Coral Reef Rehabilitation and Management Program- Coral Triangle Initiative (COREMAP-CTI) (P127813)

Key Dates

Key Project Dates

- Bank Approval Date: 21-Feb-2014
- Effectiveness Date: 05-Jun-2014
- Planned Mid Term Review Date: 17-Oct-2016
- Actual Mid-Term Review Date: 11-Nov-2016
- Original Closing Date: 30-Jun-2019
- Revised Closing Date: 30-Jun-2019

Project Development Objectives

Project Development Objective (from Project Appraisal Document)
To institutionalize the COREMAP approach of a viable, decentralized and integrated framework for sustainable management of coral reef resources, associated eco-systems and bio-diversity for the welfare of the communities in the selected districts of the respective provinces in Indonesia.

Has the Project Development Objective been changed since Board Approval of the Project Objective?
Yes

Board Approved Revised Project Development Objective (If project is formally restructured)
To strengthen institutional capacity in coastal ecosystems monitoring and research to produce evidence-based resource management information.

Global Environmental Objective (from Project Appraisal Document)
The GEF GEO is the same as the PDO.

Has the Global Environmental Objective been changed since Board Approval of the Project Objective?
No

Components

<table>
<thead>
<tr>
<th>Name</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Institutional Strengthening for Coastal Ecosystems Monitoring</td>
<td>$14.26 M</td>
</tr>
<tr>
<td>Support for Demand-Driven Coastal Ecosystems Research</td>
<td>$13.09 M</td>
</tr>
</tbody>
</table>
Strengthening Institutional Systems for Coastal Ecosystems Monitoring and Research:(Cost $15.79 M)

Project Management:(Cost $4.24 M)

Overall Ratings

<table>
<thead>
<tr>
<th>Name</th>
<th>Previous Rating</th>
<th>Current Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Progress towards achievement of PDO</td>
<td>Moderately Unsatisfactory</td>
<td>Moderately Satisfactory</td>
</tr>
<tr>
<td>Overall Implementation Progress (IP)</td>
<td>Moderately Unsatisfactory</td>
<td>Moderately Satisfactory</td>
</tr>
<tr>
<td>Overall Risk Rating</td>
<td>Moderate</td>
<td>Moderate</td>
</tr>
</tbody>
</table>

Implementation Status and Key Decisions

The Project's Mid-Term Review (MTR) was carried out on schedule and completed in November 2016. The MTR recommended an immediate Level 1 restructuring to address the far ranging impacts of Law No. 23/2014 as well as the ongoing and persistent implementation delays and low disbursement.

On June 16, 2017, the Board approved the Level 1 restructuring proposal for the Project, in light of the Ministry of Marine Affairs and Fisheries’ (MMAF) exit from the project as Executing Agency (EA) based on its internal policy to no longer access external funds in the form of loans and due to the broad implications of Law No. 23/2014 on the project's objectives and institutional arrangements. With MMAF's exit, the role of Executing Agency was transferred to the Indonesian Institute of Science (LIPI), currently one of the project's three National Implementation Units, and the original Executing Agency of the first phase of the COREMAP Adjustable Program Loan.

The Level I restructuring introduced a number of significant changes to the project in order to ameliorate overall project performance, improve the potential for successful achievement of the Project Development Objective (PDO) and to facilitate timely disbursement of the remaining funds, including: (i) revision of the PDO reflecting a reduced project scope and, as a consequence, revision of component names, activities, costs and results framework; (ii) change of Executing Agency and, as a consequence, modification of implementation, financial management, procurement and disbursement arrangements; and, (iii) 18-month extension of the closing date.

The 18-month extension of the closing date to December 30, 2020 was proposed as the restructuring was sufficiently deep that it should put the project back on an implementation trajectory that we expect to fully satisfactory results.

The objectives of the project are important to pursue in order to address the fundamental and persistent information and capacity gaps preventing long-term sustainable management of Indonesia’s critical coastal ecosystems which are of paramount importance to the more than 10,600 coastal communities whose livelihoods depend on the health of these resources. This extension will also ensure successful delivery and completion of the restructured project through the entire 2020 calendar year which reflects LIPI’s annual budget planning cycle and project execution schedule.

The new component activities will focus on coastal ecosystem monitoring, demand driven research and institutional capacity development for improved coastal ecosystem monitoring and research.
Risks

Systematic Operations Risk-rating Tool

<table>
<thead>
<tr>
<th>Risk Category</th>
<th>Rating at Approval</th>
<th>Previous Rating</th>
<th>Current Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Political and Governance</td>
<td>--</td>
<td>Low</td>
<td>Low</td>
</tr>
<tr>
<td>Macroeconomic</td>
<td>--</td>
<td>Low</td>
<td>Low</td>
</tr>
<tr>
<td>Sector Strategies and Policies</td>
<td>--</td>
<td>Low</td>
<td>Low</td>
</tr>
<tr>
<td>Technical Design of Project or Program</td>
<td>--</td>
<td>Low</td>
<td>Low</td>
</tr>
<tr>
<td>Institutional Capacity for Implementation and Sustainability</td>
<td>--</td>
<td>Moderate</td>
<td>Moderate</td>
</tr>
<tr>
<td>Fiduciary</td>
<td>--</td>
<td>Substantial</td>
<td>Substantial</td>
</tr>
<tr>
<td>Environment and Social</td>
<td>--</td>
<td>Low</td>
<td>Low</td>
</tr>
<tr>
<td>Stakeholders</td>
<td>--</td>
<td>Low</td>
<td>Low</td>
</tr>
<tr>
<td>Other</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Overall</td>
<td>--</td>
<td>Moderate</td>
<td>Moderate</td>
</tr>
</tbody>
</table>

Results

Project Development Objective Indicators

- Sites at which Indonesia's new Coral Reef Health Index is applied (Number, Custom)

<table>
<thead>
<tr>
<th>Value</th>
<th>Baseline</th>
<th>Actual (Previous)</th>
<th>Actual (Current)</th>
<th>End Target</th>
</tr>
</thead>
<tbody>
<tr>
<td>Value</td>
<td>0.00</td>
<td>--</td>
<td>0.00</td>
<td>31.00</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Date</th>
<th>Baseline</th>
<th>Actual (Previous)</th>
<th>Actual (Current)</th>
<th>End Target</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date</td>
<td>30-Jun-2017</td>
<td>--</td>
<td>30-Jun-2017</td>
<td>31-Dec-2020</td>
</tr>
</tbody>
</table>

Comments
This indicator will function to strengthen institutional capacity in monitoring and provision of evidenced-based resource management information part of the PDO. The new Index will be developed, validated and used at 31 coastal ecosystem monitoring sites in Indonesia led by LIPI. The new Index will offer a practical approach to link field data with coastal ecosystems resources management. Specific aspects of the proposed metric include:
1. Coral cover
2. Potential for coral recovery
3. Total fish biomass

The 31 monitoring sites at which the new Index will be validated and applied during the course of the project are:

- **9 districts in Eastern Indonesia** (Pangkep, Selayar, Sikka, Buton Induk, Buton Tengah, Buton Selatan, Wakatobi, Biak, Raja Ampat)
- **8 districts in Western Indonesia** (Tapanuli Tengah, Nias Utara, Mentawai, Batam, Bintan, Lingga, Natuna, Sabang)
- **7 marine conservation areas in Eastern Indonesia** (Kapoposang, Sawu/Kupang, Aru Tenggara, Banda, Kep. Wayag Sayang (Raja Ampat), SAP Raja Ampat, Padaido)
- **3 marine conservation areas in Western Indonesia** (Gili Matra, Anambas, Pulau Pieh)
- **4 locations responding to national priorities**, including: Spermonde, Lombok/Sekotong, Kendari and Ternate

| Coastal ecosystems area under continuous monitoring according to defined criteria (Hectare(Ha), Custom) |
|--------------------------------------------------|-----|----------------|-----------------|----------------|
| Baseline                                         | Actual (Previous) | Actual (Current) | End Target      |
| Value                                            | 6,773,026.00      | 6,773,026.00     | 9,235,028.00    |
| Date                                             | 30-Jun-2017       | 30-Jun-2017      | 31-Dec-2020     |

Comments

This indicator will function to strengthen institutional capacity in monitoring and provision of evidenced-based resource management information part of the PDO.

Note: indicator is cumulative.

Coastal ecosystems include: coral reefs, mangroves and sea grass meadows.

Continuous monitoring means: longitudinal (every year, over multiple years) and systematic (at pre-selected sampling sites) use and completion of LIPI monitoring surveys at sampling sites identified as representative sites for the 16 Eastern project sites and 11 Western project sites under Sub-Components 1.1a and 1.1b. Note: the 4 new sites are not included in this indicator.

Defined criteria means: assessment of coastal ecosystems status and health through field surveys conducted along multiple pre-identified marine and coastal sample transects at each of the project sites carried out by LIPI monitoring specialists.

<table>
<thead>
<tr>
<th>Coastal ecosystems research papers published by LIPI and research grant recipients that meet the need for evidence-based resources management information (Number, Custom)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baseline</td>
</tr>
<tr>
<td>Value</td>
</tr>
<tr>
<td>Date</td>
</tr>
</tbody>
</table>

Comments
This indicator will function to strengthen institutional capacity in research and the provision of evidenced-based resource management information part of the PDO.

Note: indicator is cumulative.

**Coastal ecosystems include:** coral reefs, mangroves and sea grass meadows.

**Scientific research paper published means:** primary research on coastal ecosystems based on application of the scientific method and line of inquiry. Published papers means submission and subsequent publication of the research scope, methods and findings in national or international journals or circulars.

**Meet the need for evidenced-based resources management information means:** need identified based on LIPI’s pre-research preparatory work to prioritize demand-driven research needed by end users to generate data and information needed to address priority coastal ecosystems resource management questions. This would entail identification of target end users of the research findings including the Ministry of Marine Affairs and Fisheries as well as sub-national technical resources management units of marine affairs and fisheries, among others. The target end users will complete an annual pre-research survey to identify priority research themes and questions for LIPI to create a menu of topics for the competitive research grants and to determine which areas its own staff will prioritize in that year to undertake and complete to respond to target end user demand.

### Overall Comments

**Global Environmental Objective Indicators**

**Intermediate Results Indicators**

| Specific coastal ecosystems schemes for which LIPI is accredited as the national certification entity (Number, Custom) |
|---|---|---|---|
| **Baseline** | **Actual (Previous)** | **Actual (Current)** | **End Target** |
| Value | 0.00 | -- | 0.00 | 5.00 |
| Date | 30-Jun-2017 | -- | 30-Jun-2017 | 31-Dec-2020 |

**Comments**

LIPI will obtain accreditation from the National Agency for Professional Certification (Badan Nasional Sertifikasi Profesi, BNSP), to become
the Indonesian Professional Certification Agency for coastal ecosystems monitoring, enabling LIPI to become the National Certification Entity for coastal ecosystems monitoring. Certification will be secured for 5 schemes:

- Assess coral reef conditions
- Assess biodiversity of coral reef fish species
- Assess megabenthos
- Assess mangrove habitat condition
- Assess seagrass habitat condition

Note: indicator is cumulative.
It is linked to PDO#1 and #2.

<p>| Assessors and surveyors certified in coastal ecosystems monitoring by LIPI (Number, Custom) |</p>
<table>
<thead>
<tr>
<th>Baseline</th>
<th>Actual (Previous)</th>
<th>Actual (Current)</th>
<th>End Target</th>
</tr>
</thead>
<tbody>
<tr>
<td>Value</td>
<td>0.00</td>
<td>--</td>
<td>0.00</td>
</tr>
<tr>
<td>Date</td>
<td>30-Jun-2017</td>
<td>--</td>
<td>30-Jun-2017</td>
</tr>
</tbody>
</table>

Comments

This indicator will measure LIPI’s ability to certify a new cohort of assessors and surveyors to conduct coastal ecosystems monitoring. It will involve face-to-face classroom and field based trainings and formal certification issuance for the monitoring work to be conducted by the certified cohort.

Note: indicator is cumulative.
It is linked to PDO#1 and #2.

<p>| Researchers trained by LIPI in coastal ecosystem research techniques (Number, Custom) |</p>
<table>
<thead>
<tr>
<th>Baseline</th>
<th>Actual (Previous)</th>
<th>Actual (Current)</th>
<th>End Target</th>
</tr>
</thead>
<tbody>
<tr>
<td>Value</td>
<td>0.00</td>
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<td>0.00</td>
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<tr>
<td>Date</td>
<td>30-Jun-2017</td>
<td>--</td>
<td>30-Jun-2017</td>
</tr>
</tbody>
</table>

Comments

This indicator will measure the number of new national and international research scientists who will improve their skills, knowledge and capacity to conduct coastal ecosystem research as a result of receiving targeted training from LIPI on Global Information Systems applications and approaches, data analysis methodologies, research and laboratory techniques investigative and applied approaches, among other research techniques.

Note: indicator is cumulative.
It is linked to PDO#3.

<table>
<thead>
<tr>
<th>LIPI coastal monitoring and research infrastructure assets upgraded (Number, Custom)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baseline</td>
</tr>
<tr>
<td>---</td>
</tr>
<tr>
<td>Value</td>
</tr>
<tr>
<td>Date</td>
</tr>
</tbody>
</table>

Comments

This indicator measures the progress made with upgrading of existing LIPI infrastructure assets used for monitoring, research and training purposes.

Note: indicator is cumulative.

It is linked to PDO #2 and #3.

All upgrades will involve small scale interior civil works to refurbish existing laboratories, offices, dormitories and training classrooms and conference rooms. The work will also include installation of new IT equipment and furniture and laboratory equipment to ensure state of the art facilities and equipment to strengthen and expand opportunities for LIPI and partner institutions to access improved training, monitoring and research facilities in Indonesia to improve the scale, quality and delivery of timely data and information related to coastal ecosystem resources management.

The 8 facilities are:

- The Marine Species Conservation Technical Units at: Bitung, Sulawesi, Biak, Papua, Tual, Maluku, Ternate, North Maluku, Mataram, Lombok
- LIPI’s Ancol Headquarters
- LIPI’s central Jakarta (Jl. Raden Saleh) site and Pulau Pari field station
### Coastal ecosystems monitoring surveys completed (Number, Custom)

<table>
<thead>
<tr>
<th></th>
<th>Baseline</th>
<th>Actual (Previous)</th>
<th>Actual (Current)</th>
<th>End Target</th>
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<tbody>
<tr>
<td>Value</td>
<td>16.00</td>
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<td>93.00</td>
</tr>
<tr>
<td>Date</td>
<td>30-Jun-2017</td>
<td>--</td>
<td>30-Jun-2017</td>
<td>31-Dec-2020</td>
</tr>
</tbody>
</table>

Comments

This indicator will be used to track progress made with completion of LIPI coastal ecosystem monitoring surveys at each of the pre-identified project sites. It is linked to PDO#1 and #2.

Note: indicator is cumulative.

LIPI monitoring surveys, including application of the new Coral Reef Health Index, would be used to assess the status and health of the coral reefs, mangroves and sea grass meadows at each of the sites on an annual basis following set transect sampling locations at each project site.

The data and information provided by the surveys will afford academia and target end users with longitudinal data on the changing health and status of each ecosystem type across the country and in priority conservation areas.

The 31 project sites are as noted above in PDO#1.

### Sub-national assessment centers established by LIPI (Number, Custom)

<table>
<thead>
<tr>
<th></th>
<th>Baseline</th>
<th>Actual (Previous)</th>
<th>Actual (Current)</th>
<th>End Target</th>
</tr>
</thead>
<tbody>
<tr>
<td>Value</td>
<td>0.00</td>
<td>--</td>
<td>0.00</td>
<td>7.00</td>
</tr>
<tr>
<td>Date</td>
<td>30-Jun-2017</td>
<td>--</td>
<td>30-Jun-2017</td>
<td>31-Dec-2020</td>
</tr>
</tbody>
</table>

Comments

This indicator will measure the number of assessment centers for coastal ecosystems monitoring that LIPI has equipped with IT systems and other interior assets in existing partner monitoring institutions (i.e., universities) linked to district and provincial coastal ecosystem monitoring programs under Government's Marine Affairs and Fisheries Agencies.

Note: indicator is cumulative.

It is linked to PDO#1 and #2.
Demand-driven coastal ecosystems research grants awarded by LIPI (Number, Custom)

<table>
<thead>
<tr>
<th></th>
<th>Baseline</th>
<th>Actual (Previous)</th>
<th>Actual (Current)</th>
<th>End Target</th>
</tr>
</thead>
<tbody>
<tr>
<td>Value</td>
<td>0.00</td>
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<td>0.00</td>
<td>20.00</td>
</tr>
<tr>
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<td>30-Jun-2017</td>
<td>--</td>
<td>30-Jun-2017</td>
<td>31-Dec-2020</td>
</tr>
</tbody>
</table>

Comments

This indicator will measure the number of competitive research grants LIPI awards annually to partner institutions in its research network to conduct coastal ecosystems research on themes and topics deemed priority by the target end users identified through preparatory end user surveys to ensure that the menu of research topics and questions respond to applicable resource management questions or issues that end users want data and information to support appropriate resource use decision making processes and investments.

Note: indicator is cumulative.
It is linked to PDO#3.

Sub-national data nodes within existing institutions established by LIPI (Number, Custom)

<table>
<thead>
<tr>
<th></th>
<th>Baseline</th>
<th>Actual (Previous)</th>
<th>Actual (Current)</th>
<th>End Target</th>
</tr>
</thead>
<tbody>
<tr>
<td>Value</td>
<td>0.00</td>
<td>--</td>
<td>0.00</td>
<td>7.00</td>
</tr>
<tr>
<td>Date</td>
<td>30-Jun-2017</td>
<td>--</td>
<td>30-Jun-2017</td>
<td>31-Dec-2020</td>
</tr>
</tbody>
</table>

Comments

This indicator will measure the number of coastal ecosystem data nodes extant in existing institutions that partner with LIPI that are provided with upgraded IT systems and laboratory equipment and furnishings as needed to ensure they are able to generate the data needed to inform resource management decision making by target end users.

Note: indicator is cumulative.
It is linked to PDO#1, #2 and #3.

Overall Comments
Note: All Project Indicators noted herein were added as part of the restructuring exercise.

Data on Financial Performance
Disbursements (by loan)

<table>
<thead>
<tr>
<th>Project</th>
<th>Loan/Credit/TF</th>
<th>Status</th>
<th>Currency</th>
<th>Original</th>
<th>Revised</th>
<th>Cancelled</th>
<th>Disbursed</th>
<th>Undisbursed</th>
<th>Disbursed</th>
<th>Disbursed</th>
</tr>
</thead>
<tbody>
<tr>
<td>P127813</td>
<td>IBRD-83360</td>
<td>Effective</td>
<td>USD</td>
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<td>47.38</td>
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<td>P130389</td>
<td>TF-15470</td>
<td>Effective</td>
<td>USD</td>
<td>10.00</td>
<td>10.00</td>
<td>0.00</td>
<td>4.82</td>
<td>5.18</td>
<td>48%</td>
<td></td>
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Key Dates (by loan)

<table>
<thead>
<tr>
<th>Project</th>
<th>Loan/Credit/TF</th>
<th>Status</th>
<th>Approval Date</th>
<th>Signing Date</th>
<th>Effectiveness Date</th>
<th>Orig. Closing Date</th>
<th>Rev. Closing Date</th>
</tr>
</thead>
</table>

Cumulative Disbursements

Restructuring History

Level 1 Approved on 05-Jun-2017

Related Project(s)