



The World Bank

Oceans for Prosperity - LAUTRA (P173391)

Project Information Document (PID)

Appraisal Stage | Date Prepared/Updated: 19-Dec-2022 | Report No: PIDA29476

**BASIC INFORMATION****A. Basic Project Data**

Country Indonesia	Project ID P173391	Project Name Oceans for Prosperity Project - LAUTRA	Parent Project ID (if any)
Region EAST ASIA AND PACIFIC	Estimated Appraisal Date 07-Nov-2022	Estimated Board Date 28-Feb-2023	Practice Area (Lead) Environment, Natural Resources & the Blue Economy
Financing Instrument Investment Project Financing	Borrower(s) Republic of Indonesia	Implementing Agency Ministry of Marine Affairs and Fisheries, Ministry of National Development Planning (Bappenas)	

Proposed Development Objective(s)

To enhance the sustainable management of selected marine protected areas and coral reef fisheries, and access to economic opportunities for local communities in target areas.

Components

Component 1: Infrastructure and Institutional Strengthening for Sustainable Marine Protected Areas Management

Component 2: Expanding Economic Opportunities in and around Marine Protected Areas

Component 3: Sustainable Financing for Marine Protected Areas and Livelihoods

Component 4: Project Management

PROJECT FINANCING DATA (US\$, Millions)**SUMMARY**

Total Project Cost	210.00
Total Financing	210.00
of which IBRD/IDA	200.00
Financing Gap	0.00

DETAILS**World Bank Group Financing**



International Bank for Reconstruction and Development (IBRD)	200.00
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Non-World Bank Group Financing

Trust Funds	10.00
Indonesia Oceans, Marine Debris, and Coastal Resources MDTF	5.00
PROBLUE MDTF	5.00

Environmental and Social Risk Classification

Substantial

Decision

The review did authorize the team to appraise and negotiate

Other Decision (as needed)

B. Introduction and Context

Country Context

1. After two decades of political and institutional reforms, Indonesia is a stable democracy that has reduced poverty significantly. It is the world's fourth most populous nation, with 276 million people (2021) living throughout an archipelago of more than 6,000 inhabited islands; the world's 10th-largest economy, with a gross domestic product (GDP) of over US\$1 trillion (2020); and the only Southeast Asian member of the G20.¹ From 2015 to 2019, Indonesia maintained an average real GDP growth rate of 5 percent. Growth fell sharply to 2.1 percent in 2020 following the onset of the global COVID-19 pandemic, but the economy rebounded in 2021 (3.7 percent) and is projected to accelerate to 5.1 percent in 2022 and 2023 as consumption, exports, and investment pick up.²

2. Natural resources have contributed to economic growth, but natural capital stocks are at risk. Agriculture, forestry, and fisheries accounted for 12.7 percent of GDP in 2019 and two-thirds of exports.³ However, uncontrolled natural resource exploitation is undermining these economic benefits, leading to habitat degradation, biodiversity loss, and carbon emissions.⁴ Over the next 25 years, Indonesia is projected to experience lower land and sea productivity, scarcer renewable natural resource goods and services, and more severe climate change impacts. For example, climate change is predicted to cause a 13 to 29 percent decline in total fish catches by 2050—the strongest reduction of any nation and making Indonesia's fisheries

¹ The G20 or Group of Twenty is an intergovernmental forum comprising 19 countries and the European Union. It works to address major issues related to the global economy, such as international financial stability, climate change mitigation, and sustainable development.

² World Bank. (2022). "Macro Poverty Outlook: East Asia and the Pacific," Annual Meetings 2022.

³ World Bank National Accounts Data. Agriculture, Forestry, and Fishing, Value Added (percent of GDP) – Indonesia. Accessed April 21, 2022.

⁴ World Bank. (2019). "WAVES Partnership Policy Brief: Natural Capital Accounts and Policy in Indonesia."



sector one of the most vulnerable in the world.⁵ These trends pose substantial risk to Indonesia's sustainable development goals, including the targets to become a high-income country with near-zero poverty by 2045.⁶

Sectoral and Institutional Context

3. Indonesia's blue economy, the largest in Southeast Asia, is valued at US\$256 billion annually or more than a quarter of GDP.⁷ Indonesia's fisheries provide 2.6 percent of GDP, 20 percent of the country's agricultural product,⁸ and around seven million jobs.⁹ Fish contribute half of the protein in the national diet—well above the global average of one-sixth. In 2018, fishery exports were valued at US\$4.8 billion and supplied three percent of the global seafood market.¹⁰ Before the COVID-19 pandemic, Indonesia's tourism sector in 2017 generated US\$12 billion—the fourth largest source of foreign exchange—and provided 10.5 percent of employment, with 30 percent of tourism occurring in coastal locations, particularly around coral reef areas.¹¹

4. Globally significant coral reefs and associated ecosystems¹² are vital for Indonesia's economy and social welfare. Indonesia is the nation most dependent on marine ecosystems, particularly for their provision of nutritious food¹³; Indonesia's coral reefs deliver ecosystem services and benefits that include tourism (US\$3.1 billion per year),¹⁴ fisheries (US\$2.9 billion per year),¹⁵ and flood protection (US\$639 million per year).¹⁶ Diverse and productive coral reefs extend over 39,538 square kilometers and represent 16 percent of the world's total, while coral reef-associated ecosystems comprise 17 percent of the world's blue carbon reservoir and are in urgent need of protection to contribute to climate change mitigation.

5. Climate change and local human activities jeopardize Indonesia's coastal ecosystems, with one-third of the coral reef already in poor condition, and an estimated 40 percent of the country's mangroves and seagrasses degraded or lost. Coral reefs have declined globally by 20 to 50 percent since the 1950s, with a 90 percent loss predicted by 2050, due in part to ocean warming and acidification caused by greenhouse gas emissions. Effects are exacerbated by local threats including overfishing, destructive fishing, watershed pollution, and coastal development that affect over 90 percent of Indonesia's reefs, reducing their biodiversity, their resilience to climate change, and the ecosystems services they deliver to the people.

⁵ Barange, M. et al. (2018). "Impacts of climate change on fisheries and aquaculture: synthesis of current knowledge, adaptation, and migration options." FAO technical paper.

⁶ BAPPENAS. (2019). Indonesia Vision 2045.

⁷ OECD. (2021). "Sustainable Ocean Economy Country Diagnostic of Indonesia."

⁸ FAO. Fishery and Aquaculture Country Profiles, "The Republic of Indonesia." Accessed on April 21, 2022.

⁹ California Environmental Associates. (2018). "Trends in Marine Resources and Fisheries Management in Indonesia: A 2018 Review."

¹⁰ Badan Pusat Statistik BPS. (2019). Statistics of Marine and Coastal Resources 2019.

¹¹ Spalding, M. et al. (2017). "Mapping the global value and distribution of coral reef tourism."

¹² Coral reefs and associated ecosystems as defined by the International Coral Reef Initiative include three main tropical coastal ecosystems: coral reefs, seagrass meadows, and mangrove forests. Coral reefs are ecologically connected to these other coastal ecosystems that serve as nurseries for juvenile species that will eventually move into the coral reef ecosystem. More broadly, the movement of organic matter and nutrients within and between these ecosystems is critical for their respective productivity. They also share key threats, such as coastal development and land- and sea-use change. Therefore, these ecosystems have often been understood and managed as coherent and interlinked coastal ecosystems that must remain collectively intact to ensure the persistence of biodiversity and ecosystem services.

¹³ Selig, E. R. et al. (2019). "Mapping Global Human Dependence on Marine Ecosystems."

¹⁴ Spalding et al. (2017). "Mapping the Global Value and Distribution of Coral Reef Tourism."

¹⁵ UNEP. (2018). "The Coral Reef Economy."

¹⁶ Beck et al. (2018). "The Global Flood Protection Savings Provided by Coral Reefs."



6. **Environmental degradation and climate change have increased the vulnerability of Indonesia's coastal communities to flooding, biodiversity loss, deteriorating fish stocks, and declining viability of coastal agriculture and aquaculture.** This will only further widen the poverty gap in coastal villages, which is currently 1.27 percent higher than in non-coastal villages, with the average fisher earning less than the minimum wage.

¹⁷ Poverty rates are likely to further increase if the COVID-19 pandemic persists. While women, especially in low-income households, make a significant contribution to coastal livelihoods and household incomes, they are particularly vulnerable to economic shocks due to gender disparities in asset ownership, non-inclusion in livelihood programs, and limited access to finance, which limit their capacity to cope with more frequent and extreme weather events. Marine plastic debris causes significant impacts to marine ecosystems, with sea-based leakage contributing at least 20 percent of all plastic waste that leaks into Indonesia's marine environment. Abandoned, lost, and discarded fishing gear (ALDFG) is a major component, with potential to ensnare marine wildlife, entangle commercially important fishery species, and smother critical habitats.

7. **The World Bank's Oceans for Prosperity¹⁸ report for Indonesia demonstrated that the future of the country's oceanic sectors, such as fisheries, tourism, and aquaculture, relies on the health of these natural assets.** The report proposed key strategies to ensure a sustainable transition to a blue economy in Indonesia, including the need to improve the management of coastal and marine assets, such as coral reefs, mangrove forests, and seagrass meadows. To that end, the proposed Oceans for Prosperity Project (*Lautan Sejahtera*, LAUTRA) will support implementation of key policy recommendations from the Oceans for Prosperity report by (a) investing in Marine Protected Areas (MPAs)¹⁹ management effectiveness (b) enhancing fisheries monitoring and strengthening fisheries management institutions for more effective management of priority fisheries; (c) promoting diversified livelihoods and business growth in coastal communities through investments in infrastructure, business skills-building, and access to finance programs; and (d) developing the systems to provide a sustainable flow of financing for MPA management and the development of coastal community livelihoods.

8. **MPAs conserve marine and coastal ecosystem services and are a key nature-based solution to promote climate adaptation and mitigation.** Effectively managed MPAs have the potential to deliver ecological and socioeconomic benefits²⁰ that far exceed their capital and operational investment. According to United Nations Environment Programme (UNEP) and Ministry of Maritime Affairs and Fisheries (MMAF) data, between 0.08²¹ and 15 percent²² of MPAs are managed effectively in Indonesia. Responding to international commitments to protect marine and coastal habitats (for example, Aichi Biodiversity Targets and the Sustainable Development Goals), the Government of Indonesia (GOI), supported by the World Bank-financed Coral Reef Rehabilitation and Management Program (COREMAP, P127813), has established 201 MPAs encompassing 24.1 million hectares (ha)²³ and containing around 40 percent of Indonesia's coral reef and

¹⁷ Cahagi, D., and Gurning, R. (2018). "A Review on Indonesian Fishermen Prosperity in the Coastal Area."

¹⁸ World Bank. (2021). "Oceans for Prosperity: Reforms for a Blue Economy in Indonesia."

¹⁹ Indonesia's regulatory framework adopts the IUCN definition of an MPA as "a clearly defined geographical marine space, recognised, dedicated, and managed, through legal or other effective means, to achieve the long-term conservation of nature with associated ecosystem services and cultural values."

²⁰ Campbell et al. (2020). "Fishing Restrictions and Remoteness Deliver Conservation Outcomes for Indonesia's Coral Reef Fisheries."

²¹ UNEP-WCMC and IUCN. (2021). "Protected Planet: The World Database on Protected Areas." Accessed March 2021.

²² MMAF. (2018). "Our MPAs: Sharing Plans, Investments, and Responsibilities."

²³ MMAF. (2021). MPA management Status in 2020.



seagrass meadow areas and 25 percent of mangrove forests.²⁴ The GOI further aims to expand the MPA network to 32.5 million ha of effectively managed MPAs by 2030.²⁵ Technical Guidelines and Partnerships for evaluating conservation area effectiveness (*Evaluasi Efektivitas Pengelolaan Kawasan Konservasi*, EVIKA)²⁶ were recently established to support meeting this goal and to ensure MPAs are delivering targeted biophysical and socioeconomic benefits. An EVIKA Gold rating denotes a “sustainably managed” MPA, Silver an “optimally managed” MPA, and Bronze a “minimally managed” MPA.

9. To increase the contribution of MPAs to the sustainability of fisheries, MPAs need to be better integrated into wider fisheries management planning. Indonesia’s oceans are divided into 11 Fishery Management Areas (*Wilayah Pengelolaan Perikanan*, WPP), with 38 percent of fish stocks currently overfished.²⁷ Recent stock assessments²⁸ indicate that coral reef fisheries are overexploited in eight of the 11 WPPs and represent one of Indonesia’s most overexploited fish stocks. Coral reef fisheries target species that include snapper, grouper and ornamental fish using lines, traps and spears. MPAs can provide refugia for target species and support stock recovery and spillover, provided MPA and fishery management strategies are harmonized. The GOI recently took steps to strengthen fishery management frameworks, and key institutions need to be operationalized, including a central Fishery Management Council (*Lembaga Pengelolaan Perikanan*, LPP) and WPP-level Fishery Management Units (*Unit Pengelolaan Perikanan*, UPP) that incorporate stakeholder coordination structures.

10. Indonesia’s MPAs are also expected to deliver socioeconomic benefits, especially enhanced access to economic opportunities²⁹ for local communities by encouraging investments in small community institutions and coastal enterprises, in the sustainable tourism, fisheries, and aquaculture sectors. The MPA zoning system includes areas dedicated to the development of these three sectors. The current MMAF’s “Model Village” Program³⁰ adopts a community-based approach, aligning with international good practice, to identify and invest in the economic development potential of villages. Community groups and village governments submit proposals for investments in micro, small, and medium enterprise (MSME) development and public infrastructure. MMAF evaluates these proposals to ensure eligibility, consistency with regulations, legality of ownership, environmental sustainability, and feasibility. There is an opportunity to strengthen and expand this “Model Village” Program to villages in and around MPAs. A stronger MPA management framework

²⁴ Amkieltiela et al. (2022). “The rapid expansion of Indonesia’s marine protected area requires improvement in management effectiveness.”

²⁵ Republic of Indonesia (2020). The National Medium-Term Development Plan 2020–2024; Indonesia National MPA Vision 2030.

²⁶ DG Marine Spatial Management decree 28/KEP-DJPRL/2020 on Technical Guidelines for Evaluating Conservation Area Effectiveness; Ministerial Regulation 21/PERMEN-KP/2015 on Partnerships for Marine Conservation Area Management.

²⁷ Ministerial Regulation 19/KEPMEN-KP/2022 on Estimation of Potential, Total Allowable Catch, and Utilisation of Fish Resources in the Fishery Management Areas of the Republic of Indonesia.

²⁸ Ministerial Decree 19/KEPMEN-KP/2022 on Estimation of Potential, Total Allowable Catch, and Utilisation of Fish Resources in the Fishery Management Areas of the Republic of Indonesia

²⁹ “Access to economic opportunities” is defined in this project as access by individuals and MSMEs to improved infrastructure and facilities, and/or receipt of business development assistance, and/or receipt of financial instruments; for activities associated with sustainable coastal enterprise.

³⁰ MMAF Model Village Program: Ecotourism Village model (Dewi Bahari Villages); Advanced Fishing Village model (Kampung Nelayan Maju), Aquaculture Village model (Kampung Perikanan Budidaya). These programs consist of a package of technical assistance provided by MMAF to selected villages with local economic development potential. Technical assistance includes facilitating community-led economic development planning based on priority blue sectors, capacity building for producer groups, and financing of infrastructure, facilities, and services to improve productivity.



will also help prioritize and target local investments in sustainable small-scale infrastructure and MSMEs. There is also a need to increase finance for and investment in MSMEs in villages in and around MPAs, especially for women-led MSMEs. The success of coastal enterprises is limited due to remoteness, poor market linkages and value-chain integration, as well as gaps in basic infrastructure and services. Several financial institutions offer financial services to marine sectors, but access to these sources of capital and credit is limited for many coastal enterprises in the informal sector, due to information asymmetry and limited capacity of coastal enterprises. Barriers for women are further exacerbated by traditional gender norms, which drive disparities in asset ownership, decision-making, and access to finance and technical support, leading to low levels of female business ownership and higher exposure of women to economic shocks.

11. Sustaining MPAs and resilient communities will require enhanced access to blue finance,³¹ particularly targeted to: (a) MPA operational and capital investments, (b) infrastructure to support coastal livelihoods and value chains, and (c) access to financial services for coastal MSMEs. Mobilizing blue finance is critical since the national budget (State Revenue and Expenditure Budget, APBN)³² amounts to only 20 percent of the funding required to meet the GOI's marine and fisheries sector targets, including MPAs. Indonesia is also the largest impact investing market in Southeast Asia in terms of both capital deployed and number of transactions, facilitating potential access to a blue finance market. Yet, two sets of key challenges hinder the development of robust blue finance instruments. First is the uncoordinated enabling environment, including poor coordination among government institutions, development partners, and the private sector, the lack of consistent policies (particularly for the rapidly developing blue carbon market and payments for ecosystem services), suboptimal government expenditure in the fisheries and marine sector, and the lack of an agreed monitoring and reporting framework for blue finance. The second relates to undefined financing requirements and strategies encompassing the operating and capital requirements for MPAs and investments in coastal infrastructure as well as intermediary financing for MSMEs.

12. LAUTRA aligns with the GOI blue economy development strategy³³ for Indonesia's economic transformation with the project's emphasis on coastal and marine management (including of coral reef and associated ecosystems, fisheries, and MPAs) and on improving coastal community livelihoods. LAUTRA aims to strengthen government management capacity, data, and information systems, and to encourage enabling policies to leverage blue finance for enhanced coastal and marine management and livelihoods. LAUTRA builds on successful past operations such as COREMAP to address the complexities and sequencing of interventions inherent in reforming the blue economy within the world's largest archipelagic nation and second largest national fishery.

C. Proposed Development Objective(s)

Development Objective(s) (From PAD)

13. To enhance the sustainable management of selected marine protected areas and coral reef fisheries, and access to economic opportunities for local communities in target areas.

³¹ Blue finance refers to the capital required to preserve and restore oceans and to promote their sustainable use.

³² National Medium-Term Development Plan 2020–2024.

³³ BAPPENAS and OECD (2021). Blue Economy Development Framework for Indonesia's Economic Transformation.



Key Results

PDO Level Indicators

14. Achievement of the PDO will be measured through the following indicators:

- Target MPAs with increased management effectiveness (Hectares).
- Target fishery management areas (WPPs) with Fishery Management Units (UPPs) operationalized (Number).
- People supported by the project with improved access to sustainable economic infrastructure or facilities (Number), of which, are women (Percentage).
- Coastal enterprises supported by the project which receive enterprise development assistance and/or receive finance (Number), of which, are led by women (Percentage).

D. Project Description

15. **LAUTRA strengthens coastal resilience by improving management of marine protected areas and coral reef fisheries; improving the economic opportunities of local communities and MSME's in sustainable fisheries, tourism, and aquaculture; and building government capacity to mobilize associated sustainable blue financing.** The project will finance four components, working in 20 MPAs and villages located in 10 Provinces in Eastern Indonesia. Specific investments and actions in each MPA and village will be selected by MMAF based on assessment of the MPA management plans, EVIKA score rating of MPAs, village development plans, small infrastructure project proposals, and MSME capacity. The selection process and criteria will be elaborated further in the Project Operations Manual (POM). Investments to strengthen MPA management effectiveness will commence in the 15 MPAs³⁴ with existing management plans (with priority given to 8 national MPAs during the initial stages of the project), expanding to the five proposed MPAs³⁵ once management plans have formally been adopted by MMAF via Ministerial Regulation. Innovative MPA management approaches will be piloted, including establishment of funds management systems (through Public Service Agencies (*Badan Layanan Umum*, [BLU]³⁶) in three MPAs Management Units³⁷ to establish a robust model suitable for replication. Following existing practices, livelihood development and diversification activities will follow a cycle of socialization, planning, and financing/technical assistance for target villages and MSMEs. Pilot villages with existing enterprises and community groups will be identified and engaged first, followed by other nearby villages, and based on the economic assessments and MPA management plans. The investments in Components 1 and 2 will inform the development of the sustainable blue finance strategies in Component 3, along with enabling environment investments.

16. **Component 1. Infrastructure and Institutional Strengthening for Sustainable Marine Protected Areas Management (Total: US\$98.5 million; IBRD: US\$95 million; Oceans MDTF: US\$3.5 million).** This component, led by MMAF, will strengthen ecosystem-based and participative management of about 20 MPAs and selected coral reef-associated fisheries within three target WPPs. These 20 MPAs consist of the nine national-level

³⁴ KKN Gili Matra, KKPD Selat Pantar, KKN Lau Sawu, KKPD Banggai Dalaka, KKN Kapoposang, KKPD Teluk Moramo, KKPD Teluk Gorontalo, KKN Lau Banda, KKN Aru Tenggara, KKPD Pulau Kei Kecil, KKPD Pulau Mare, KKN Kepulauan Raja Ampat, KKN Kepulauan Waigeo Sebelah Barat, KKPD Kepulauan Raja Ampat, KKN Papaido.

³⁵ KKN Laut Sulawesi Bagian Utara, KKPD Teluk Gorontalo, KKPD Kepulauan Babar, KKPD Wetar, KKPD Buru Selatan, KKPD Buru.

³⁶ A Public Service Agency (BLU) is legally enabled to undertake commercial, not for profit activities, with revenues publicly reported and reinvested into MPA management.

³⁷ KKPD Selat Pantar, KKPD Banggai Dalaka, BKKPN Kupang.



MPAs in eastern Indonesia and all 11 provincial-level MPAs within the three target WPPs. This Component contributes to strengthening climate resilience under Pillar 3 (Strengthening Resilience) and to institutional strengthening, and capacity building under Pillar 4 (strengthening Policies, Institutions and Investments for Rebuilding Better) of the GCRF. It will finance climate adaptation and mitigation measures that improve MPA management effectiveness and enhance coordination among central, provincial, and village governments, the private sector, and community stakeholders. It will also promote participative and inclusive representation of women and other marginalized and vulnerable groups in the management of MPAs and coral reef fisheries.

17. Subcomponent 1.1. Infrastructure and Capacity Building for Marine Protected Areas Management (IBRD: US\$85 million; Oceans MDTF: US\$3.5 million) will deliver a measurable increase in MPA management effectiveness³⁸ through financing technical assistance, infrastructure, goods and services, trainings, and operating costs. Activities include *inter alia*: (a) development of species inventories, management plans, organizational plans, and other prerequisites for MPA gazettlement under the Determination Criteria³⁹; (b) reviewing and updating selected existing management plans in line with international best practices; (c) development of small infrastructure works⁴⁰, equipment⁴¹, operational⁴² and capacity building⁴³ activities required to manage MPAs effectively⁴⁴; (d) benchmarking and revising EVIKA against international MPA management standards such as those adopted by the IUCN Green List or UNESCO World Heritage Sites; (e) facilitating knowledge sharing and training events for MPA managers and other stakeholders; (f) reviewing MPA management strategies and impact evaluation of innovative MPA management strategy to be designed and tested in pilot sites; (g) assessment and identification of ecosystem services delivered by MPAs that have the potential for monetization; (h) coral reef rehabilitation activities in 3 target MPAs⁴⁵; and (i) establishment of public service agencies (BLU), MPA collaborative management partnerships and MPA multi-stakeholder collaboration forums to enhance participatory management for MPA management.

³⁸ The EVIKA scorecard measures management effectiveness via 187 indicators spanning management inputs (for example, management plans and human resources), processes (for example, implementation of surveillance and resource monitoring), outputs (for example, data reports, compliance rates, and proportion of stakeholders exposed to communication strategies), and outcomes (for example, conservation and socioeconomic targets). Silver status requires an EVIKA score of 50 to 85 percent, and Gold status >85 percent.

³⁹ Legal recognition of an MPA at the national level via Determination of the Minister of Marine Affairs and Fisheries. The gazettlement is defined in regulation 31/PERMEN-KP/2020.

⁴⁰ Such as management unit offices, field stations, information centers, surveillance towers, small jetties, boundary demarcation, mooring buoys, and signage

⁴¹ Such as small patrol boats and survey equipment

⁴² While the project will support the financing of target MPA operational costs (for activities such as surveillance, biophysical and socioeconomic monitoring, stakeholder outreach, and education), GOI will take over these costs in Year 4 of the project

⁴³ Capacity development will address needs identified in the MMAF (2020), "Assessment of Capacity Development Needs for Marine Protected Area Managers in Indonesia 2020–2024".

⁴⁴ Part of the activities supported will include surveillance patrols. The project will only finance the operational costs (such as fuel) of surveillance patrols by MPA management units. Patrols will occur only within MPA boundaries, and to monitor compliance with MPA resource use regulations. Surveillance patrols supported by the Project are limited to: (i) surveillance patrols conducted using small boats (or possibly drones) by MPA management unit personnel; and (ii) community-based patrols by legally established POKMASWAS (community surveillance groups). In both cases, activities are limited to surveillance and detection. All target MPAs are within Indonesia archipelagic waters and territorial seas. For the 5 proposed MPAs the project will only finance MPA patrolling activities after gazettlement once confirmed that the boundaries of these 5 MPAs do not extend beyond Indonesia archipelagic waters and territorial seas. The project will not finance any activities related to enforcement actions.

⁴⁵ Rehabilitation activities will be implemented in line with Ministerial Regulation 26/PERMEN-KP/2021 which emphasizes the need to first reduce and prevent anthropogenic threats and to facilitate processes of natural recovery and resilience via passive rehabilitation processes.



18. **Subcomponent 1.2. Infrastructure and Capacity Building for Coral Reef Fisheries Management (IBRD: US\$10 million)** will strengthen effective ecosystem-based management of priority coral reef-associated fisheries⁴⁶ within target WPPs through financing technical assistance, infrastructure, goods and services, trainings, and operating costs. Activities include *inter alia*: (a) monitoring and publication of catch and effort data⁴⁷ of selected small-scale coral reef-associated fisheries in and around MPAs; (b) small infrastructure works,⁴⁸ capacity-building activities, developing standard operating procedures (SOPs), and establishing key functional groups and units to operationalize UPPs for ecosystem-based management of selected coral reef-associated fisheries.

19. Criteria for operationalizing the UPPs are defined in regulation 22/PERMEN-KP/2021 and include a stakeholder engagement framework. It requires private sector and women's participation in stakeholder engagement forums, which in turn will improve capabilities to identify and respond to priority fishery management issues, such as identifying significant hotspots and impacts associated with abandoned, lost, and discarded fishing gear. The capacity-building activities include training and accreditation of fishery management personnel in line with established Ministerial Work Competency Standards (*Standar Kompetensi Kerja Khusus, SKKK*) and upgrading of these to comply with criteria for Indonesian National Competency Standards (*Standar Kompetensi Kerja Nasional Indonesia, SKKNI*) defined by the Ministry of Manpower. Physical activities financed by this Subcomponent will take place in target WPP coastal areas and the evidence-based recommendations and fisheries management plans will be informed by ongoing maritime delimitation discussions with neighboring countries and adjusted accordingly.

20. **Component 2. Expanding Economic Opportunities in and around Marine Protected Areas (Total: US\$86.5 million; US\$85 million IBRD; Oceans MDTF: US\$1.5 million).** This component, led by MMAF, will enhance the values and benefits that local communities capture from marine resources in and around MPAs by taking a multipronged approach to improving access to economic opportunities, especially in the tourism, fishery, and aquaculture sectors. All activities will be aligned with MPA management plans and environmental assessments to ensure biodiversity-positive or neutral development impacts. This component will address gender gaps in participation in local economic development planning, and in access to enterprise development assistance and access to finance. The component combines community-driven and market-driven approaches to promote viability, local ownership, and sustainability of public investments. As Component 2 activities support the development of adaptive social protection systems for people living in and around MPAs through investments in climate resilient village economic infrastructure, Component 2 contributes to the Pillar 3 of the GCRF.

21. **Subcomponent 2.1. Infrastructure for Sustainable Economic Development in and around MPAs (IBRD: US\$75 million)**. This Subcomponent will finance public goods in the form of local economic infrastructure and relevant technical assistance based on a facilitated, community-based planning process. Activities include *inter alia*: (a) carrying out of assessment of economic opportunities (including location-specific gender gaps

⁴⁶ Priority coral reef associated fisheries are those targeting grouper, snapper and ornamental fish using gears that include lines, traps and spears.

⁴⁷ Monitoring of catch and data collection will be carried out in ports. This Subcomponent will not fund at-sea fishery surveillance or patrols.

⁴⁸ LAUTRA will finance the procurement and operation of small infrastructure and equipment specified in WPP management plans, including for the establishment of small UPP offices and monitoring equipment for the collection and management of catch and effort data.



and how to address them) in MPAs to inform village planning processes; (b) facilitated development of gender-responsive and climate smart village-based local economic development plans to be led by trained village facilitators and informed by the economic assessments; and (c) building village infrastructure and/or facilities based on village development plans (such as boardwalks, small jetties, mooring buoys, access to electricity, small basic sanitation facilities at village level, fish markets, seaweed drying and storage facilities, and so forth).

22. MMAF will work through existing extension staff and implementing partners (such as local nongovernmental organizations [NGOs]) to recruit and train village facilitators to lead participatory village planning processes in at least 75 villages, including via support to village governments, village councils (*Badan Pembangunan Desa*), and marine conservation wardens (*Pokmaswas*). Village development plans and project proposals will be reviewed and approved by MMAF in line with MPA management plans and ESF instruments.

23. **Subcomponent 2.2. Sustainable Business Development and Financial Access in and around MPAs (IBRD: US\$10 million; Oceans MDTF: US\$1.5 million)**. This Subcomponent will finance technical assistance to facilitate the growth of bankable MSMEs in and around MPAs. Activities include *inter alia*: (a) market assessments to develop strategies for value-chain finance⁴⁹, including gender gaps; (b) business development support to coastal enterprises in capture fisheries, aquaculture, and tourism; and (c) capacity building of financial institutions and service providers, especially the Marine and Fisheries Business Capital Management Institution (*Lembaga Pengelola Modal Usaha Kelautan dan Perikanan*, LPMUKP), to provide financial services to sustainable coastal enterprises.

24. Economic Assessments under Subcomponent 2.1, and the MPA management plans in Component 1 will inform the selection of MSMEs (especially climate adaptable and women-led MSMEs), the definition of criteria for bankability, and the identification of local financial partners. Support for MSMEs will be aligned with MPA conservation and biodiversity targets and resource use restrictions. Implementation of this Subcomponent will be coordinated with the LPMUKP and other financial institutions to ensure these activities are aligned with bankability conditions and financing requirements and will include technical assistance to pilot innovative financing mechanisms and business models to enhance climate smart and biodiversity positive production and lending practices. This Subcomponent will also support female entrepreneurship and women's community groups through gender-sensitive training and prioritized access to business opportunities. These women-focused activities are to address the main gender gap identified during project preparation, namely limited opportunities for female-focused entrepreneurship in coastal communities and limited access of female entrepreneurs to credit, limiting their businesses in the fisheries, aquaculture, and tourism sectors. Supporting women to expand their access to economic opportunities will increase their resilience to the impacts of climate change and allow them to better cope with the financial impacts of extreme weather events.

25. **Component 3. Sustainable Financing for Marine Protected Areas and Livelihoods (PROBLUE Grant: US\$4.5 million)**. This component, led by the National Development Planning Agency (Bappenas), through the Indonesia Climate Change Trust Fund (ICCTF) under the Deputy for Marine Affairs and Natural Resources (ICCTF-Bappenas), in collaboration with MMAF, will improve the government's policy framework and capacity to mobilize long-term blue financing for: (a) Marine Protected Areas operating and capital investments; (b)

⁴⁹ Value chain finance refers to financial products and services that flow to or through any point in a value chain that enable investments that increase actors' returns and the growth and competitiveness of the chain.



developing coastal infrastructure with biodiversity-positive or neutral development impacts; and (c) enhancing MSME access to finance in the sustainable tourism, fisheries, and aquaculture sectors. It builds upon, sustains, and extends the outcomes of Components 1 and 2 of the LAUTRA Project beyond the project life. This component will finance technical assistance, workshops, goods and services and trainings.

26. Subcomponent 3.1. Strengthening the Enabling Environment and Policy Framework for Blue Finance (PROBLUE Grant US\$1.5 million). This Subcomponent will support: (a) establishment of the Blue Finance Advisory Committee led by ICCTF-Bappenas—an interministerial working group (including the Financial Services Authority [*Otoritas Jasa Keuangan*, OJK], MoF, Coordinating Ministry of Maritime Affairs and Investments [CMMAI], Bappenas, Indonesian Environment Fund [*Dana Lingkungan Hidup*, BPDLH], LPMUKP, and MMAF) to coordinate blue finance policies; (b) training and knowledge exchange related to blue finance to build capacity of GOI institutions and other stakeholders in blue finance); (c) development of policy and regulatory instruments to better leverage blue finance and improve its effectiveness, including e.g. options for blue carbon and alternative non-tax revenue options for MPAs; and (d) development of a monitoring and reporting framework for blue investments that aligns with international best practices and the existing GOI SDG Government Securities Framework.

27. Subcomponent 3.2. Development of Long-Term Investment Strategies for Priority Blue Economy Sectors (PROBLUE Grant US\$3 million). This Subcomponent will support: (a) technical assistance, communications and awareness raising for the development of three long-term sustainable blue financing strategies following international guidelines⁵⁰. The three strategies to be developed will address the priority demands which underpin the blue economy and are the focus of Components 1 and 2, namely Marine Protected Area operating and capital requirements, responsibly developing coastal infrastructure linked to enhancing sustainable economic opportunities and livelihoods, and enhancing MSME access to finance in tourism, fisheries, and aquaculture sectors. The strategies will include pipeline identification, preparation and quantification of investment requirements, and options for investment structures channeling; (b) preparation of financing proposals based on the findings of the three strategies, possibly including a sovereign thematic financing instruments (such as a bond or a sukuk⁵¹for the blue sector) and a hybrid or non-sovereign financing instrument; and (c) a roundtable for public and private sector investors to stimulate interest in the financing strategies and proposed instruments.

28. **Component 4. Project Management (Total: US\$20.5 million; IBRD: US\$20 million, PROBLUE Grant: US\$0.5 million).** This component will support project management and coordination to ensure that the project is effectively managed and monitored in accordance with operational, fiduciary, and environmental and social risk management requirements.

29. Subcomponent 4.1. (IBRD: US\$ 20 million), led by MMAF, will support project management and coordination activities with respect to Components 1 and 2 of the project, including, *inter alia*, (a) staffing, operations, financial management, procurement, environmental and social risk management, monitoring, reporting, and evaluation of the PMO, PIUs and Provincial Project Supporting Units in managing and overseeing Project activities, (b) citizen and stakeholder engagement and coordination activities, including

⁵⁰ Such as the United Nations Global Compact and International Capital Markets Authority guidance.

⁵¹ Sharia compliant green/blue bond-like instrument



implementation of the grievance redress mechanism; (c) inter-institutional collaboration and coordination; and (d) Project launch and completion workshops or events and knowledge sharing activities.

30. Subcomponent 4.2. (PROBLUE Grant: US\$0.5 million), led by ICCTF-Bappenas will support project management and coordination activities with respect to Component 3 of the project, including, *inter alia*, (a) staffing, operations, financial management, procurement, environmental and social risk management, monitoring, reporting, and evaluation of the PIU at the ICCTF-Bappenas in managing and overseeing Part 3 activities of the Project, (b) citizen and stakeholder engagement and coordination activities, including implementation of the grievance redress mechanism; (c) inter-institutional collaboration and coordination; and (d) knowledge sharing activities.

Legal Operational Policies

Triggered?

Projects on International Waterways OP 7.50	No
Projects in Disputed Areas OP 7.60	No

Summary of Assessment of Environmental and Social Risks and Impacts

31. The project will bring significant positive environmental benefits through effective management of MPAs; protecting biodiversity-rich and carbon-rich natural areas; improving environment and resilience against natural disasters and climate change; and improving the coastal communities' livelihoods. Considering the type, nature and magnitude of activities, ecological sensitivity of project locations, geographical coverage, contextual risks and capacities of the implementing agencies, the potential for negative environmental impacts, if the risks are not adequately managed, are assessed as Substantial, due to the fact that although the local negative environmental impacts are predictable and of small to medium scale - some of them would be undertaken in ecologically sensitive areas. This could bring up contextual and client monitoring capacity issues – and these factors contribute to the overall risk rating.

32. Most of the activities will be implemented in 20 already existing selected MPAs which will reduce institutional and implementation capacity risks. The coral reef ecosystem management component will strengthen ecosystem based sustainable management of coastal fisheries, which will have positive effect on coral reefs and ecosystem improvement. The existing MPAs have already been legally regulated and contain provision for biodiversity and environmental preservation, which will be enhanced through Project interventions by introduction of MPAs' Biodiversity Management Frameworks. Component 1 includes technical assistance, training and infrastructure works related to small infrastructure like MPAs small field offices, signage, boundary markings, small patrol boats, survey equipment, jetties and mooring buoys, data control centers at existing fishing ports, etc. Component 2 will produce village economic development plans that may contain small-scale infrastructure works related to construction and/or rehabilitation of the village' public markets, small jetties for village and tourist boats, information centers, etc. The investments under Project Component 2 will be implemented mostly, although not fully, outside the physical footprint of MPAs.



The environmental risks from above activities will be site-specific, low to medium magnitude, mostly confined to civil works impacts during execution phase, with the impacts being predictable, easily defined, reversible and manageable by application of good engineering practice and standard construction techniques.

33. The environmental impacts will be mitigated during project preparation and implementation through application of the standard mitigation hierarchy, and mitigation measures that are described in project-specific ESMF, including specific ones related to infrastructure within protected areas. The range of mitigation tools includes up-front environmental screenings, environmental impact assessment (EIA) and design of mitigation measures for the infrastructure related activities, as well as design and incorporation of the environmental screening methodology for development of future MPA management plans. Based upon the screening results, the site-specific ESMPs in line with ESMF, WB and national legislation will be developed and adjusted to each specific location. Incorporation of environmental screening criteria and development of innovative MPA management models and incentives under Components 1 and 3 will bring positive environmental impacts, contributing to the creation of healthy marine environments and improved socio-economic situation. Aiming at furthering the institutional capacity related to environmental protection, the Component 4 includes capacity building and training activities focused on the project implementers. To deal with the contextual risks, as a part of the site-specific designs, the project would undertake climate change vulnerability assessments to ensure suitable design and construction of the infrastructure within the project areas.

34. Social risk is assessed as Substantial given the overall scope, scale and geographic distribution, complexity of the project, and potential risks and impacts related to Indigenous Peoples, land acquisitions, and cultural heritage, the social risk rating is kept on Substantial level, although the potential social risk and impacts are unlikely to be significant. Social risks are associated with inadequate stakeholder engagement and unequal access to project participation and information; marine resource access restriction with low to medium level of potential livelihoods disruption; potential for small-to medium-scale land acquisition related to civil works; the project's focus on eastern Indonesia and consequent importance of identifying and ensuring meaningful consultation with IPs; and inadequate capacity of implementing agency. While project anticipates that improved coral reef management will deliver community livelihood benefits, these objectives risk being undermined by inadequate participatory processes, particularly amongst marine resource dependent communities. Restrictions to marine resources are anticipated due to improved coral reef management. To minimize social risks and impacts, LAUTRA will not finance creation of new MPAs, but only support gazette process of MPAs that already reserved and achieve certain EVIKA score. Inadequate consultations may risk not obtaining local consensus to comply with MPA regulations. Unequal access to project participation and information may exclude vulnerable groups, including IPs, from project benefits in the context of economic opportunity expansion.

35. Project design incorporates measures related to participatory and inclusive decision-making in the MPA management (e.g., MPAs collaborative management partnership established, representation of vulnerable group in stakeholder forums) and economic opportunity expansion in and around MPA (e.g., inclusive community-based development planning, ensuring the inclusion of vulnerable peoples as project beneficiaries). Participatory decision making in MPA management from planning, implementation and monitoring enables community to engage in management plan development and determining boundary, including any measures to address livelihoods disruption due to access restriction. SEP and ESMF (PF and IPPF) provide strategies for engagement with vulnerable group and promote a meaningful consultation intended to



mitigate risks associated with access restriction and impacts on IPs and actions to be taken to ensure participatory decision making in the course of project implementation.

36. Activate local grievance mechanism will be conducted to capture and process grievances and its response in an inclusive and accessible manner. Small to medium-scale land acquisition is anticipated for civil works. Project will prioritize use of government-owned land or lands within the existing facility premises for ecosystem management infrastructure, and use of land owned by village beneficiaries for village level infrastructures. ESMF provides land due diligent procedure to ensure land condition is clean and clear, Resettlement Policy Framework as a precaution when government land is illegally occupied, VLD and voluntary transaction protocol if village infrastructures need additional land. Risks of property expropriation and physical displacement are not envisaged.

37. Risks associated with child labor, labor influx, Sexual Exploitation & Abuse/Sexual Harassment (SEA/SH) and Community Health and Safety are considered low as civil works are expected to be of small to medium scale and will mostly employ local laborers. Forced labor risks are not envisaged. LMP provisions to prohibit children's participation in certain tasks that may jeopardize health, safety, education of children, outlines employment terms for project workers, minimum age of employment, and SEA/SH code of conduct. Establishment of a dedicated and well-trained ES team at IAs are essential.

E. Implementation

Institutional and Implementation Arrangements

38. **A National Project Steering Committee (NPSC) and an overall Project Management Office (PMO) under MMAF will be established within one month after project effectiveness.** The NPSC, chaired by the Bappenas Deputy of Maritime Affairs and Natural Resources and with relevant Director General level (Echelon 1) representatives as members, will provide overall strategic guidance for project implementation. The DJPRL of MMAF will host the PMO, which will be responsible for overall project coordination, day-to-day management, budgeting, financial management, safeguards monitoring, project progress monitoring, evaluation and reporting, and coordination with other government agencies.

39. **A Project Technical Committee, chaired by Bappenas (Director of Marine and Fisheries, consisting of Director level representatives (Echelon 2) from MMAF, Bappenas, MoF, and MoHA will be formed within one month after project effectiveness.** It will provide technical guidance and advice for project planning, implementation, and monitoring and evaluation, and play a key role in intra- and inter-ministerial coordination when difficult issues emerge.

40. **MMAF and Bappenas will establish Project Implementation Units (PIUs) for different project components within one month after project effectiveness.** MMAF will manage Component 1 and 2 activities, Bappenas will be responsible for Component 3 activities; and MMAF and Bappenas will manage component 4 activities. MMAF will establish three PIUs each in DJPRL, DJPT and DJPB. PIU DJPRL and DJPT will be responsible for implementing Subcomponent 1.1 (MPA management) and Subcomponent 1.2 (coral reef fisheries management), respectively. DJPRL, DJPT, and DJPB PIUs will work jointly to implement Component 2, under the leadership of DJPRL. Bappenas, through its Work Unit (*Satuan Kerja*) - the Indonesia Climate Change Trust Fund (ICCTF) - will implement Component 3 (Blue Finance). MMAF, as the Executing Agency, and



ICCTF-Bappenas will be responsible for implementation of Component 4 (project management) funded by IBRD loan and PROBLUE grant, respectively. The Technical Implementing Unit (*Unit Pelaksana Teknis/UPT*), MMAF's representative offices in the provinces, will be responsible for day-to-day management and implementation of activities at the subnational level (provincial/district/village), including support to activities planning, facilitation, monitoring and evaluation, and reporting. The UPT will also facilitate the coordination with relevant stakeholders at the subnational level to ensure smooth project implementation.

41. At the subnational level, a Provincial Project Supporting Unit (PPSU), hosted in the Provincial Marine and Fisheries Services (DKP, *Dinas Kelautan dan Perikanan*) in the target provinces, will receive and manage project funds, via Decentralized Fund (*Dana Dekonsentrasi*), to provide implementation support for activities for provincial MPAs under Subcomponent 1.1 and associated community support under Component 2. District Governments will be involved in coordination of relevant Dinas staff to support project implementation, and to oversee alignment of village-based activities in Component 2.1 with local development plans and budgets.

42. Figure 1 illustrates the institutional and implementation structure of the Project.

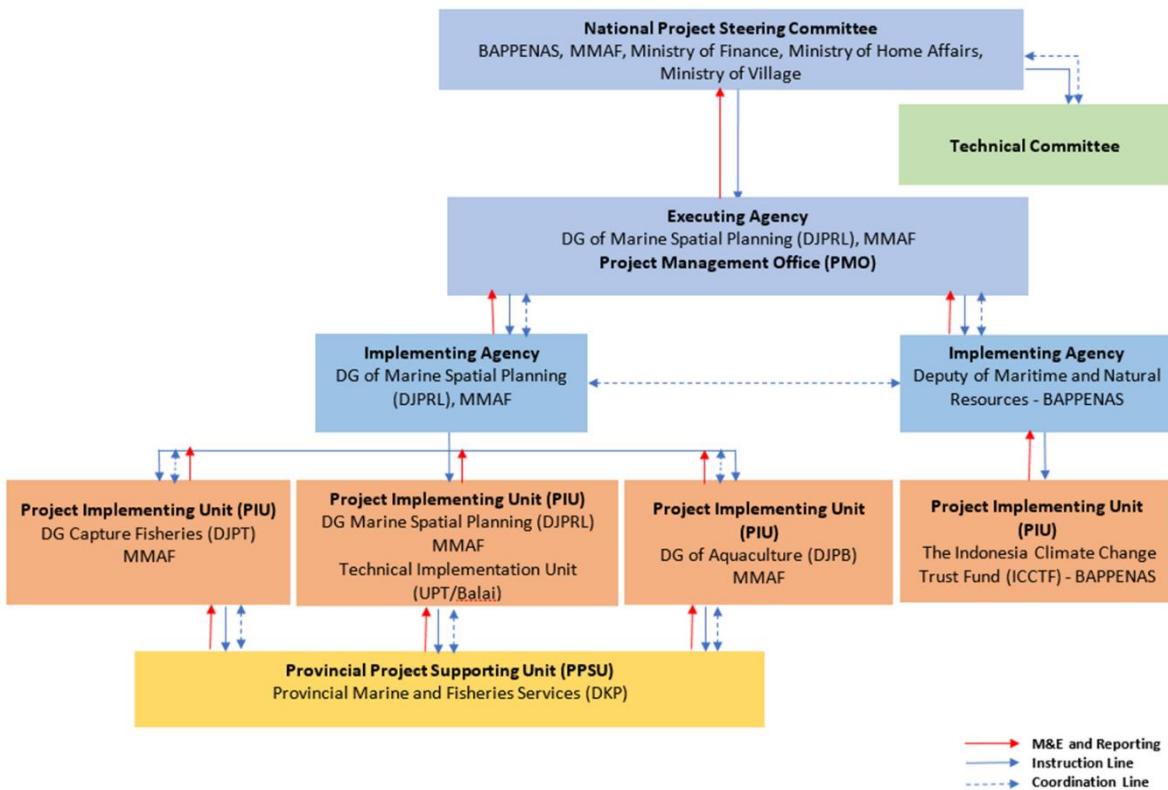


Figure 1. Institutional Arrangements for LAUTRA

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