



Report Number: ICRR0023535

## 1. Project Data

**Project ID**  
P127813

**Project Name**  
Coremap III

**Country**  
Indonesia

**Practice Area(Lead)**  
Environment, Natural Resources & the Blue Economy

**L/C/TF Number(s)**  
IBRD-83360

**Closing Date (Original)**  
30-Jun-2019

**Total Project Cost (USD)**  
54,651,555.72

**Bank Approval Date**  
21-Feb-2014

**Closing Date (Actual)**  
30-Jun-2022

	<b>IBRD/IDA (USD)</b>	<b>Grants (USD)</b>
Original Commitment	47,380,000.00	0.00
Revised Commitment	44,751,627.18	0.00
Actual	44,751,627.18	0.00

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**Project ID**  
P130389

**Project Name**  
Coremap III ( P130389 )

**L/C/TF Number(s)**

**Closing Date (Original)**

**Total Project Cost (USD)**  
9899928.54

**Bank Approval Date**

**Closing Date (Actual)**



21-Feb-2014

	IBRD/IDA (USD)	Grants (USD)
Original Commitment	0.00	10,000,000.00
Revised Commitment	0.00	9,899,928.54
Actual	0.00	9,899,928.54

## 2. Project Objectives and Components

### a. Objectives

The Project Development Objective (PDO) of the Coral Reef Rehabilitation and Management Program - Coral Triangle Initiative (COREMAP-CTI) Project was **"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"** (Loan Agreement dated March 17, 2014, schedule 1, page 6). The PDO statement in the PAD (para 18) was the same as in the Loan Agreement.

The PAD (annex II, page 22) describes that the Coral Reef Rehabilitation and Management Program (COREMAP) approach was based on "a system of co-management in coastal villages to promote community-based management and control over the coastal resources in a decentralized manner."

The project targeted 210 villages in the following seven districts in five provinces: Sikka district (East Nusa Tenggara province); Selayar and Pangkep districts (South Sulawesi province), Buton and Wakatobi districts (South East Sulawesi province), Raja Ampat district (West Papua province), and Biak district (Papua province) (PAD, para 20).

The PDO was revised twice during implementation. In the 2017 restructuring, the PDO was revised to **"strengthen institutional capacity in coastal ecosystems monitoring and research to produce evidence-based resource management information"** (Restructuring Paper 2017, para 17). The 2019 restructuring further amended the PDO to: **"strengthen institutional capacity in coastal ecosystems monitoring and research to produce evidence-based resource management information and to improve the management effectiveness of priority coastal ecosystems"** (Restructuring Paper 2019, para 6).

IEG concurs with the ICR (para 44) that a split rating is necessary as the project's scope decreased after the restructurings.

The PDOs at appraisal and after revisions were parsed as follows for this ICR Review:



Objective 1. 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.

Objective 1 (Revision 1). Dropped.

Objective 1 (Revision 2). Dropped.

Objective 2. None at appraisal.

Objective 2 (Revision 1). To strengthen institutional capacity in coastal ecosystems monitoring and research to produce evidence-based resource management information.

Objective 2 (Revision 2). To strengthen institutional capacity in coastal ecosystems monitoring and research to produce evidence-based resource management information and to improve management effectiveness of priority coastal ecosystems.

**b. Were the project objectives/key associated outcome targets revised during implementation?**  
Yes

**Did the Board approve the revised objectives/key associated outcome targets?**  
Yes

**Date of Board Approval**  
05-Jun-2017

**c. Will a split evaluation be undertaken?**  
Yes

**d. Components**  
**Component 1**

- **Component 1 (at appraisal): Institutional Strengthening for Decentralized Coral Reef Management** (Estimate: US\$14.93 million) intended to institutionalize the COREMAP approach at the different levels of the government agencies and develop policy and legal framework to enhance decentralized coral reef management through the following four sub-components.
  - Sub-component 1.1: Strengthening and expansion of the COREMAP approach.
  - Sub-component 1.2: Support for robust ecological and socioeconomic monitoring.
  - Sub-component 1.3: Strengthening surveillance of coastal ecosystems.
  - Sub-component 1.4: Strengthening technical capacity.
- **Component 1 (after restructurings): Institutional Strengthening for Coastal Ecosystems Monitoring** (Estimate at the 2017 restructuring: US\$14.26 million; Estimate at the 2019 restructuring: US\$28.12 million; Actual: US\$27.53 million) shifted its focus to support institutional strengthening for ecological monitoring at the national level. There were three sub-components.
  - Sub-component 1.1: Support for robust coastal ecosystems monitoring.
  - Sub-component 1.2: Strengthen technical capacity for target coastal monitoring end users.



- Sub-component 1.3: Strengthen institutional capacity for coastal ecosystems monitoring.

## Component 2

- **Component 2 (at appraisal): Development of Ecosystem-Based Resource Management** (*Estimate: US\$15.19 million*) intended to improve management of national and district Marine Conservation Areas (MCAs) and create enabling conditions for sustainable use of the surrounding production seascape. There were five sub-components. This component was dropped at the first restructuring but partially restored at the second restructuring as component 3 (see below).
  - Sub-component 2.1: Support preparation of zoning plans.
  - Sub-component 2.2: Application of integrated coastal management.
  - Sub-component 2.3: Management effectiveness of MCAs.
  - Sub-component 2.4: Piloting community rights-based approach.
  - Sub-component 2.5: Sustainable fisheries management in selected fisheries management areas.
- **Component 2 (after restructurings): Support for Demand-Driven Coastal Ecosystems Research** (*Estimate at the 2017 restructuring: US\$13.09 million; Estimate at the 2019 restructuring: US\$16.39 million; Actual: US\$16.36 million*) supported the Indonesian Institute of Sciences (LIPI), which was later merged into the National Research and Innovation Agency (BRIN) in 2021, to strengthen institutional and technical capacity for coastal ecosystems research at the national level. There were three sub-components.
  - Sub-component 2.1: Strengthening institutions for demand-driven coastal ecosystems research.
  - Sub-component 2.2: Strengthen technical capacity for coastal ecosystems research.
  - Sub-component 2.3: Strengthen coastal ecosystems monitoring and research data and knowledge networks.

## Component 3

- **Component 3 (at appraisal): Strengthening a Sustainable Marine-based Economy** (*Estimate: US\$22.12 million*) intended to develop sustainable, ecosystem-based marine enterprises to reinforce links between healthy marine ecosystems and economic benefits and create an economic basis to sustain COREMAP local institutions. This component was dropped at the first restructuring.
  - Sub-component 3.1: Creation of basic infrastructure.
  - Sub-component 3.2: Pilot program to test the development of sustainable enterprise alliances.
- **Component 3 (after the first restructuring): Strengthening Institutional Systems for Coastal Ecosystems Monitoring and Research** (*Estimate at the 2017 restructuring: US\$ 15.79 million*). This component was added during the 2017 restructuring. During the 2019 restructuring, this component was removed, and the following activities were reallocated to components 1 and 2, with no change to associated budgets or implementation arrangements (Restructuring Paper 2019, page 5).
  - Sub-component 3.1: Strengthen institutional capacity for coastal ecosystems monitoring and research.



- Sub-component 3.2: Strengthen coastal ecosystems monitoring and research data and knowledge networks.

- **Component 3 (after the second restructuring): Management of Priority Coastal Ecosystems** (*Estimate at the 2019 restructuring: US\$9.07 million; Actual: US\$8.57 million*). This component was added at the 2019 restructuring to include reintroduced GEF-financed activities (Restructuring Paper 2019, page 11). There were three sub-components.

- Sub-component 3.1: Management effectiveness of marine protected areas and conservation of threatened species.
- Sub-component 3.2: Integrated coastal zone planning.
- Sub-component 3.3: Community stewardship of coastal resources.

**Component 4: Project Management, Coordination, and Learning** (*Estimate: US\$5.14 million; Estimate at the 2017 restructuring: US\$4.24 million; Estimate at the 2019 restructuring: US\$3.80 million; Actual: US\$2.19 million*) intended to support: (i) monitoring and evaluation of project performance, (ii) learning networks and dissemination of best practices, (iii) compliance monitoring on safeguards and fiduciary management, and (iv) coordination with the Asian Development Bank (ADB) and other partners. At the first restructuring, the component descriptions related to (ii) and (iv) on the coordination with ADB were dropped.

#### e. Comments on Project Cost, Financing, Borrower Contribution, and Dates

**Project Cost:** At appraisal, the project was estimated to use a financing of US\$57.38 million (PAD, para 25). At project closing, the cost was US\$54.65 million (ICR, annex 3, page 53).

**Financing:** At appraisal, the project was planned to be financed through an IBRD loan of US\$47.38 million and a Global Environmental Facility (GEF) grant of US\$10.00 million (PAD, para 25). At project closing, the project was financed by an IBRD loan of US\$44.75 million and a GEF grant of US\$9.89 million (ICR, page 6).

**Borrower Contribution:** At appraisal, the government committed the counterpart funding of US\$5.74 million to supplement the IBRD loan and the GEF grant (PAD, para 25). At project closing, the ICR (annex 3, page 54) reported that the counterpart funding of US\$3.42 million had been spent, and US\$2.28 million was cancelled by the 2017 restructuring.

**Dates:** The project was approved on February 21, 2014, and became effective on June 5, 2014. The Mid-Term Review (MTR) was done in December 2016. The project closed on June 30, 2022, 36 months after the original closing date of June 30, 2019.

**Restructuring:** The project conducted two restructurings on June 5, 2017, and May 8, 2019.

- The first restructuring was a level one restructuring (Restructuring Paper 2017, page 5). The proportions of disbursements were 33.35 percent of the IBRD loan and 48.19 percent of the GEF grant, respectively (Restructuring Paper 2017, para 9). The MTR recommended to conduct the first restructuring to address the delays in project implementation by the MMAF, the internal policy on external loans with the MMAF, and the implications of Law No. 23/2014; project activities stopped between December 2015 and July 2016. This key changes made under the first restructuring included: (i) revising the PDO to reflect a reduced project scope, and, as a consequence, revising



component names, activities, costs, and results framework; (ii) changing the executing agency from the Ministry of Marine Affairs and Fisheries (MMAF) to the Indonesian Institute of Science (LIPI, later merged into BRIN), and, as a consequence, modifying implementation arrangements for financial management, procurement, and disbursement; and (iii) extending the project closing date for 18-months (Restructuring Paper 2017, para 12).

- The second restructuring was a level two restructuring (ICR, para 16). The proportion of disbursement under the IBRD loan was 50.80 percent (ICR, para 16). The key changes included: (i) revising the PDO to reflect the focus of the GEF-financed activities to be restarted, leading to revisions in component names, activities, costs, and results framework; (ii) changing the executing agency for all GEF-financed activities from MMAF to the Ministry of National Development Planning (BAPPENAS), and changing the executing agency for IBRD-financed activities related to scholarships from LIPI to BAPPENAS. It led to modifications in implementation arrangements for financial management, procurement, and disbursement; (iii) establishing a demand driven grants mechanism to support on-the-ground management activities through experienced and established NGOs and other eligible organizations; and (iv) extending the closing date for an additional 18 months (Restructuring Paper 2019, para 5). Regarding the target Marine Protected Areas (MPAs) with improved management effectiveness, the original PDO indicator at appraisal to measure the progress in all 13 Marine Conservation Areas (MCAs, which was a term interchangeable with MPAs) was revised to measure the number of MPAs which achieved the highest level of management effectiveness (i.e., four MPAs with the blue status), as described in section 4.

### 3. Relevance of Objectives

#### Rationale

**Country and Sector Context:** Indonesia has one of the world's largest networks of coral reefs, comprising about 16 percent of the world's total stock and the highest marine biodiversity with about 590 species of hard coral and at least 2,200 reef fish species (ICR, para 1). However, almost two-thirds (65 percent) of Indonesia's coral reefs have been threatened from overfishing, and almost half have been threatened specifically from destructive fishing practices (PAD, para 4). The threats were further exacerbated by extreme coral bleaching due to climate change, marine pollution, and ocean acidification. Given that nearly 60 million people live in coastal areas and within 30 kilometers of a coral reef, these threats are significant to the lives and livelihoods of Indonesia's coastal area inhabitants (ICR, para 1).

**Relevance to Government Strategies:** Throughout implementation, the project's objectives aligned with the Indonesian Presidential Priorities. Since 2014, the commitment was to develop the ocean economy based on the country's massive coral reef and associated ecosystems (ICR, para 41). At appraisal, the project's original objectives aligned with the Master Plan for Acceleration and Expansion of Indonesia's Economic Development (MP3EI) 2011-2025 (PAD, para 13), which aimed to reduce excessive exploitation of fisheries and increase fish production by enhancing aquaculture (MP3EI, page 128). At project closing, the revised objectives aligned with two priority areas of marine sector development outlined under the Five-Year Strategic Plan 2020-2024 of the Ministry of Marine Affairs and Fisheries (MMAF), which aimed to improve the conservation of marine and fisheries resources, as well as to build institutional capacity and competence (ICR, para 41).





**Relevance to Bank Assistance Strategies:** At appraisal, the project's objectives aligned with the Country Partnership Strategy (CPS) FY2013-2015, which aimed to support the implementation of Indonesia's pro-green strategy to enhance the protection of its critical coral and marine resources (PAD, para 13). The project was envisioned to support enhancing community stewardship of natural and marine resources through promoting good governance at the village, district, and national levels (CPS, page 39). At project closing, the project's revised objectives aligned with the Country Partnership Framework (CPF) FY2021-2025, which aimed to address the development challenges in managing natural assets by: (i) improving management practices and institutions, with a focus on fisheries management and mangrove rehabilitation; and (ii) building capacity in government (CPF, page 16). The project was expected to contribute to the CPF's objective 4.1 to strengthen management of natural assets and the environment by improving the quality and transparency of data, the integration of landscape management principles and ecosystem-based fisheries management into natural resources management (CPF, page 65 and para 92). On the other hand, the relevance of the project to the CPF decreased through restructurings because project activities to enhance decentralization and participation of stakeholders in decision making were dropped.

**Bank's Previous Experience in the Sector:** Over the past quarter century, the World Bank has been supporting the Government of Indonesia (GoI) in addressing the coral reef degradation challenge through the Coral Reef Rehabilitation and Management Program (COREMAP) that originally started as a three-phase Adaptable Program Loan (APL) series in 1998. The program objective of COREMAP was to "protect, rehabilitate and achieve sustainable use of coral reefs and associated ecosystems in Indonesia, which will, in turn, enhance the welfare of coastal communities" (PAD, para 14). This investment project financing (IPF) operation was implemented as the third and final phase of this series due to the discontinuation of the APL financing instrument. The first phase, COREMAP I (1998-2004), piloted a decentralized, community-based approach for the management of coral reefs and associated coastal ecosystem resources. The second phase, COREMAP II (2005-2011), scaled up the approach to implement the institutional framework for coral reef management, by supporting regulations, strengthening capacity, and expanding a decentralized architecture for administration of coral reefs. COREMAP II also played a key role in establishing the Coral Triangle Initiative on Coral Reefs, Fisheries and Food Security (CTI-CFF) in 2009, which was a regional initiative partnering with six countries to "preserve and manage the vast marine, coastal and small islands ecosystems and the unique biodiversity of the coral triangle region of the Indo Pacific, which provide invaluable livelihood and food security" (ICR, footnote 3, page 10, and footnote 25, page 20). The implementing agencies at appraisal including the MMAF were also the implementing agencies for the preceding project, COREMAP II. At appraisal, the project was designed by reflecting lessons from the preceding project in the programmatic series, including the lessons on enhancing the welfare of communities (PAD, para 26). On the other hand, the project design and objective were revised during restructurings to exclude alternative livelihood activities.

In sum, through restructurings, the project's design and objective decreased the relevance to the Bank's development assistance strategies and the lessons from the earlier projects in the programmatic series. The original PDO sought to institutionalize the decentralized COREMAP approach. While it appears that this objective was in line with government aims at appraisal, Law No.23/2014 contributed to the recentralization of funds and authority from the district to the provincial level, representing significant shift away from the main assumptions and strategies of the project and resulting in undermining the institutionalization objectives of the project (ICR, para 93). The revised PDO was irrelevant since it was mainly situated at the input/output level. While acknowledging the difficulty of the operational environment, a shortcoming here was that the revised objectives were at a low level of the logical chain to achieve the program objective of COREMAP and were to build on the previous phases of the project cycle. The second revision of the PDO was more relevant, but it contained a flawed causal theory. Since the project shifted



implementation from the Ministry of Marine Affairs and Fisheries to the Indonesian Institute of Science (LIPI, later merged into BRIN), it was not possible for the project in the restructured phases to achieve management effectiveness because LIPI did not engage in MPA management with its national institutional mandate for monitoring and research and decision-making on coral reef management (ICR, para 38). The statement of the second revision of the PDO was also ambiguous, resulting in a lack of clarity regarding the World Bank's attribution towards the achievement of the PDO. The second revised PDO statement was not clearly formulated. It presented two parallel objectives (i.e., "to produce evidence-based resource management information, and to improve the management effectiveness of priority coastal ecosystems"), although these objectives were expected to be observed in a sequential manner as described in the ICR (page 55). Thus, overall, the relevance of objectives is rated modest.

**Rating**  
Modest

#### 4. Achievement of Objectives (Efficacy)

##### OBJECTIVE 1

###### Objective

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.  
(PDO from February 2014 to May 2017)

###### Rationale

The **Theory of Change (ToC)** for the objective 1 postulated that activities including mainstreaming and embedding a decentralized approach to coral reef ecosystem management within the local government and village program of activities and raising awareness to enable the adoption of the COREMAP approach in non-COREMAP villages would result in outputs including village-level coastal resource management plans developed in line with district zoning plans, coral reef management information systems upgraded, and a certification and training program for coral reef monitoring developed. These outputs were postulated to contribute to the outcomes of the COREMAP approach institutionalized at the Ministry of Marine Affairs and Fisheries (MMAF), the district governments, and villages. The ToC also postulated that, with the strengthened institutional capacity above, implementing activities such as conducting collaborative monitoring, control, and surveillance (MCS) activities and implementing pilots for the management of biodiversity conservation would result in the output including increases in MCS joint patrols and mangrove and sea-grass coverage. These outputs were postulated to contribute to outcomes including the coral reef health status improved, the destructive fishing declined, and the management effectiveness of Marine Conservation Areas (MCAs, used interchangeably with Marine Protected Areas (MPAs) in COREMAP) improved. Furthermore, the ToC postulated that, with the enhanced sustainable management of coastal resources above, activities such as implementing sub-grant projects would result in outputs including community rights-based fisheries





management piloted and sustainable fisheries management implemented. These outputs were postulated to contribute to the outcome of the increased incomes for project beneficiaries.

Critical assumptions included: (i) the capacity of MMAF is sufficient to enhance the decentralization of the coastal resource management at district- and village-levels; (ii) the pilots for management of bio-diversity conservation are effective to improve the coverage of mangrove and sea-grass and the management effectiveness of MCAs; and (iii) the MCS joint patrols are effective in reducing destructive fishing and these patrols will continue to receive enough financial and human resources after project closing.

The ToC of objective 1 was not sound, as there were some gaps in causal links between outputs and the intended outcomes such as increases in beneficiary incomes and reef health (ICR, para 100). It was unclear whether the critical assumptions were sufficiently met to cover these logical gaps.

The original PDO contained three elements: (i) to institutionalize the COREMAP Approach of a viable, decentralized and integrated framework (ii) for sustainable management of coral reef resources, associated eco-systems and biodiversity (iii) for the welfare of the communities in the Selected Districts of the Respective Provinces in Indonesia.

(i) Institutionalization of the COREMAP Approach of a viable, decentralized and integrated framework

**Outputs** (PAD, annex 1; ICR, paras 44-73 and annex 1):

- No data was provided on the number of village development plans that include line item for support for coastal resources management, not being able to assess the progress towards achieving the target of 210 village development plans.
- No data was provided on the number of villages with coastal plans, trained community for reef management and monitoring, and linked with village program, not being able to assess the progress towards the achievement of the target of coral reef management institutionalized at 210 villages.
- No data was provided on the number of zoning plans for districts and provinces prepared, not being able to assess the progress towards achieving the target of 12 zoning plans.
- No data was provided on the number of MCAs at the district level legalized by ministerial decree, not being able to assess the progress towards achieving the target of 6 MCAs.
- No data was provided on the number of improved management plans prepared and/or regulations for threatened species promulgated, not being able to assess the progress towards achieving the target of 3 plans.

(ii) Sustainable management of coral reef resources, associated eco-systems and biodiversity:

**Outputs** (PAD, annex 1; ICR, paras 44-73 and annex 1):

- No data was provided on the number of joint patrols for monitoring, control, and surveillance (MCS) between navy, district, and community-based groups, not being able to assess the progress towards achieving the target of 27 joint patrols per month.
- No data was provided on the number of pilots for management of biodiversity conservation, not being able to assess the progress towards achieving the target of 3 pilots.



- No data was provided on the area of mangrove and sea-grass cover, not being able to assess the progress towards achieving the target of maintaining or improving the mangrove and sea-grass cover during the project years.

**Outcomes** (ICR, paras 44-73 and annex 1):

- No data on actual changes in the coral reef health status in 18 COREMAP-CTI areas was provided to be fully in line with the indicator's definition in the PAD (page 18), which planned to measure changes in percentages of live coral cover, macro-benthos, and indicator reef fish species. At project closing, the average live coral cover was seen to either be maintained or increased across all 39 sites (ICR, page 21). However, no data on macro-benthos and indicator reef fish species was reported. It was not feasible to assess to what extent the target (i.e., improving coral reef health status in at least 80 percent of project sites) was met based on the PAD's definition of the indicator.
- No reliable data was reported to show a declining trend in destructive fishing. According to the ICR (para 50), it was not possible to assess with certainty the extent to which this target was achieved. The incidence of bomb fishing in Pangkep district decreased from 14 to 7 cases between 2015 and 2016. However, monitoring the change in bomb fishing in one of the seven project sites for one year would not provide strong evidence to show that there was a declining trend in destructive fishing. In the remaining 6 project sites, only anecdotal evidence with limited comprehensiveness was available to suggest a decline in destructive fishing due to the unclarity in the definition of the indicator (ICR, para 50).
- Partial data was reported to show improvements in the Marine Conservation Area (MCA) management effectiveness. At appraisal, the MCA management effectiveness scorecard (E-KKP3K) indicated that the target 13 MCAs were red with 80 percent of red level scores as baseline (PAD, page 18). The E-KKP3K ranked management effectiveness of MCAs with five categories: red, yellow, green, and blue (PAD, page 18). By the 2017 restructuring, eight MPAs achieved yellow status (ICR, para 55). During implementation, the E-KKP3K was updated to the Evaluation Tool for Management of the Effectiveness of Conservation Areas in Indonesia (EVIKA). At project closing, four target MPAs achieved EVIKA scores of 44.96 percent, which were equivalent to 75 percent E-KKP3K blue level (ICR, para 70). On the other hand, the PAD (page 18) stated three criteria for the target: (i) all 13 MCAs achieve yellow status; (ii) 9 have at least 50 percent of green level score; and (iii) of these 9, four have at least 10 percent of the blue level score." It was not specified to what extent the criteria (i) and (ii) were met at project closing.

(iii) Welfare of the communities

**Outputs** (PAD, annex 1; ICR, paras 44-73 and annex 1):

- No data was provided on the number of community rights-based fisheries management piloted, not being able to assess the progress towards achieving the target of 2 pilots.
- No data was provided on the number of sustainable fisheries management activities implemented in two fisheries management areas (WPP 715 and WPP718), not being able to assess the progress towards achieving the target of 2 activities.

**Outcomes** (ICR, paras 44-73 and annex 1):



- 0 percent of income increases for project beneficiaries, not meeting the target of 15 percent income increases net of inflation.
- Female beneficiaries of the project reached 29 percent, almost meeting the target of 30 percent. Though this indicator was set as a PDO indicator, the proportion of female beneficiaries was an output.

There was partial evidence to indicate some progress in sustainable management of coral resources, associated eco-systems, and biodiversity, as the management effectiveness score increased in 4 out of 13 target MCAs from the lowest red score to the highest blue score based on the E-KKP3K scorecard. On the other hand, limited evidence was provided regarding changes in coral reef health status, destructive fishing, welfare of the communities, and management effectiveness of 9 out of 13 original target MCAs. Thus, the achievement of objective 1 is rated modest due to insufficient evidence on the achievement of outcomes.

**Rating**  
Modest

## **OBJECTIVE 1 REVISION 1**

**Revised Objective**  
Dropped.

**Revised Rationale**  
Objective 1 was dropped at the first restructuring.

**Revised Rating**  
Not Rated/Not Applicable

## **OBJECTIVE 1 REVISION 2**

**Revised Objective**  
Dropped.

**Revised Rationale**  
Objective 1 was dropped at the first restructuring.

**Revised Rating**  
Not Rated/Not Applicable

## **OBJECTIVE 2** **Objective**



None at appraisal.

**Rationale**

None at appraisal.

**Rating**

Not Rated/Not Applicable

**OBJECTIVE 2 REVISION 1**

**Revised Objective**

To strengthen institutional capacity in coastal ecosystems monitoring and research to produce evidence-based resource management information.

(PDO from June 2017 to April 2019)

**Revised Rationale**

The **Theory of Change (ToC)** for the objective 2 revision 1 postulated that activities including conducting coastal ecosystems monitoring surveys, implementing a new coral reef health index, establishing a national coastal ecosystems monitoring certification standard, strengthening technical capacity across relevant institutions in coastal ecosystems monitoring and management, and upgrading infrastructure in several existing facilities of the Indonesian Institute of Science (LIPI, later merged into BRIN) would result in outputs including coastal ecosystems monitoring surveys completed, a coral reef health index established and operational, advanced graduate degrees awarded to technical staff, assessors and surveyors certified in coastal ecosystems monitoring by LIPI, subnational nodes within existing institutions established, and LIPI coastal monitoring and research infrastructure assets upgraded. The ToC also postulated that activities including strengthening the demand-driven research process, LIPI's technical capacity for coastal ecosystems research, coastal ecosystems monitoring, and research data and knowledge networks would result in outputs including the researchers trained on coastal ecosystems research techniques and the demand-driven coastal ecosystems research grants awarded. The above outputs were postulated to contribute to the outcome that evidence-based ecosystem management information was utilized for coastal ecosystems management. In the long-term, the outcome was postulated to contribute to improving the management effectiveness of coastal ecosystems and establishing healthy, effectively managed coastal ecosystems and evidence-based resource management.

Critical assumptions included: (i) a methodology for a coral reef health index that meets international standards is developed and nationally accepted; (ii) monitoring activities using the developed coral reef health index is sustained with resources from the government after project closing; and (iii) the information produced is utilized effectively to improve the management effectiveness of MPAs.

The ToC for objective 2 revision 1 had shortcomings. First, the goal of the results chain was set at the output level. Second, the ToC did not capture outcome level results including to what extent the produced information was utilized for coastal resource management. Third, the low ambition of the revised objective (described in section 2) negatively affected the soundness of the overarching ToC.



The PDO after the first restructuring in 2017 contained two elements: (i) to strengthen institutional capacity in coastal ecosystems monitoring and research (ii) to produce evidence-based resource management information.

(i) Institutional capacity in coastal ecosystems monitoring and research

**Outputs** (ICR, paras 44-73 and annex 1):

- 503 researchers were trained by BRIN in coastal ecosystems research techniques, exceeding the target of 340 researchers (148 percent of the target).
- BRIN was accredited as the national certification entity for 6 specific coastal ecosystem schemes, exceeding the target of 5 schemes (120 percent of the target). The accreditation ensured that BRIN met the technical and legal requirements to become a certification agency for coastal ecosystem assessors and surveyors for the following 6 schemes: (i) coral reef condition, (ii) biodiversity of coral reef fish, (iii) mega-benthos condition, (iv) mangrove condition, (v) seagrass condition, and (vi) scientific diving.
- 639 assessors and surveyors certified in coastal ecosystems monitoring by BRIN, exceeding the target of 500 assessors and surveyors (128 percent of the target).
- 11 sub-national assessment centers were established by BRIN, exceeding the target of 10 centers (110 percent of the target).
- 20 technical staff members were awarded master's degree scholarships in coastal ecosystems monitoring and management, meeting the target of 20 technical staff members (100 percent of the target).
- 8 sub-national data nodes were established within existing institutions by BRIN, meeting the target of 8 data nodes (100 percent of the target). This indicator reflected that BRIN established 8 official coastal ecosystem data-entry points (data nodes) within partner institutions (universities) at the sub-national level which were connected to BRIN's central coastal ecosystem database.
- 6 BRIN coastal monitoring and research infrastructure assets were upgraded, not meeting the target of 7 infrastructure assets (86 percent of the target). The target was not met because the government cancelled the use of loan funds for the upgrade of infrastructure in one site (Bitung Research Station) due to change in priorities which led to downgrade of the status of the Bitung facility from a technical implementing unit to a field research station.

(ii) Evidence-based resource management information

**Outputs** (ICR, paras 44-73 and annex 1):

- 60 demand-driven coastal ecosystems research grants were awarded by BRIN, doubling the target of 30 grants (200 percent of the target).
- 78 coastal ecosystems monitoring surveys were completed, increasing from the baseline of 16 surveys and meeting the target of 78 surveys (100 percent of the target).

**Outcomes** (ICR, paras 44-73 and annex 1):

- Indonesia's new coral reef health index was applied to 39 sites, meeting the target of 39 sites (100 percent of the target). The coral reef health index included three parameters: (i) coral cover, (ii) potential for coral recovery (indicated by algae cover), and (iii) total reef fish biomass.



- 12,719,840 hectares (ha) of coastal ecosystems area were under continuous monitoring according to defined criteria, exceeding the target of 11,241,404 ha (113 percent of the target).
- 131 coastal ecosystems scientific research papers were published by BRIN and research grant recipients that meet the need for evidence-based resources management information, more than doubling the target of 57 research papers (230 percent of the target).

The following outcomes were not measured by the indicators in the Results Framework, thus not having any formal target.

- An impact evaluation study conducted following completion of the postgraduate training at international universities and the various training activities found the following (ICR, para 67). No detail was provided on the methodology to measure the changes in capacities and collect the baseline data.
  - 74 percent of graduates increased their skills and knowledge in coastal ecosystem management.
  - On return to their respective institutions, graduates increased their contribution to their unit's/institution's work performance by up to 35 percent, and increased individual performance by 61 percent.

Although the above three PDO indicators in the Results Framework were designed as outcome indicators, these indicators largely measured outputs. The extension of project duration for 3 years supported the overachievement of some of these indicators (ICR, page 42), but no data was reported regarding the utilization of the information produced by the improved monitoring and research of coastal ecosystems. However, given we are able to draw upon the results framework for the second revision of the project, we get a clearer sense of the impact of the project on resource management information. The instigation of the MPA assessment gives IEG confidence that the outputs underway as part of the first revision have had the expected impact on the region in the medium to longer term. Thus, the project rating for this objective is Substantial.

**Revised Rating**  
Substantial

## **OBJECTIVE 2 REVISION 2**

### **Revised Objective**

To strengthen institutional capacity in coastal ecosystems monitoring and research to produce evidence-based resource management information, and to improve management effectiveness of priority coastal ecosystems.

(PDO from May 2019 to June 2022)

### **Revised Rationale**

The **Theory of Change (ToC)** for the objective 2 revision 2 built upon the ToC for the objective 2 revision 1. It postulated that activities including implementing Marine Protected Area (MPA) management plan priority actions to improve management effectiveness for priority MPAs, accelerating implementation of three new National Plans of Action for threatened species, supporting implementation of one provincial level integrated





coastal management plan, and strengthening community surveillance of coastal ecosystems would result in outputs including registered community surveillance groups carrying out regular surveillance patrols, provincial integrated coastal zone management (ICZM) action plan activities implemented, and management activities from the National Plan of Action for threatened species implemented. These outputs were postulated to contribute to an outcome illustrating the management effectiveness of priority coastal ecosystems improved. In the long-term, the outcome, in combination with other outcomes, was postulated to contribute to establishing healthy, effectively managed coastal ecosystems and evidence-based resource management.

Critical assumptions included: (i) improved monitoring and scientific capacity will improve management effectiveness to prevent reef degradation and live coral loss (ICR, page 55); (ii) the government continues to use its resources to implement activities to strengthen conservation, MPA management, and marine spatial planning in line with the original COREMAP-CTI approach; and (iii) the government continues to invest in sustainable finance options for MPAs and livelihoods of people living around MPAs; and (iv) the small ecotourism infrastructure assets built in MPA areas contributes to improve financial sustainability of MPA management and livelihoods of people living around MPAs.

The ToC for objective 2 revision 2 was flawed. No causal link was explicitly provided between: (i) the research conducted and the MPA management effectiveness improved; and (ii) the small ecotourism infrastructure assets built and the MPA management effectiveness improved.

The PDO after the second restructuring in 2019 contained three elements: (i) strengthen institutional capacity in coastal ecosystems monitoring and research (ii) to produce evidence-based resource management information, and (iii) to improve management effectiveness of priority coastal ecosystems.

The results achieved for the elements (i) and (ii) are described under objective 2 revision 1.

#### (iii) Management effectiveness of priority coastal ecosystems

**Outputs** (ICR, paras 44-73 and annex 1):

- 9 small ecotourism infrastructure assets were built in target MPA areas in line with MPA management plans, exceeding the target of 8 assets (113 percent of the target).
- 22 registered community surveillance groups (POKMASWAS) were carrying out regular surveillance patrols in target MPA areas, exceeding the target of 18 groups (122 percent of the target).
- 17 provincial ICZM action plan activities were implemented in and around target MPA areas, exceeding the target of 14 activities (121 percent of the target). The sub-grant program under the project supported partner organizations working on the ground and utilized the ICZM action plan activities to strengthen MPA management.
- 21 management activities in the MMAF's National Plans of Action were implemented for sharks, cetaceans, and manta-rays in target MPA areas, more than doubling the target of 9 activities (233 percent).

**Outcome** (ICR, paras 44-73 and annex 1):

- 4 target MPAs achieved a blue level management effectiveness score of at least 75 percent, increasing from the baseline of zero and meeting the target of 4 target MPAs (100 percent of the



target). The four target MPAs were: KKPN/SAP Raja Ampat (Papua Barat), KKPD Raja Ampat (Papua Barat), KKPN/SAP Waigeo Sebelah Barat (Papua Barat), and KKPN/TNP Laut Sawu (Nusa Tenggara Timur) (Restructuring Paper 2019, page 11). The indicator used the Evaluation Tool for Management of the Effectiveness of Conservation Areas in Indonesia (EVIKA) developed in 2021, which included assessments of the MPAs' biophysical and socioeconomic outcomes. At project closing, four target MPAs achieved EVIKA scores of 44.96 percent, which were equivalent to 75 percent E-KKP3K blue level (ICR, para 70). Although this new indicator was added at the second restructuring, this indicator was one part of the PDO indicator at appraisal on the improvements in the Marine Conservation Area (MCA) management effectiveness, as described under objective 1.

In sum, the management effectiveness of 4 MPAs improved, although it was not fully clear to what extent the project contributed to the achievement of the outcome based on the ToC above. Overall, the efficacy of objective 2 revision 2 is rated substantial.

### **Revised Rating**

Substantial

## **OVERALL EFFICACY**

### **Rationale**

The achievement of the objective 1 is rated modest due to insufficient evidence on outcomes, leading to the overall efficacy of the original objective to be rated modest.

### **Overall Efficacy Rating**

Modest

### **Primary Reason**

Insufficient evidence

## **OVERALL EFFICACY REVISION 1**

### **Overall Efficacy Revision 1 Rationale**

The achievement of the objective 2 revision 1 is rated substantial even with the limitations of the results framework at the time. The achievement of the objective 1 revision 1 is not rated due to the cancellation of the objective at the first restructuring. Thus, overall efficacy of the first revised objective is rated substantial.

### **Overall Efficacy Revision 1 Rating**

Substantial

## **OVERALL EFFICACY REVISION 2**

### **Overall Efficacy Revision 2 Rationale**



The achievement of the objective 2 revision 2 is rated substantial. The achievement of the objective 1 revision 2 is not rated due to the cancellation of the objective at the first restructuring. Thus, overall efficacy of the second revised objective is rated substantial.

### Overall Efficacy Revision 2 Rating

Substantial

## 5. Efficiency

**Economic and Financial Analysis:** At appraisal, the ex-ante economic internal rate of return (EIRR) was 15.6 percent (PAD, page 55). No specific values were presented for a benefit-cost ratio and a net present value.

At the second restructuring in 2019, the EIRR ranged from 6.20 percent to 9.56 percent (the midrange estimate was 8.02 percent) (ICR, page 57). The benefit-cost ratio and the net present value (US\$2017) ranged from 1.11 to 1.59 and from US\$5.6 million to US\$29.6 million, respectively (ICR, page 57).

At project closing, the ex-post economic analysis used the same approach and the assumptions used during the second restructuring described later in this paragraph (ICR, page 55). The ex-post EIRR, the benefit-cost ratio, and the net present value ranged from 6.72 percent to 9.99 percent (the midrange estimate was 8.48 percent), from 1.14 to 1.63, and from US\$6.7 million to US\$30.7 million, respectively, based on the range of assumed contribution of research and monitoring to improved management of Indonesia MPAs from 5 percent to 15 percent (ICR, page 57). The ex-post EIRRs were calculated using a 5.6 percent discounting rate over a 30-year period to account for the long-term benefits expected to accrue from improved natural resources management and the slow rate of change in natural systems (ICR, page 55). These estimates did not include carbon sequestration for consistency with earlier analysis (ICR, para 75). A weakness in the ex-post economic analysis was the data gap in the utilization of the research and monitoring as described in section 4, which negatively affected the assumptions on the contribution of research and monitoring to improved management of the MPAs.

The ex-post EIRR was not comparable to the ex-ante EIRR at appraisal due to the significant changes in the project design made at the restructurings (ICR, page 56). The ex-post EIRR was only slightly higher than that at the second restructuring.

**Aspects of design and implementation that affected efficiency:** The project was inefficient in the speed of implementation, closing three years after the appraisal estimate. The project implementation was slow in the first two years mainly due to the institutional issues in the implementing agency, the MMAF, including (i) the enactment of Law No. 23/2014, which shifted management authority over coastal waters to 12 nautical miles from the district level to the provincial level and thus required changes in implementation arrangements; and (ii) the cancellation of the use of external loan funds to support the MMAF's project implementation activities under the ministerial leadership in 2016 (ICR, para 33). The project was rated moderately unsatisfactory because of prolonged delays, culminating in an internal MMAF suspension of all project activities from December 28, 2015, to April 16, 2016 (six months) (ICR, footnote 20, page 17). Two extensions of the project closing date of 18 months each were made in 2017 and 2019; thus, these extensions were not directly caused by the COVID-19 pandemic and the associated travel restrictions.



In conclusion, the project was cost-effective based on the ex-post benefit-cost ratio. The ex-post EIRR was not comparable to the ex-ante EIRR; however, the midrange ex-post EIRR of 8.48 percent was not high. The rate of implementation was inefficient, due primarily to the slow start, and the project required an extra three years to complete, although this helped enable exceeding targets in some indicators on coastal ecosystems monitoring and research without additional funding. Thus, overall, the efficiency is rated substantial with shortcomings in implementation efficiency.

## Efficiency Rating

Substantial

a. If available, enter the Economic Rate of Return (ERR) and/or Financial Rate of Return (FRR) at appraisal and the re-estimated value at evaluation:

	Rate Available?	Point value (%)	*Coverage/Scope (%)
Appraisal	✓	15.60	75.00 <input type="checkbox"/> Not Applicable
ICR Estimate	✓	8.48	100.00 <input type="checkbox"/> Not Applicable

\* Refers to percent of total project cost for which ERR/FRR was calculated.

## 6. Outcome

Table 1. Overall Outcome Ratings.

Rating Dimension	Original Objective (June 2014-May 2017)	Objective after the First Restructuring (June 2017-April 2019)	Objective after the Second Restructuring (May 2019-June2022)
Relevance of Objectives	Modest		
Efficacy			
Objective 1	Modest	Not applicable	Not applicable
Objective 2	Not applicable	Substantial	Substantial
Overall Efficacy	Modest	Substantial	Substantial
Efficiency	Substantial		
Outcome Rating	Moderately Unsatisfactory	Moderately Satisfactory	Moderately Satisfactory
Outcome Rating Value	3	4	4
Amount Disbursed (US\$ million)	20.62	8.26	25.77
Disbursement (%)	38%	15%	47%
Weight Value	1.13	0.60	1.89
Total weights	3.62 (rounds up to 4)		



Overall Outcome Rating	Moderately Satisfactory (4)
------------------------	-----------------------------

**a. Outcome Rating**  
Moderately Satisfactory

## 7. Risk to Development Outcome

**Financial risk.** There was a potential risk that the coastal monitoring activities might not be continued due to insufficient budgets. After project closing, BRIN discontinued the national monitoring activities due to a lack of budgetary allocations (ICR, para 111). To mitigate the risk, MPA managers under the MMAF and provincial governments continued the coastal monitoring with the tools and instruments developed by BRIN under COREMAP (ICR, para 111). At the time of the ICR, the MMAF showed an intention to take on the annual budgetary mandate to mitigate the risk of lack of funding for coastal ecosystems monitoring, although the extent of commitment was unclear (ICR, para 111).

**Technical risk.** There was a potential risk that the monitoring methodologies and the research findings developed by the project would not be utilized to inform decisions to improve coastal resource management due to limited technical knowledge among the stakeholders.

## 8. Assessment of Bank Performance

**a. Quality-at-Entry**

The strategic relevance and approach were adequately aligned with the strategies of the government and the World Bank's development assistance at appraisal until it deteriorated at the first restructuring, as described in section 3. Given the World Bank's competitive advantage as the government's primary counterpart on marine conservation issues, the Bank conducted a robust analysis to scale up the COREMAP approach (ICR, para 108). The technical, gender, and social development aspects were designed based on lessons learned from the preceding projects in the series and on international experience (PAD, para 26). The World Bank supported the project management unit to establish a national steering committee and a technical committee to maintain coordination across the numerous implementing agencies (ICR, para 108). On the other hand, stakeholder engagements could have been more robust to ensure their ownership of the project at all levels, even under the instability in changes in political priorities. The risk assessment and mitigation were not adequate, as the risks of changes in relevant regulations, leadership, and political priorities were not specifically addressed in the PAD, resulting in implementation inefficiency, as described in section 5. Moreover, the design of components was partially reasonable to achieve the project objectives at appraisal. Specifically, the activities to enhance community-based and collaborative management were reduced, and budgets were scaled back in comparison to COREMAP II, which modestly achieved the element in the program objective of the COREMAP program. Furthermore, the M&E arrangements were not thoroughly considered to develop feasible causal links in the Theory of Change and the Results Framework (ICR, para 108). The quality at entry, thus, is rated moderately unsatisfactory.



## **Quality-at-Entry Rating**

Moderately Unsatisfactory

### **b. Quality of supervision**

The fiduciary issues experienced in early years due to implementation delays were addressed based on the recommendations in the MTR, as described in section 10. The World Bank's supervision inputs and processes were adequate in general. The Task Team conducted supervision missions biannually followed by informative reports (ICR, para 109). Although the project's Task Team leadership changed six times during implementation due to the project duration and its extension, the Task Team transition was supported by proper documentation and handover of project status (ICR, para 109). The project did not require any extension during the COVID-19 pandemic and associated travel restrictions which posed threats to implementation progress and disbursement rates (ICR, para 109). On the other hand, the project's focus on development impact significantly reduced at the first restructuring but only partially recovered at the second restructuring, as described in sections 2 and 4. The project was extended twice for a total of 3 years due to the changes in supporting legal framework and political priorities, as described in section 5. The change in political priorities resulted in temporarily stopping the project implementation for 6 months and cancelling the use of loans for project activities, requiring drastic changes in the project design (ICR, para 33). The quality of supervision, thus, is rated moderately satisfactory.

The overall quality of Bank performance is rated moderately satisfactory based on the harmonized guideline between OPCS and IEG.

## **Quality of Supervision Rating**

Moderately Satisfactory

## **Overall Bank Performance Rating**

Moderately Satisfactory

## **9. M&E Design, Implementation, & Utilization**

### **a. M&E Design**

The Theories of Changes (ToCs) for objectives were not sound due to insufficient causal links and the low expectations in the results chain, as described in section 4. While the objectives were clearly specified in general, the statement of the second revision of the PDO was not in line with the ToC of the objective presented in the ICR, as described in section 3. The indicators mostly encompassed outcomes of the PDO statements, though the PDO indicators for objective 2 revision 1 were pitched at the output level. The PDO indicator on destructive fishing under objective 1 were not measurable due to unclear methodologies (ICR, para 101). The M&E arrangements were partially embedded to the existing M&E system. Responsible entities for data collections for each indicator were clearly specified in annex 1 of the PAD, but it provided limited description on the data source and the associated methodology. After restructurings, the revised M&E framework better aligned with the government's policy and regulations in terms of targets and metrics,





enabling these regulatory frameworks to define measuring and documentation needs in case of any discrepancy (ICR, para 101).

## b. M&E Implementation

A few indicators in the original Results Framework required baseline data, but no evidence was provided whether all the baseline data was collected as planned. Limited data was provided regarding achievements of the indicators in the original Results Framework by project closing, although such data was necessary for conducting split rating based on the harmonized guideline between OPCS and IEG. The indicators in the revised Results Frameworks were measured and reported by utilizing a comprehensive Management Information System (ICR, para 102). The lack of measurability in some indicators were addressed at the first restructuring, but the revised indicators reduced focus on development impacts. At the second restructuring, the PDO indicator to measure MPA effectiveness was restored but the target MPAs to monitor the progress were decreased to one-third, as described in section 4. At project closing, the impact evaluation study was conducted following completion of the postgraduate training courses at international universities and the various training activities, providing some supplemental evidence on the achievement of objective 2 revision 1. Monitoring of coastal ecosystems might be unlikely to be sustained after project closing due to insufficient budget, as described in section 7.

## c. M&E Utilization

M&E data and findings informed the MTR and informed the needs of restructurings. The M&E data provided some evidence on achievement of outcomes on MPA management effectiveness but did not provide solid evidence on other outcomes including positive changes in coral ecosystems, community welfare, and use of scientific research and monitoring. The M&E findings informed the subsequent interventions including the Oceans of Prosperity – LAUTRA project (P173391).

The shortcomings in the M&E design at appraisal on the results chain and the indicators' measurability were partially and inadequately addressed during M&E implementation, negatively affecting the M&E utilization to provide evidence of achievement of outcomes. Thus, the M&E quality is rated modest.

## M&E Quality Rating

Modest

## 10. Other Issues

### a. Safeguards

**Environmental Safeguards:** The project was classified as Category B and triggered OP 4.01 (Environmental Assessment) and OP 4.04 (Natural Habitats). In line with OP 4.01, an Environmental and Social Impact Assessment and related documents were prepared and disclosed online. In response to OP 4.04, which was triggered by project activities to enhance the management effectiveness of MPAs, Environmental and Social Management Plans were prepared. Environmental management and mitigation



plans were established for all infrastructure works. Impacts associated with access restriction to natural habitats were mitigated in the Land Acquisition and Resettlement Policy Framework.

**Social Safeguards:** The project triggered OP 4.10 (Indigenous Peoples) and OP 4.12 (Involuntary Resettlement). Screening for the presence of indigenous people in project sites was undertaken and documented. An Indigenous Peoples Planning Framework was used to mitigate adverse impacts to them. Regarding OP 4.12, the project involved no significant land acquisition or resettlement.

A Grievance Redress Mechanism was set up to capture and document any stakeholder complaints and enable mitigating actions to be developed. No major environmental and social issues, or instances of noncompliance were reported during project implementation. Transparent, competitive processes were established for the selection of grantees and scholarship candidates to minimize the potential for complaints.

## b. Fiduciary Compliance

**Financial Management:** Financial management issues in the early period of implementation (e.g., the delays in financial reporting and following up audit findings and the weakness in implementing internal control) were mitigated with recommendations from the MTR. Nevertheless, due to restructuring, the project experienced further delays in verifying payments and resolving audit findings. To strengthen financial management capacity, the project provided intensive training and a mentoring program for project staff. The ICR (para 106) reported that the refunding status of ineligible expenditures were closely monitored; however, it did not mention reasons of ineligible expenditures and whether all ineligible expenditures were refunded at project closing. Audit reports were submitted generally in a timely manner, although the first audit of the project after restructuring was delayed. No information was provided on whether audits presented any qualified opinions and, if so, whether the qualified opinions were addressed. The ICR did not explicitly report the extent of compliance with financial covenants.

**Procurement:** In early implementation periods, procurement was decentralized to the districts, causing delays in the hiring of key consultants. After the first restructuring, procurement arrangements were centralized, coupled with close monitoring by project staff, leading to better procurement processes. All procurement activities were updated regularly in the Systematic Tracking of Exchanges in Procurement tool. The ICR did not explicitly report the extent to which Bank procurement guidelines were followed.

## c. Unintended impacts (Positive or Negative)

The project supported robust coastal ecosystem health monitoring to include seagrasses and mangroves, by facilitating the development and utilization of ecosystem health index tools for estimating the health of seagrasses (Seagrass Ecological Quality Index) and mangroves (Mangrove Health Index), including the development of MonMang, a mobile app used for mangrove monitoring (ICR, para 83). COREMAP contributed to global knowledge on Coral Reef Ecosystems Conservation, supporting: (i) preparation of guidelines for management of sharks and rays, (ii) research on blue carbon in seagrasses, (iii) marine debris management, and (iv) development of regional marine protected areas (ICR, para 84).



d. Other

Not applicable.

## 11. Ratings

Ratings	ICR	IEG	Reason for Disagreements/Comment
Outcome	Satisfactory	Moderately Satisfactory	There were moderate shortcomings on achievement of outcomes and gaps in causal links in the ToC.
Bank Performance	Satisfactory	Moderately Satisfactory	There were shortcomings in the project design at appraisal
Quality of M&E	Modest	Modest	
Quality of ICR	---	Substantial	

## 12. Lessons

The ICR (paras 112-117) presented six lessons. Two of them are presented below rephrasing as these might be relevant for the future operations aiming to achieve coastal ecosystem conservation through community-based management.

**COREMAP could have benefited from activities related to establishing long-term operational financing to ensure the legacy of the COREMAP approach beyond the lifespan of the project.**

The government recognizes this need and has prioritized the establishment of a blue finance regulatory framework and potentially an instrument to support the financing of MPA management and the livelihoods of coastal communities. These needs will be addressed in the World Bank's recently approved US\$210 million Oceans for Prosperity – LAUTRA Project (P13391).

**COREMAP leveraged developmental partner financing to scale up impacts and worked together with partner organizations for a strong development outcome.** Combined financing from the Bank and donor partners was integral to COREMAP's success, and the World Bank-financed activities were replicated with financing from other partners in other parts of Indonesia. Knowledge exchange for project implementation was fostered through joint missions and the exchange of aides-mémoire among developmental partners.

IEG draws the following additional lesson from this project.

**COREMAP-CTI discontinued COREMAP's community-centered approach due to the shift in coastal resource authority from district to provincial levels of government by Law 23/2014, diminishing the outcomes achieved through the program's long-term engagement.** The preceding operations in the COREMAP programmatic series facilitated collaborative and



community-based management of coastal ecosystems by involving district and community institutions, which aligns with the objective of decentralizing the management of coral reefs and associated coastal ecosystems. COREMAP-CTI cancelled the community-based management activities, making a drastic shift in its approach for improving coastal ecosystems management. Considering that the succeeding LAUTRA project reintroduced the community-driven development approach to the project design again, further research and analysis would be needed to better understand the context and background of the suspension of the community-centered approach in the post-restructuring COREMAP-CTI.

### 13. Assessment Recommended?

Yes

Please Explain

A quarter century of the World Bank's engagement in the COREMAP approach in Indonesia could provide substantial information to the PPAR cluster on Marine Spatial Planning being conducted under IEG's Blue Economy evaluation.

### 14. Comments on Quality of ICR

The ICR provides a detailed overview of the project. The ICR's lessons are responding to the specific experiences and findings for the project. The quality of evidence and analysis is generally aligned to the messages outlined in the ICR, except for some weakness in methodological clarifications and comprehensiveness as described in sections 4 and 9. The narrative explained the detailed changes in the components and key activities made at the two complex restructurings. On the other hand, there were shortcomings. First, the ICR presents the Theory of Change (ToC) at appraisal only, not articulating substantial changes made to the ToC through the two restructurings. The ToC is also brief and does not articulate the links between activities, outputs, and outcomes. Orientation of the narrative to the theory of change is limited. Second, the ICR does not comprehensively report the achievements of the indicators in the original Results Framework at project closing, as described in sections 4 and 9. Finally, the ICR did not explicitly report some points on fiduciary compliance, as described in section 10.b. Therefore, the overall quality of ICR is rated substantial.

#### **a. Quality of ICR Rating** Substantial

