively keeping national security; and sovereignty.
- Act No 33/2004 Financial distribution between central and regional government Transfers budgetary management from the central to local government. The act stipulates the distribution of equilibrium funds (money derived from APBN/national income and expense) including sharecropping funds, general funds, and specific allocation funds. Sharecropping funds sourced from natural resource conservation proceed from: forestry, general mining, fisheries, oil mining, natural gas production, and natural heat production. Revenue is further broken down into four categories:
  - Revenue from forestry activities:
    - Revenue from forestry levy and forestry resource provision regional government gets 80% and 20% goes to central;
    - Revenue from reforestation fees regional government gets 40% and 60% goes to central.
  - Revenue from fishing, general mining and natural heat production regional government gets 80% and 20% goes to central;
  - Oil production revenue regional government gets 15.5% and 84.5% goes to central.
  - Revenue from natural gas production regional government gets 30.5% and 69.5% goes to central.

According to Article 27.1, the central government should provide the second component of equilibrium funds, the general allocation, to the regional government in the amount of 26% of APBN. These allocations are based on the fiscal gap and basic allocation. The regional fiscal need is calculated from total population, width area, the expense of the construction index, gross regional domestic product per capita, and the human development index. The third component, specific allocation funds are meant to assist the regional government to finance specific needs.

# Problems with the Indonesian Legal Framework for Coastal Management:

- Conflicts arise within Indonesian laws because most of them are vague and broad. Sometimes the conflicts arise within a single law or with the regulation made under the law.
  - Fisheries Act No 31/2004 prohibits activities that will result in the destruction of fish habitats, but also allows the use of bottom trawl fishing and other types of fishing gear that in some situations can be destructive to the fish habitats and coral reef ecosystems. In

- addition, one of the purposes is to increase the livelihood of fishermen and small scale seafarmers, yet it does not recognize community-based fisheries management.
- Living natural resources Act No 5/1990 designates the Ministry of Forestry as manager of living resources. This conflicts with No 32/2004 and 27/2007 on the designated institution on the management of conservation areas.
- Conflicts in the use of the terms "conservation area" or "protected area."
- Conflict in the meaning of "conservation."
- Conflict in the scope of definitions of marine species.
- Conflict in the penalties and liabilities imposed.
- A short-cut approach for conflict resolution most conflicts among the natural resource management laws are resolved through the issuance of a presidential decree or ministerial decree, a process that further complicates clarity of the law and in some cases actually counters the formal law.
- Lack of consistency in interpretation of legal rules.
- Conflict of jurisdiction among the national laws.
- Lack of recognition of traditional management there is still no law or government regulation that incorporates the rights for the community to manage its adjacent marine and coastal resources.
  - Coastal Management Act No 27/2007 does not recognize community-based coastal management but rather states that conservation areas are managed by the government (central or local). In addition, Act 27/2007 does not provide a mechanism for how to engage the public during the process of assigning concessions (HP3).

# **Possible Solutions and Policy Implications:**

- According to D. Dirhamsyah (2006), there are three approaches could be taken in order to improve the legal framework for coastal and marine resources management:
  - Strengthen existing legislative instruments that are related to the use and management of coral reef ecosystems, including: amendment of some articles of the existing legislation and the insertion of community traditional rights (adat law) in coastal and marine resources management;
  - Develop a new, integrated law for managing natural resources that addresses a broad range of issues including small island and coastal management (note: some of this is addressed in Act 27/2007);
  - Strengthen local regulations or PERDA as "frontier legislation" addressing the needs and responsibilities of stakeholders.
- According to L. Nurhidayah (2010), the primary conclusions regarding existing policies:
  - Need to recognize community-based conservation management in legislation.
  - There needs to be a clear mechanism for public participation in coastal management, especially as it relates to granting concessions in these areas.
  - Need to focus on conflict management in the following areas: cooperation and coordination among government agencies, consistency of laws, and marine zoning.

# Appendix 4. A summary of regional marine conservation areas in Indonesia (KKP and KKP)

- 1. Kawasan konservasi laut daerah (KKLD), or regional marine conservation areas, is a general term which is not actually referred to in governmental regulations or laws (UU, PP or Permen). The right nomenclature in is actually kawasan konservasi Perairan (KKP). According to the regulation, there are four types of KKP:
  - a) Taman Nasional Perairan (Aquatic National Park)
  - b) Suaka Alam Perairan (Aquatic nature reserve)
  - c) Taman Wisata Perairan (Aquatic tourism area )
  - d) Suaka Perikanan (Fishery nature reserve)
- 2. Legal basis for establishment of KKP:
  - a) Act No. 31/2004 Fisheries
  - b) Act No. 32/2004 Regional Government
  - c) Act No. 27/2007 Coastal and Small islands Management.
  - d) Government regulation No. 60/2007 Fish Resources Conservation
  - e) Government regulation No. 58 /2005 Regional Financial Management
  - f) Government regulation No. 41/2007 Regional Government Structural Organization.
  - g) Ministry of Internal Affairs regulation No. 61/2007 Technical guideline of BLUD Financial Management.
  - h) Ministry of Marine Affairs and Fisheries No. 17/2008 Conservation areas in Coastal and Small Island
- 3. KKPs can be designated by regency, provincial or ministry (MMAF) decree. As of December 2008, it 32 KKP areas have been designated, covering 3,844,000 hectare from West to East of Indonesia (Direktorat Konservasi dan Taman Nasional Laut, 2008). To manage these marine conservation areas, government is meant to establish a local institution<sup>30</sup> depending on the specific area and objectives.
- 4. KKP institutions could be attached under regional technical agency (e.g. Dinas Kelautan dan Perikanan) or could be established as an UPTD<sup>31</sup>.
- 5. UPTD under the regional technical agency is established by local government regulation (PERDA) that signed by head of local government<sup>32</sup>.

According to PP No 60, 2007 financing for KKP can be secured from the following sources:

• APBN / APBD (state budgets);

<sup>&</sup>lt;sup>30</sup> See PP No 41, 2007 article 29 point 1.

<sup>&</sup>lt;sup>31</sup> See PP No 41, 2007 article 14 point 6.

<sup>&</sup>lt;sup>32</sup> Permendagri No 57, 2007

- fisheries sector levies;
- conservational services fees;
- grants or loans; or,
- other legal, non-binding sources.

# Appendix 5. A statement on fisheries management and marine conservation in Indonesia<sup>33</sup>

Indonesia's marine ecosystems and their fisheries are threatened by over-fishing, destructive fishing (blast fishing, bottom trawling, etc.), and poaching of protected species. <sup>34</sup> Conventional fisheries management has had few successes with addressing the tragedy of the commons in fisheries anywhere, including in Indonesia. This is partly because conventional fisheries management assumes accurate knowledge of fish stocks, and because it assumes that local fisheries managers can adequately enforce quota, effort, or gear regulations. Neither is true in Indonesia - especially not for its near-shore fisheries<sup>35</sup> which are multi-species, multi-gear, dispersed, and set in a governance framework that remains essentially open-access. Capture fisheries face intense over-exploitation, especially the major income-generating fish stocks. Under this management regime, current and projected total catch are less than would have been possible under better management approaches. This is a troubling development that puts at risk the welfare of 2.3 million fishers and millions of households across Indonesia's coastal communities. Any development that endangers the productive capacity of marine ecosystems requires the immediate attention of the Government of Indonesia, notably the Ministry of Marine Affairs and Fisheries (MMAF).

Whereas MMAF acknowledges the problem of over-exploitation and the need for a moratorium on the issuance of fishing licenses for certain fishing grounds and gears, it also calls for an expansion of total production, providing in excess of US\$140 million per year in direct and indirect subsidies to encourage expansion of culture and capture fisheries. This reveals that, as with many other countries, Indonesia struggles to align aspirations for development with ecological bottom lines. Recently, technical advisors to the MMAF have been calling for innovative management approaches that address these challenges, including the need for Territorial Use Rights in Fisheries (TURFs) in combination with marine reserves. The TURFs encourage wise fisheries management by local fishing communities while reserves ensure that fish stocks will last even some of the local groups fail to manage their assets in a sustainable way.

<sup>&</sup>lt;sup>33</sup> Adapted from October 2010 presentation materials by People and Nature Consulting International.

<sup>&</sup>lt;sup>34</sup> Whereas there are other important threats (e.g. climate change, coastal development, mining, and oil and gas exploitation), a *Reefs at Risk* assessment conducted by the World Resources Institute found that over-fishing and destructive fishing are most pervasive in Indonesia.

<sup>35</sup> Less than 4 nm from the coast.

<sup>&</sup>lt;sup>36</sup> TURF + reserve combinations works in near-shore waters and demersal (reef) fisheries, directly resolving the tragedy of the commons as not all user groups will succeed in asserting their exclusive right to harvest. It is less effective for most offshore pelagic fisheries and is therefore not a solution for all fisheries problems. Nevertheless, especially if implemented "at scale", this ecosystem-based approach will help district fisheries services to make meaningful contributions to sustainable fishery management. In a TURF + reserve governance system, the role of local government is limited to monitoring, renewal of TURF licenses, and management of reserves.

<sup>&</sup>lt;sup>37</sup> TURFs provide local groups with exclusive rights to harvest fish/organisms in a certain area. These groups also have a responsibility to manage their fisheries. Because benefits of improved management (which often comes at the expense of short-term gains) accrue to user groups and not to outsiders, these user groups have an incentive to manage towards sustainability.

# Appendix 6. Badan Layanan Usaha Daerah (BLUD): Concept, Design and Implementation

As in other countries, the performance of local governments in Indonesia is measured primarily through the delivery of basic public services. During the period of the New Order Administration in Indonesia, development and public service activities at the sub-national level (provincial or district levels) were largely carried out as an extension of the central government.

Therefore, all central departments had their field offices at sub-national level. Following decentralization in 2001, the functions of these central departments' field offices were transferred to the provincial and district levels and performed by the government working units within the regional apparatus known as SKPD (*Satuan Kerja Perangkat Daerah*).

Currently, sub-national governments deliver public services (e.g. education, healthcare, etc.) through these service units and their implementing facilities (e.g. schools, hospitals, etc). These are predominantly SKPD at *dinas* or agency level or at sub-agency level known as UPT (*Unit Pelaksana Teknis*) or technical implementing unit<sup>38</sup>.

In 1997, public service-providing units managing non-tax receipts (penerimaan negara bukan pajak, or PNBP) from their services found themselves in a difficult position when the Government of Indonesia passed Law no. 20/1997. It mandated any government entity receiving non-tax receipts to deposit these funds into a designated government bank account. This new regulation aimed at reducing corruption but also made it impossible for service units such as government-owned hospitals to use revenues from the services to cover their cost of operations in a timely manner.

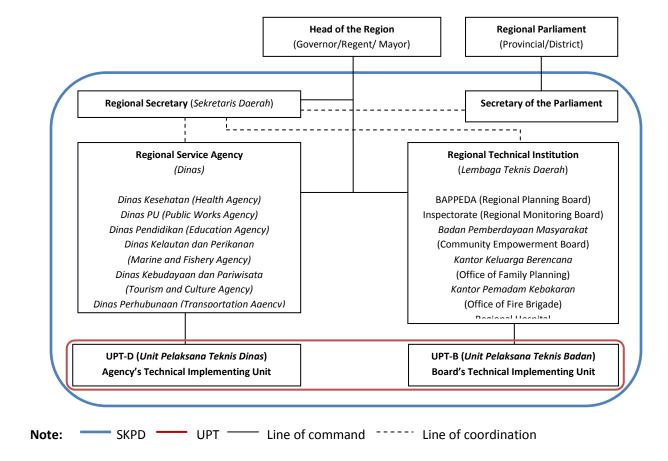
Law No. 1/2004 was then passed. It offered a comprehensive legal framework for accounting for the allocation and use of state funds, and opened the door for the formation of *Badan Layanan Umum/BLU* (public service agency). BLU is a new financial and administrative mechanism that provides *flexibilities* needed by central government service units to directly use the non-tax government revenue from their services to the public. BLU mechanism is applied to central government service units.

Three years later, in 2007 the implementation of BLU concept at the regional level – known as BLUD (*Badan Layanan Umum Daerah* or the Regional Public Service Agency) was formalized through the Ministry of Home Affairs Regulation No 61/2007.

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<sup>&</sup>lt;sup>38</sup> UPT is basically an SKPD (regional working unit), working as a technical implementing unit under a certain agency (*dinas*) or office (*Kantor*). So structurally UPT operates at sub-agency level.



# Current Structure of Local Government (Provincial and District level)

# **Definition and Key Features**

BLUD is a financial management model which provides flexibility to directly use its revenue from non-government money to achieve sound business practices. This is an exception to the usual financial management model applied in general SKPD. On top of this, the main purpose to achieve from this flexibility is to improve services and efficiency of budget. In Chapter 1, Article 1, Point 1 the MoHA Regulation No. 61/2007 provides the following definition of BLUD.

Badan Layanan Umum Daerah/ BLUD (Local Public Service Agency) is a regional working unit (Satuan Kerja Perangkat Daerah- SKPD) or a local technical implementing unit (Unit Pelaksana Teknis Daerah-UPTD) under an SKPD, established to deliver services to the public by providing goods and/or services in a not-for-profit manner. Its operation will be based on efficiency and productivity principles.

With the introduction of BLUD mechanism, there are currently two kinds of regional government service units (SKPD) within local government agencies, the BLUD-SKPD (SKPD which applies the BLUD financial management model or the PPK-BLUD) and the general SKPD (SKPD that does not apply the PPK-BLUD). A comparison between the non-BLUD SKPD and BLUD-SKPD is provided in the table below.

Aspects of Flexibility – comparison between general SKPD and BLUD SKPD

| Aspects of Flexibility         | SKPD   | BLUD-SKPD  |
|--------------------------------|--|--|
| Financial Management           | <ul> <li>revenue deposited in a regional government account (Kas Daerah); not accessible to SKPD</li> <li>may not receive grants</li> <li>may not spend beyond approved budget</li> <li>may not have investments</li> <li>may not to write off assets</li> <li>financial reports based on Gol accountancy standard (Standar Akuntansi Pemerintah)</li> </ul> | <ul> <li>revenue deposited in a BLUD account; accessible by SKPD-BLUD</li> <li>may receive grants<sup>39</sup></li> <li>may spend beyond approved budget within certain threshold<sup>40</sup> (flexible budget)</li> <li>allowed to have investments, based on regional head approval</li> <li>may hold long term debt with approval of the head of region</li> <li>may write off non-fixed assets</li> <li>financial reporting based on Generally Accepted Accounting Principles/GAAP and Gol accountancy standard (Standar Akuntansi Keuangan)</li> </ul> |
| Staffing                       | all are civil servant government employees   | both civil servant government<br>employees and non-civil servant<br>employees, with an exception for<br>the post of Financial Officer which<br>must be civil servant.  |
| Partnership                    | not allowed to initiate partnership  | Allowed to establish partnerships with other entities  |
| Procurement                    | must comply with Presidential Decree<br>80/2003 (regulated bidding)  | use of non-APBN fund for<br>procurement does not have to<br>comply with Presidential Decree<br>80/2003   |
| Governance                     | no Board   | Supervisory Board recruitment<br>based on assets (>Rp75 billion) and<br>or revenue (>Rp15 billion)   |
| Remuneration                   | based on government civil-servant<br>employee standard   | While civil servant remuneration is<br>in line with government civil-<br>servant employee standards, it may<br>vary based on the size of overall<br>assets and revenues  |
| <b>Establishment of Tariff</b> | Based on <i>Perda</i> (Regional Regulation)  | Based on appropriate regulation.   |

 $<sup>^{39}</sup>$  According to MoHA Regulation 61/2007 Chapter X Article 60 and 61, BLUD can receive grants, both conditional and unconditional.

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 $<sup>^{40}</sup>$  The percentage of the threshold is proposed by the Head of BLUD, reviewed by TAPD (The Regional Government Budgeting Team) and approved by the PPKD (The Regional Financial Management Office). The threshold is calculated based on the BLUD financial performance over the last three years.

# Appendix 7. National Park (PHKA) Budgeting Process

Development and preparation of National Park (PHKA) workplans and budgets are regulated by regulation P.01/Menhut-II/2006. This regulation provides general guidance for preparing and creating workplans and budgets for individual department, and also the integration of these into the Ministry of Forestry integrated budget (DIPA). Each National Park (PHKA office) typically prepares their specific workplan and budget by February to be submitted as part of the preparation of the Ministry of Forestry work plan (RENJA-KL). The individual workplans and budgets are adjusted during the following process and final annual budgets (next year) are decided by December 31. This is almost always less than what is requested.

- 1. The preparation of the Ministry of Forestry work plan (RENJA-KL) (February to April);
- 2. The preparation of Ministry of Forestry work plans and budgets (RKA-KL) (May to August); and,
- 3. The preparation of the Budget Implementation List (DIPA) (September to December).

The actual workplan is developed utilizing input from various stakeholders at local, provincial and regional levels during a series of planning forums. The outputs from these forums are a workplan for each Technical implementing unit (UPT-Unit Pelaksana Teknis).

A crucial aspect of budget planning within Ministry of Forestry is an indicative (or estimated) budget (PAGU INDIKATIF) as set for every department and program within the Ministry in accordance with specific development priorities set by the Ministry of Planning (Bappenas) and the Ministry of Finance. These are agreed to between Ministry of Finance and parliament (DPR-RI).

After discussion with DPR-RI, the Ministry of Finance will issue a definitive budget for the Ministry of Forestry (PAGU DEFINITIF) – the maximum budget for each program / department from the state budget plan for revenue and expenditure (RAPBN). The PAGU DEFINITIF is used in the national consolidation and coordination meeting (RAKONASBANGHUT) to adjust the provisional workplan and budget (RKA-KL Sementara) become draft of definitive workplan and budget (draft RKA-KL definitif). When DPR-RI agreed with the draft definitive, the draft becomes definitive Ministry of Forestry RKA-KL.

The Ministry of Forestry RKA-KL is reviewed by the Ministry of Forestry, the Secretariat General C.Q Planning and Financial Bureau and the Ministry of Finance. Outputs are SAP-SK, DIPA of central office and SRAA of local working unit. SAP-SK is a budget document that includes budget allocation per working unit based on Activities, Sub-Activities, and budget activity points. And SRAA is a budget document that includes budget allocations per working unit based on the proposed functional needs of the department.