

Indonesia Understanding Blue Economy Development

A Case Study on Small-scale Fisheries







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Written by: Marthin Hadiwinata

Editorial Team: Sopan Joshi Siddharth Premkumar Ahana Lakshmi

> Designed by: Ramu Aravindan

> > Published by:

International Collective in Support of Fishworkers (ICSF) Trust

No:22, First Floor, Venkatrathinam Nagar, Adyar, Chennai 600 020, India

Tel: 91-44-24451216 / 24451217

Email: icsf@icsf.net

Website: https://www.icsf.net/

ICSF Archives/Digital Library: http://icsfarchives.net/

Twitter: https://twitter.com/ICSF1 Facebook: https://www.facebook.com/ICSF

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Traditional fishing craft at Labuan Bajo fishing town, Indonesia by Marthin Hadiwinata

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1. Introduction

1.1 Background

As an archipelagic country with the world's second longest coastline, Indonesia has great potential in the fisheries sector. This potential needs to be optimised, especially in smallscale fisheries (SSF)—the backbone of the national fishing industry. However, SSF tend to be marginalised, as observed in practices such as minimum tenure rights protection, competition with industrial fishing and trawlers, and limited access to social protection and markets. They are also affected by coastal development, environmental degradation, and policy challenges. The new definition of SSF in the country's 'Omnibus law on job creation' makes it even more general and unspecific; the 2020 law defines a small-scale fisher as "a person who engages in capture fishing for subsistence, including both those using and not using fishing vessels".

'Blue Economy' is touted as a strategy emphasising the sustainable use of marine resources; it has received particular attention in recent years. In 2023, Indonesia's Ministry of National Development Planning (BAPPENAS is the national abbreviation) published a document titled the 'Indonesia Blue Economy Roadmap' that describes it as a "pathway towards a diversified and sustainable maritime economy".

This characterisation draws from the same terminology as other definitions of the blue economy that refer to its potential for 'economic growth', while ostensibly reducing the economic, social and environmental risks to ocean ecosystem sustainability. Indonesia's fisheries sector relies on marine fishing, aquaculture, and fish processing. Taken together, these three account for 83 per cent of the value generated from the six conventional ocean-based sectors that are measured (the remaining three being shipbuilding, maritime passenger transport and maritime freight).

The roadmap focuses on both established sub-sectors and newly emerging ones. In the former category fall four sub-sectors, which are:

- Marine capture fisheries and aquaculture
- · Marine-based industry, including food processing, shipbuilding, and salt and chemicals
- · Maritime trade, transportation, and logistics
- Tourism

The newly emerging category also has four focus areas. They are:

- · Renewable energy
- · Biotechnology and bio-economy

- · Research and education
- Marine conservation and sustainable management of ecosystem services

Akin to the BAPPENAS roadmap, the Ministry of Maritime Affairs and Fisheries (MoMAF) has proposed five policies for Indonesia's blue economy programme, which are:

- Expanding Marine Protected Areas (MPAs)
- · Quota-based Measured Fishing
- Development of Sustainable Marine, Coastal and Inland Aquaculture
- Supervision and Control of Coastal Areas and Small Islands
- Cleaning Plastic Waste from the Ocean through a Fishers Participation Movement or Monthly Loving Ocean agenda

The blue economy has been related to "blue grabbing" in Indonesia. The dominant practices of this form of deceptive appropriation are mostly disguised in narratives of incentives for investment, or recovery from environmental destruction. As well, the implementation of the blue economy is counterproductive and tends to raise other issues in the ocean. A study of blue economy practices on Nusa Penida island, published in 2015, provides an example to substantiate this observation.

The study showed that seaweed farmers on the island reported receiving good incomes of about 160-480 Australian dollars (1 AU\$ = 0.64 US\$ as on May 25, 2025) per month; some had also received training, including on the optimal conditions for production and quality assurance. Their prosperity notwithstanding, the farmers were pessimistic about the future due to threats to the viability of seaweed farming. These challenges include pollution from increased tourism, losing young people to employment opportunities arising from tourism, inadequate marketing support for abalone production (farmed as part of an integrated seaweed and abalone cultivation programme), and the increased incidence of diseases and pest fish in seaweed.

The government offered several priority programmes that were to be implemented by the end of 2024. These included increasing non-tax revenue in the fisheries sector for fishers' welfare. For instance, the government has designated Fisheries Management Area 714 (WPP 714) around the Banda Sea in Maluku province as an exclusive area for spawning and breeding of fish. The government has also developed export-oriented fish hubs by improving and revitalising communal fish ponds.

However, the government's attitude shows it undervalues the economic contribution of the SSF sub-sector as compared to that of industry-scale players—despite more than 90 per cent of Indonesia's fishery actors falling under small-scale, technical, and micro capital-scale fisheries in the field. According to the MoMAF, 2.1 million people living in the coastal areas are involved in SSF. Despite this, the government does not have a clear plan towards SSF; its recognition of SSF has not extended to the implementation of effective measures to protect SSF economic activities, their tenure rights and fishing grounds, among others.

While the job creation law has changed the definition of a small-scale fisher based on the technical regulatory framework, its subsidiary regulation still describes SSF as fishing for subsistence with (or without) vessels under a gross tonnage (GT) of 5. It is important to look not only at the blue economy's economic aspect, but also its social impacts. For

example, it needs to recognise—clearly and obviously—that SSF provide jobs, affordable and accessible food, and have a much smaller carbon footprint compared to the largescale fishing industry.

Based on the above background, a case study of the blue economy programme in Indonesia was devised, focusing on three sectors: measured capture fishing, viewed as an Indonesian capture fishing quota system; the shrimp estate, an industrial-scale aquaculture in Central Java province; and Labuan Bajo premium luxury tourism, the government's strategic national project in the South East Nusa province. The case study was designed to understand the impact of these programmes on small-scale fishers.

1.2 Objectives

The case study has the following objectives:

- To review the status of blue economy projects
- · To examine their impact on SSF
- To make recommendations for sustainable and equitable SSF policies and practices

1.3 Research questions

The case study was designed to answer the following questions:

- 1. How is the implementation of the non-fishery blue economy projects affecting the economic welfare of SSF in Indonesia?
- 2. What are the social implications of emphasising certain elements of the blue economy on the SSF community, for both men and women, particularly regarding the security of livelihood and food?
- 3. How has the promotion of non-fisheries sectors under the blue economy affected government policies and programmes that concern SSF?

1.4 Methodology

The research methodology was as follows:

- 1. Literature: Conduct a review of literature from various sources regarding the blue economy, SSF, and the challenges in Indonesia
- 2. Field studies: Visit small-scale fishing locations in several regions in Indonesia to understand how the fisheries sector, especially SSF, is impacted by the development of non-fisheries sectors under the blue economy
- 3. In-depth interviews: These include stakeholders such as small-scale fishers, local and national governments, fisheries associations, and marine experts

1.5 Output

The researchers expect the following:

- 1. An in-depth report on the blue economy and SSF in Indonesia.
- 2. A series of recommendations to the Indonesian government to protect and strengthen small-scale fishers, while applying the blue economy approach.

1.6 Timeline

Activities // Month	One	Two	Three	Four	Five
Literature study, survey site identification, and interview preparation					
Conduct field surveys and in-depth interviews with relevant people					
Data analysis, report preparation, and recommendation formulation					
Preparation of the publication, editing script, layout and design, and publication					



2. Indonesia's Blue Economy and Small-scale Fisheries

2.1 National context of the blue economy

Indonesia's marine fisheries sector initially recognised the term 'Blue Revolution' as representative of a sea-change in thinking and a shift in development orientation from land to maritime—through a rapid and foundational transition. The blue revolution was characterised by the concept of 'Minapolitan', which entailed a series of dynamic processes including the development of a zone-based maritime and fisheries economy, all in an integrated, efficient and high-quality manner. This was explained by MoMAF in a 2011 decree on the Minapolitan General Guidelines. Minapolitan has two main elements: (i) a region-based marine and fisheries sector development scheme and (ii) the creation of a vibrant economic hub with marine products and fisheries being the main commodities. The term blue economy did not feature in Indonesia's national development plan policies, including its 2005-2025 National Long-Term Development Plan. Likewise, in various medium-term planning policy documents, there was still no recognition of the blue economy concept.

When Law no. 32 (Law of the Republic of Indonesia No. 32 of 2014 on Marine Affairs) was enacted in 2014, it used the term blue economy as the principle in ocean management that promised the greatest prosperity through the utilisation and exploitation of marine resources. It defined the blue economy as "an approach to promoting sustainable marine management and the conservation of marine and coastal resources and their ecosystems to generate economic growth through community engagement, resource efficiency, minimising waste, and multiple revenues."

Management of Indonesia's marine resources is governed under two instruments: (i) the Indonesia Ocean Policy (IOP), which lays down (among other things) the overview and principles of the country's vision of becoming a 'Global Maritime Fulcrum'; and (ii) the IOP's Action Plan. The action plan, which details various programmes and activities in ocean areas to be implemented in accordance with national development goals, was first published for the period 2016-2019; it was then updated for the period 2021-2025. Aside from the blue economy, the ocean policy is based on five principles: (i) archipelagic insight; (ii) sustainable development; (iii) integrated and transparent management; (iv) participation; and (v) equality and equity. The blue economy is described as a model of economic development that accounts for the carrying capacity of resources and the environment. Here, the blue economy is said to synergise the potential of activities on land, sea and in the air, and projected to become Indonesia's strength.

However, the term was explicitly stated in the implementation of only two of the seven pillars of the IOP, namely (i) marine resource management, a strategy to develop and utilise energy and mineral resources, and (ii) the marine economy, a strategy to develop integrated marine economic areas. The other five pillars concern defence, security, law enforcement, and safety at sea; maritime governance and institutions; management of marine space and protection of the marine environment; maritime culture; as well as maritime diplomacy.

Likewise, the marine action plan for 2016-2019 mentions the blue economy only once as a priority activity towards the development of marine economic areas in an integrated manner. The marine action plan for 2021-2025 mentions the blue economy as part of just two programmes:

- (i) the development and utilisation of energy and mineral resources, in accordance with the principles of the blue economy, by taking into account environmentally friendly technology
- (ii) the development of integrated marine economic areas, using the principles of the blue economy in coastal areas, small islands, outer islands, and Indonesian marine waters in a realistic manner

The above shows that the blue economy—as a principle—is interpreted simply through its derivative actions. These include minimising waste, creating a multiplier effect, encouraging social inclusion, and innovation and adaptation. But it does not read the blue economy critically in terms of its core logic and its impacts on the fisheries sector. Furthermore, the IOP mentions small-scale fishers only twice, revealing the lack of importance given to SSF in government policy.

The national government has issued various documents for the implementation of the blue economy. Beginning with the Blue Economy Development Framework (2021), the Blue Finance Policy Notes (2022) and Blue Financing Strategic Document (2022), the latest is BAPPENAS' roadmap. The roadmap, which indicates the government's direction in implementing the blue economy, states that the expected outcome is to "sustain high economic growth based on well-managed marine resources, and to allow Indonesia to become an advanced economy."

The blue economy roadmap does not prioritise the extractive economy; yet the programme for the development of just transition in the energy sector is still promoting marine mining, that is, offshore drilling for petroleum. The roadmap raises issues and challenges related to capture fisheries and aquaculture. The include the following:

- Overstock and overfishing
- Unsustainable practices, including the conversion of mangrove and seagrass areas into aquaculture areas
- Lack of marine resource management governance in addressing illegal, unreported and unregulated fishing (IUUF)
- Stagnated productivity due to welfare issues and working conditions
- Pollution and ecosystem degradation

Table 1. National official documents related to the blue economy

No.	Document title and year of publication	Author and publisher	Content
1.	Blue Economy Development Framework for Indonesia's Economic Transformation (2021)	Ministry of National Development Planning/ National Development Planning Agency (BAPPENAS)	Explains the policy steps the government can take regarding the implementation of the blue economy
2.	Indonesia Blue Finance Policy Note (2022)	Indonesia Climate Change Trust Fund (ICCTF), along with BAPPENAS, with support of the World Bank	Describes the roadmap for the development of financing for blue economy projects in: sustainable fisheries (including aquaculture); coastal and marine tourism; managing coastal and marine assets, particularly marine protected areas; and combating waste, plastics in particular
3.	Blue Financing Strategic Document (2022)	Coordinating Ministry for Maritime and Investments Affairs (CMMIA), United Nations Development Programme (UNDP), Innovative Financing Lab, and the Archipelagic and Island States (AIS) forum	Provides guidelines for the development and identification of collaborative mechanisms to encourage the implementation of blue finance to protect and derive economic benefits from the marine sector
4.	Indonesia Blue Economy Roadmap (2023)	BAPPENAS with support from United Nations Resident Coordinator (UNRC), United Nation Environment Programme (UNEP), Inter- national Labor Organization (ILO), UNDP, ASEAN Regional Integration Support from the European Union (ARISE+), Swedish Agency for Marine and Water Management (SwAM), and EcoNusa Foundation	Provides an overview to promote the implementation of the blue economy. Provides guidance on how the blue economy can increase productivity and contribute to the economy towards Indonesia's Vision 2045

The roadmap encourages the implementation of sustainable fisheries and aquaculture management for SSF. For example, it calls for "boosting the downstream of marine capture fisheries and aquaculture products supported by the development of a resilient supply chain involving the partnership between small-scale fishers and medium-large industries, and the application of innovative and sustainable technology solutions."

Strategic action plans are formulated as a practical framework to address such challenges. At least five action plans under blue economy plans relate to SSF. They are:

- Development of a social protection scheme for fishers and maritime workers to help improve productivity
- Development of an inclusive supply chain of fisheries and aquaculture products, upstream to downstream products, through fair and feasible partnerships between smallscale fishers and medium-large industries
- · Improvement of social safety nets to support vulnerable communities affected by environmental changes, supported by possible development of climate-resilient insurance or risk-sharing mechanism to protect coastal farmers and small-scale fishers financially from seasonal variations or unforeseen events or disasters
- Revolving loan funds for small-scale fishers to invest in sustainable fishing practices and equipment
- Expansion of technical assistance and financial support to promote the transition of fishers and coastal communities to alternative livelihoods that are less dependent on marine resources, such as ecotourism or sustainable agriculture

As listed above, MoMAF has also proposed five policy programmes as part of its blue economy strategy. This case study focuses on three of these: Quota-based Measured Fishing; Sustainable Development of Marine, Coastal and Inland Aquaculture; and largescale premium tourism. Section Three will explain the blue economy programmes.

Indonesia's blue economy policy is not free of criticism—with critiques ranging from outright rejection of its programme, to critical positions offering strategies to avoid adverse impacts on SSF communities, indigenous peoples and local coastal and small island communities. For example, a study published in 2023 recognises the existing criticisms, going on to explain the blue economy in reference to the initial business model paradigm coined by Gunter Pauli.

Blue economy practices are still within the scope of the blue growth narrative, concentrating only on economic growth. Such a policy model can encourage only blue grabbing. This will ultimately deprive marine, coastal and small island resources. If the government continues to implement blue economy policies, here are four recommendations based on a critical perspective:

- Prioritise the main concerns of blue economy actors: the small-scale fishers, local communities and indigenous peoples in coastal areas and small islands
- Foster transparency and fairness through easy access to up-to-date data, integrated with information systems
- Create a participatory end-to-end monitoring mechanism and law enforcement in blue economy policies
- Encourage the sustainable governance of marine, coastal and small island utilisation programmes, while accommodating local wisdom

2.2 Small-scale fisheries in Indonesia

Indonesia's national marine and fisheries policy does not regulate small-scale fisheries explicitly. However, it does regulate subjects that fall within the scope of SSF actors, such as small-scale fishers, traditional fishers, fishing labour, and small-scale fish aquaculture. In fact, the majority of Indonesian fisheries vessels are within the scope of small-scale fisheries; as many as 1,051,990 vessels out of 1,161,332—90 per cent of the total—are smaller than 5GT. This is reflected in the size of the contribution of small fishing craft to the total domestic food produced by fisheries—to the tune of 80 per cent.

According to official statistics, 2.1 million people living in 12,510 villages in the coastal areas are involved in small-scale fisheries. More than 90 per cent of these coastal villages rely on capture fisheries as the main source of livelihood. In 2022, the Central Bureau of Statistics noted that 17.74 million people lived in poverty along Indonesia's coast in 2022, which means the coastal areas hold about 68 per cent of the country's total poor population (26 million people). In addition, about 3.9 million coastal residents were recorded to be living in extreme poverty; a majority of them working as fishers.

This has been linked to the alarming incidence of malnutrition in fishing villages. For instance, seven out of 19 children (about 37 per cent) aged under four years show stunted growth in Sinaka village, South Pagai district, in the Mentawai Islands regency of West Sumatra province, the Kompas newspaper reported in 2023. A similar picture emerges

from Wuring village in the West Alok sub-district of the Sikka regency, East Nusa Tenggara province. Most fishers in the village, primarily members of the Bajo indigenous people, experience stunting; one explanation offered for the growth stunting (despite an abundance of animal protein) is because the catch is all sold to buy instant food. The physical problem of stunting arises from the pressures of both social and economic needs, and compounded by unsustainable fisheries activities.

The government's recognition, and protection, of SSF is complicated and incomplete. Several national-level legislations provide limited definitions of SSF actors, including the Job Creation Act (Act No. 11 of 2020), also called the Omnibus Law; this covers small-scale fishers, traditional fishers, fish workers, fishing vessel owners, small fish aquaculturists, aquaculture by landless fishers in public water bodies such as ponds, among others. The omnibus law has the definition of small-scale fishers as people whose livelihood is to conduct fishing to fulfil their daily needs, that is, subsistence fishing; this applies to both those who use fishing craft and those who do not.

In addition, the law offers no technical consideration of vessel size, whereas the previous definition limited the definition of small-scale fishers to those using vessels under 10GT. But the subsidiary regulation of the law does provide an implicit limitation of the scope of a small-fisher craft, under which capture fisheries vessels now cannot be bigger than 5GT.

This quasi-recognition is also evident in the partial protection cover afforded the sub-sector, even as several policies mandate special treatment of SSF actors (see Table 2). One example is the lack of preferential access to fisheries resources for small-scale and artisanal fisheries, as mandated by the Code of Conduct for Responsible Fisheries (article 6.18) and the SSF guidelines. Meanwhile, small-scale fishers are given the freedom to fish in all fisheries management areas with the obligation to comply with conservation provisions and the stipulations of the fisheries law.

The Law on the Protection and Empowerment of Fishermen, Fish Raisers and Salt Farmers (Law No. 7/2016) mandates spatial planning rules for managing coastal areas and small islands. It creates an obligation to provide livelihood space and access to small fishers in the stipulations of spatial plans. Yet policies governing the management of coastal and small islands do not clearly earmark areas for the exclusive use of small-scale fishers in local zoning regulations.

Such inconsistencies highlight the ambiguous and circumspect nature of SSF tenure rights in Indonesia. There is no clear recognition of small-scale fishers as food producers, nor has there been an acknowledgment of their relationship with agrarian and natural resources. While small-scale fishers have access to marine and fisheries resources, they do not have control over, or participate in, the processes that determine the use of said resources. In sum, tenure protection for SSF remains unrealised.

The incomplete state of protection is also evinced by the lack of valid data on the number of SSF actors, including the absence of gender-disaggregated data. This is because under Article 61 of the Fisheries Law No. 31/2004, it is not the government's responsibility to register small-scale fishers, their businesses or activities, or to collect SSF data.

Consequently, undocumented SSF actors struggle to access subsidies and business support, including fisheries infrastructure, from the governance structure. Another concern lies in the division of responsibilities between the central government, which frames

policy, and the local government units responsible for regulating and empowering SSF actors. Governments at the district or city levels lack the budgets; therefore, they simply unprioritise the needs of small-scale fishers and the sub-sector in general.



No. Laws and regulations related to small-scale fisheries

1. Fisheries Law No. 31/2004 (Law of the Republic of Indonesia Number 31 of 2004 Concerning Fisheries) was amended twice by Law No. 45/2009 (Law of the Republic of Indonesia Number 45 of 2009 on amendment to law number 31 of 2004 on fisheries) and Law No. 6/2023 (Law of the Republic of Indonesia Number 6 of 2023 concerning the Stipulation of Government Regulations intended to become Law, in Lieu of Law no. 2 of 2022 concerning Job Creation)

Relevant provisions:

- The legal framework provides unclear definition of small-scale fishers and small-scale fish farmers. The 2022 'Job Creation' law revised the definition to "people whose livelihood is catching fish to fulfil their daily needs, both those who use fishing vessels and those who do not use fishing vessels"
- It also provides special arrangements for small-scale fishers such as: exemption from the obligation of the fishing vessel monitoring system; exemption from the obligation to fulfil business licensing and/or to carry documents showing this; exemption from fisheries levies: streamlined provision of credit schemes for business capital and operational costs, low rates of interest on loans in accordance with their ability to repay, and the implementation of capacity building in the form of education, training and counselling; providing freedom to fish in all fisheries management areas with the obligation to comply with conservation provisions and norms stipulated by the ministry; the government is obliged to provide empowerment funds; and a reduction of penalties and criminal sanctions in certain criminal offences
- 2. Law Number 27/2007 (Law of the Republic of Indonesia No. 27 of 2007 on Management of Coastal and Small Islands) was amended twice by Law Number 1/2014 (Law of the Republic of Indonesia No. 1 of 2014 amending Law No. 27 of 2007 on the Management of Coastal Zone and Small Islands) and Law No. 6/2023 (Law of the Republic of Indonesia Number 6 of 2023 concerning the Stipulation of Government Regulations intended to become Law, in Lieu of Law no. 2 of 2022 concerning Job Creation)

Relevant regulations:

- · The law provides definitions of community, indigenous peoples, local communities, traditional communities, and key stakeholders such as traditional fishers, modern fishers, fish farmers
- It regulates the utilisation of coastal waters and small islands resources with three forms of planning, namely, the Coastal Zone and Small Islands Zoning Plan (RZWP3K), the National Strategic Area Zoning Plan (RZKSN); and the Specific National Strategic Area Zoning Plan (RZKSNT)
- · It sets priorities for the form of resource utilisation of small islands and surrounding waters with a priority scale that includes the following: conservation; education and training; research and development; mariculture; tourism; fisheries and marine businesses and the fishing industry; organic farming; and/or animal husbandry
- The spatial utilisation of coastal waters is carried out in accordance with spatial planning and must meet the central government's suitability requirements for marine spatial utilisation activities
- · The utilisation of sea space considers the preservation of coastal waters ecosystems, communities, traditional fishers, national interest, and the right of peaceful passage for foreign vessels
- · The central government gives indigenous peoples the freedom to have a say in the suitability of marine spatial utilisation activities in the management areas of Masyarakat Hukum Adat
- · Coastal communities have rights and obligations in the management of coastal areas and small islands.
- 3. Law Number 7/2016 (Law of the Republic of Indonesia No. 7/2016 on the Protection and Empowerment of Fishermen, Fish Raisers, and Salt Farmers) as amended by Law No. 6/2023 (Law of the Republic of Indonesia Number 6 of 2023 concerning the Stipulation of Government Regulations intended to become Law, in Lieu of Law no. 2 of 2022 concerning Job Creation)

Relevant regulations:

- The law provides a definition of small-scale fisher, traditional fisher, fishworker, fishing vessel owners and covers small fish farmers and fish cultivators
- · However, this policy applies generally to include traditional fishers, fishing labourers and those who own fishing vessels of 10 GT to 60 GT, either in one unit or in a cumulative number
- It regulates protection and empowerment measures. Protection efforts are carried out with eight schemes: (i) provision of infrastructure for fisheries business and salting business; (ii) ease of obtaining facilities for fisheries business and salting business; (iii) business certainty guarantee; (iv) risk guarantee for fishing, fish cultivation, and salting; (v) elimination of highcost economic practices; (vi) control of imports of fisheries commodities and salting commodities; (vii) security and safety guarantee; and (viii) facilitation and legal assistance
- · The empowerment scheme is carried out with five steps: education and training; counselling and mentoring; business partnerships; easy access to science, technology, and information; and institutional strengthening
- · Only mentions women once as part of the households of fishers, fish farmers and salt farmers in empowerment activities

3. Description of the Blue Economy project in Indonesia

3.1 Measured Capture Fishing

The policy on Measured Capture Fishing (MCF) has been in force since March 6, 2023, with the enactment of Government Regulation No. 11 of 2023 (PP 11/2023). This takes into account Law Number 31 of 2004 (Law 31/2004), which explains the general objectives of fisheries management. MCF is defined as controlled and proportional capture fishing, carried out in a Measured Fishing Zone (MFZ), based on a fishing quota. It aims for the sustainability of fish resources and their environment as well as equitable national economic growth. To achieve this, MCF is characterised by three elements, namely: controlled and proportional fishing; carried out in a certain fishing area zone; and restrictions or limitations on fishing quotas.

In principle, MCF is applied to all capture fisheries in Indonesian marine waters, including in the open/high sea. Indonesia's MFZ is divided between capture fishing areas (CFA) and limited capture fishing areas (LCFA). The latter are a part of the former, but are designated based on the size of fishing vessels, the use of certain fishing gear and/or usage during certain periods of the fishing season.. MCF divides the country's marine territory into six measured fishing zones from eleven fisheries management areas (see Figure 1).

Table 3. Area Zonation Plan on Measured Capture Fishing

Zone	Fishing Management Area (WPP)	Waters	
Zone 01	WPPNRI 711	Karimata Strait, Natuna Sea, and North Natuna Sea	
Zone 02	WPPNRI 716	Sulawesi Sea and north side of Halmahera Island	
	WPPNRI 717	Cendrawasih Bay Sea and Pacific Ocean dan Pacific Ocean High Sea;	
Zone 03	WPPNRI 715	Tomini Bay Marine Sea, Maluku Sea Ocean Area, Halmahera Sea, Seram Sea, and Berau Bay	
	WPPNRI 718	Aru Sea, Arafuru sea, and east side of Timor Sea	
	WPPNRI 714	Tolo Bay Marine Water and Banda Sea	
Zone 04	WPPNRI 572	West side of Ocean from West Sumatra and Sunda strait	
	WPPNRI 573	Samudra Hindia water on south Java along with South Nusa Tenggara, Sau Sea, and West side Timor Sea and Indian Ocean High Sea	
Zone 05	WPPNRI 571	Malaka Strait Sea and Andaman Sea	
Zone 06	WPPNRI 712	Jawa Sea	
	WPPNRI 7I3	Makassar Strait Sea, Bone Bay, Flores Sea and Bali ocean	

Source: Article 2 ayat (5) PP No. 11/2023 (Government Regulation no. 11 of 2023 on Measured Fishing)

Areas for limited fishing are determined by the ministry based on certain conditions; these can be utilised only by small-scale fishers whose activities are not for commercial purposes. Considerations in determining certain fisheries conditions take into account four aspects: fish resources; fish resource environment; socio-economic fisheries; and/ or fisheries governance. The fishing quota scheme was determined in each MFZ based on the potential of fish stock and the amount of catch allowed after considering the level of resource utilisation. There are three types of quotas in MFZ: industrial quota, local fishermen quota and quota for activities not for commercial purposes. The distribution of these quotas is expected to take into account the number of fishermen, the number and size of vessels, and fishing gear recorded in each management area.



Figure 1. Map divisions of Measured Capture Fishing zones, Indonesia (Source: MoMAF)

Industrial quotas are given in each MFZ beyond 12 nautical miles to fisheries business actors, both individuals and corporations. Small-scale individual business actors are incentivised to join cooperatives. Business actors can form cooperatives or limited liability companies (LLC). Both can bring in Foreign and domestic investment to utilise industrial quotas in zones 01 to 04. Specifically, industrial quotas in zones 05 and 06 can be utilised only by corporations in the form of domestic investment. The governments, both central and local, are to facilitate the issuance of industrial quotas for small fishers.

The local fishers quota is given in the marine waters of the MFZ up to 12 nautical miles. This quota is to be issued by the provincial governor to local fishers on an individual basis—they may or may not be small-scale fishers—and to fishing corporations in the form of LLCs and cooperatives. Individual fisheries business actors are to be prioritised if they are members of cooperatives. Both cooperatives or LLCs are limited to only domestic capital investment.

Meanwhile, the non-commercial fishing quota is given in each MFZ up to 12 nautical miles and beyond. This quota can be assigned to any person or government, central or regional, for only non-commercial use. For example, educational activities, training, research or other scientific activities, as well as pleasure or tourism. This quota for recreational use

and tourism can be given to the actor organizing the activity.

Every quota utilisation is subject to fisheries levies in the form of non-tax state revenue, except for small-scale fishers. Fishing vessels can come from new procurement or in a used condition; they can be domestic or foreign. Every fishing vessel is required to install and activate the transmitter of the vessel monitoring system; but small-scale fishers are exempted. All vessels are required to land their catch at the base port of the MFZ; if no base port is determined, they can anchor at the nearest base port. Small-scale fishers can land fish at the fishing centre.

Table 4. Provisions regulating small-scale fishers in Measured Capture Fishing policy

No.	Provision	Article/aturan
1.	Freedom to utilise limited fishing areas	Article 4 ayat (2) huruf a PP 11/2023
2.	Exempted from the obligation to fish only within a Measured Fishing Zone	Article 5 ayat (1) PP 11/2023
3.	Priority in accessing industrial quotas for small-scale fishers who are members of cooperatives	Article 8 ayat (3) PP 11/2023
4.	SSF can operate outside of the fishing permit validity period while conducting fishing business under an industrial quota (the same regulations apply as in the validity period of the Local Fishers Quota)	Article 8 ayat (7) PP 11/2023 dan Article 9 ayat (7) dan (8) PP 11/2023
5.	For SSF, there is an exception in the processing application for industrial fishing quota. They do not have to meet minimum requirements: the Fishing Business Permit Letter (SIUP) and Fishing Vessel book	Article 8 ayat (9) PP 11/2023
6.	Governments, central and local, facilitate small-scale fishers to obtain industrial quotas	Article 8 ayat (10) PP 11/2023
7.	They can access the local fishermen quota, with priority for those who are members of cooperatives	Article 9 ayat (2) huruf a dan ayat (3) PP 11/2023
8.	Can obtain local fishers quotas with facilitation by regional governments	Article 9 ayat (8) PP 11/2023
9.	Exempted from complying with the provisions on fishing quotas	Article 11 ayat (2) PP 11/2023
10.	Exempted from fisheries levies in the form of non-tax state revenue or levies	Article 13 ayat (2) PP 11/2023
11.	Can utilise local fishers quota without using fishing craft	Article 14 ayat (2) PP 11/2023
12.	Exempted from the administrative area restrictions of provincial authority in those MFZs for which permits are issued by the governor	Article 15 ayat (1) huruf b PP 11/2023
13.	Given access to fishing areas beyond twelve nautical miles	Article 15 ayat (2) PP 11/2023
14.	Exempted from the obligation to install and activate transmitters of the vessel monitoring system	Article 17 ayat (3) PP 11/2023
15.	Exempted from the obligation to land fish at base port	Article 18 ayat (5) PP 11/2023

The provisions favouring small-scale fishers under Government Regulation No. 11/2023 conflict with MoMAF's regulations of measured fisheries, titled PERMEN KP No. 28/2023. While the first exempts small-scale fishers from complying with the provisions of quotas in MFZ, the latter has quotas for them. There are even mechanisms and requirements for the industrial quotas and local fishers quotas to be directly issued from the ministry (through the provincial governor) by submitting an application to the governor.

Fishing businesses in the MFZ must employ only Indonesian citizens as captains, officers, and crew. However, for fishing master positions (crew members with the required expertise to plan and report on fishing operations), the regulations allow for the hiring of foreign workers. Trans-shipment is permitted under two conditions: in vessels using tuna longline fishing gear and tuna handlines; and fishing or transport vessels of the same business unit.

Violations of the MCF quota rules are not punished with legal enforcement actions, only with administrative sanctions. These include:

- · A written warning or reprimand
- · Government coercion
- Administrative fines
- Freezing of business licenses or approvals
- Revocation of business licenses or approvals

There has been criticism and plaudits regarding the MCF's potential impacts. Luky Adrianto, professor of fisheries and marine sciences at the Bogor Agricultural University (IPB), likens the MCF quota system to operating under an "illusion of certainty". Quota-based fishing has tended to damage ecosystem-based spatial management, says Adrianto, because it turns the maritime zone into a business zone. Dani Setiawan, general chairperson of the Indonesian Traditional Fisherfolk Union (KNTI), says MCF leads to a policy of liberalising the fishing sector, as seen in the industrial quota being open to foreign investment.

Muhammad Karim, lecturer and researcher from Trilogi University in Jakarta, considers MCF a milestone achievement in the sector. He offers a set of steps to avoid the negative impacts experienced in several developed countries that used a quota system for the industrialisation of fisheries: (i) he advocates changing the development paradigm of fisheries from growth-oriented to 'blue degrowth' (away from continuous economic growth into a more sustainable, equitable model); (ii) turning fisheries into a manifestation of blue degrowth by ensuring there is no 'blue grabbing' of ocean resources and space, besides securing the right to access for local and indigenous communities and traditional fishers; and (iii) reforming national institutions of capture fisheries by positioning traditional fishers, as well as local and indigenous communities, as national food producers who provide vital nutritional protein for the general population.

Another fundamental problem is the lack of reliability of data on fisheries; invalid or outdated data is still taken into consideration under the MCF quota system. Yonvitner, who heads the Center for Coastal and Marine Resources Studies at IPB University, says old fish stock data is still used for MCF policy and quota allocation. The data's accuracy is questionable on various counts such as the number of fish caught, fishing capacity, stock conditions and abundance of fish species, and other biota caught with fish that have not been validated from the lowest level to the integration into national datasets. Among the reasons why the data is not valid is: the complexity of Indonesian fisheries activities; the nature of the catch is very diverse in terms of the number of species and their types; and the vessels vary greatly in size and the type of fishing gear they use, as do their supervision and management. Moreover, the data is not specific to the fisheries sector.

The Indonesian National Ombudsman Agency has conducted a systematic review of MCF. In its conclusion, it saw five problems:

- There was no public consultation with stakeholders in the drafting of PP 11/2023
- The provisions for the protection of small-scale fishers are optional, not mandatory This leaves the potential for maladministration of services and unfair treatment to small-scale fishers, compromising the protection they need and deserve
- The absence of clear and measurable parameters to determine the category of smallscale fishers
- The lack of comprehensive accountability and transparency in the calculation, determination and evaluation of fishing quotas
- The lack of familiarisation and education about MCF regulations and technical rules

In response to the pushback, the MoMAF, in a circular dated November 29, 2023, announced the postponement of the implementation of the quota-based measured fishing policy to early 2025. The implementation of fishing quotas and quota certificates was also deferred. As of the case study period, the policy has not been rolled out.

3.2 Shrimp Estate

Another blue economy project has to do with aquaculture in the Kebumen regency of Central Java province. Titled 'Shrimp Estate', the project covers an area of 100 hectares, half of which is a production area comprising 149 ponds. The estate is located in the midst of three villages: Tegalretno and Karanggadung in the Petanahan district, and Jogosimo in Klirong district. A similar project is also planned for the East Sumba regency of East Nusa Tenggara province, covering 1,800 hectares.

A shrimp estate was defined as "a large-scale shrimp aquaculture farming scheme where the upstream to downstream processes are in one area" using technology to create 'Modern Aquaculture 4.0'. Under this, integrated fish farming or aquaculture is carried out in a "region-based and zero-waste aquaculture corporation". This relies on the collaboration of multiple stakeholders from the central and local governments, the community and the private sector. The Kebumen estate was targeting a production of 80 tonnes per hectare per year, with an annual target area of 4,000 hectares.

This deserves some historical context. The development of integrated large-scale industrial shrimp farming complex areas began right after Indonesia's 'New Order' began in 1966 (the ascension of the country's second president Suharto). This resulted in the creation of one of the largest areas of industrialised shrimp farming in Southeast Asia, situated in the Tulang Bawang regency of Lampung province. The Dipasena shrimp farming area in the regency spreads across 16,250 hectares, while the shrimp farm in Bratasena covers 8,000 hectares.

The shrimp farming business model in the two areas was built on contract farming using what was called the 'core-plasma' scheme. Under this arrangement, the company, as the 'core', provided capital loans and means of production—from land, equipment and seeds to post-production services—by setting the selling price and sale of the harvest. The fish farmers comprised the 'plasma' that actually cultivated and farmed the produce. The profits they received were often paltry because the cost of production equipment was deducted as a debt.

The Dipasena area was once the largest shrimp farm in Asia, producing up to 200 tonnes daily. However, the unfairness of the core-plasma contract resulted in conflicts between

the 'core' company and the 'plasma' farmers. The relationship was never based on transparency or profit sharing; moreover, there were human rights abuses. Now, shrimp farmers in Dipasena work independently, without any company acting as a middleman for the processing, distribution and marketing of the shrimp they produce.

The environmental impact of industrial aquaculture has become a concern and activists have been criminalised for defending environmental rights. For example, the arrests and convictions of environmental activist Daniel Frits Maurits Tangkilisan and three village community members from the Karimunjawa archipelago in 2023—on charges of hate speech and defamation—after they campaigned against shrimp aquaculture farming because it damaged the coastal ecosystem, in particular due to pollution from waste generated by harvesting methods. In 2012, the Karimunjawa Islands and its surrounding waters had been designated a national park for conservation. The 2023-2043 regional and spatial plan of Jepara regency expressly prohibits shrimp farming on the Islands.

Various other violations in aquaculture activities on Karimunjawa Islands have been reported by government agencies, such as MoMAF, the directorate-general of Marine Resources and Fisheries Supervision (PSDKP), the directorate-general of Marine Spatial Management, and the directorate-general of aquaculture. These violations are both at the administrative level and the regulatory level; they include the lack of permits, the pollution of seawater by waste, as reported by the Karimunjawa National Park Office under the Ministry of Environment and Forestry.

After the 2020 Job Creation law was passed, there have been changes to the environmental safeguards, especially related to the ecological impact on shrimp or crustacean farming. One fallout is the relaxation of the Environmental Impact Assessment (EIA, also called AMDAL) obligations for farming crustaceans in brackish water. Now, the EIA is mandatory only for shrimp farming businesses spread over more than 500 hectares. Those between 10 hectares and 500 hectares independently fulfil and self-declare their Environmental Management Efforts (UKL) and Environmental Monitoring Efforts (UPL). They do not need an AMDAL or any UKL-UPL documents because their impact on the environment or the fishing community is deemed to be insignificant.



Fish landing site at 'Shrimp Estate' in Kebumen regency, Central Java province, Indonesia by Marthin Hadiwinata

In relation to land and agrarian resources, fish aquaculture business actors are required—in principle—to fulfil the allocation of areas in spatial planning arrangements. Every utilisation of resources must be in accordance with spatial planning documents. For coastal fish farming, spatial planning regulations of Central Java province are applicable. The Central Java Spatial Planning Regulation stipulates Kebumen regency as one of the Minapolitan Areas. This marks it as an area of primary economic function, consisting of production centres, processing, marketing of fishery commodities, services, or other supporting activities.

There are provisions for the management of coastal and small island spaces and resources at the provincial level in Central Java's zoning plan for 2018-2038. One of these spatial arrangements is the designation of aquaculture zones (KPU-BD). However, in the KPU-BD regulation, the area designated for fisheries cultivation does not mention Kebumen regency—even though the 'shrimp estate' is located there.

The Indonesian government had a target of increasing aquaculture production to 22.65 million tonnes by 2024. The figure stood at 18.44 million tonnes during the case study period. Specifically for shrimp as an export commodity, the government had increased its production target from 1,208,433 tonnes in 2020 to 1,520,836 tonnes in 2024. Therefore, the government is encouraging the expansion of existing facilities or converting new land areas for fish aquaculture.

The shrimp estate has had a significant impact on the lives of fishers. For instance, there was the closure of the Fish Auction Place (TPI) in the Tegal Retno village of Kebumen regency, which had been used as a local economic centre by small-scale fishers. Before the TPI was dismantled and used as a location for the shrimp estate, the local government had promised to rebuild the site. However, the new TPI has not yet been realised, making it difficult for fishers who go to sea to sell their catch directly. As a result they have to sell it to middlemen or to auction it in faraway places in neighbouring sub-districts—further eating into their income.

Shrimp aquaculture: different sites, same concerns

Some other areas in Indonesia have witnessed developments related to shrimp farming aquaculture, for example, Minapolitan shrimp farming is underway in West Nusa Tenggara province. The first location is in Labuhan Bontong village in Tarano district, covering an area of approximately 500 hectares; the farms in the villages of Sepayung and Teluk Santong in Plampang district are spread across 1,140 hectares; in Labuhan Sangoro village, Maronge district, over an area of approximately 1,175 hectares; and in Labuhan Kuris village of Lape district, over an area of about 550 hectares. Meanwhile, the West Sumbawa Minapolitan area integrates seaweed farming in the waters of Labuhan Mapin in Alas Barat district over an area of about 1,325 hectares and shrimp farming in Stowe Brang village, Utan district, with an area of about 250 hectares.

The Sumbawa regency in West Nusa Tenggara has been designated as one of the locations for Minapolitan shrimp aquaculture. However, in 2023, the province's head of fisheries and marine service stated that the construction of the shrimp estate by MoMAF in the regency's North Moyo district would be cancelled. This was because the central government wanted 500 hectares of land belonging to the regional government to be used for the construction. However, the regional government has only about 100 hectares in the area that was to be used.

Table 5. Locations of Shrimp Estates

NO	LOCATION	AREA	ACTOR	NEWS TITLE	SOURCE
1	Waingapu, NTT	500.08 Ha	Government	Pinjamkan Lahan untuk Shrimp Estate, Pemda Sumba Timur Minta Prioritaskan Tenaga Kerja Lokal (Lending Land for Shrimp Estate, East Sumba Local Government Asks for Priority of Local Workforce)	https://tekno.tempo.co/ read/1831707/pinjamkan-la- han-untuk-shrimp-estate-pem- da-sumba-timur-minta-prioritas- kan-tenaga-kerja-lokal
2	Palakahembi village, East Sumba, NTT	2,085 Ha	Government	Pemerintah Bangun Tambak Udang Seluas 2.085 Hektar di NTT (Government Builds 2,085 Hectares of Shrimp Ponds in NTT)	https://www.kompas.id/baca/ ekonomi/2024/02/08/pemerin- tah-bangun-tambak-udang-selu- as-2085-ha
3	Palakahembi Village, East Sumba, NTT	2,085 Ha	Private com- panies/ state owned company: PT Adhi Karya	Hutama Karya Garap Shrimp Estate KKP di NTT, Bakal Rampung Tiga Tahun Lagi (Huta- ma Karya Works on Shrimp Estate KKP in NTT, Will Be Completed in Three Years)	https://voi.id/ekonomi/353390/ hutama-karya-garap-shrimp-es- tate-kkp-di-ntt-bakal-rampung- tiga-tahun-lagi

The central government, through the MoMAF, and the East Sumba regency government are working together to build a pilot project for integrated upstream and downstream shrimp farming. Construction of the 2,085-hectare shrimp pond area will be carried out between 2024 and 2027. It is based on a loan-to-use cooperation agreement for goods owned by the East Sumba regency—2,085 hectares of land in Palakahembi village, Pandawai district— with a budget of Indonesian Rupiah (IDR) 7.5 trillion (1 IDR = 0.000061 US\$, as on May 25, 2025). The shrimp pond is projected to distribute an annual economic value of around IDR 3.4 trillion and absorb about 4,730 local workers for upstream to downstream needs.

Haris Muhtadi, the general chairman of the Indonesian Shrimp Club, an industry association, said that the government needs to be careful in developing integrated shrimp pond projects in terms of design and construction techniques. This is reflected in the development of the shrimp pond project in Kebumen. The experience of private shrimp farmers over decades has proven that the ponds that are sustainable are not massive in scale and concentrated in one point. Massive ponds centralised in one area will only concentrate the environmental burden in one location; over time, this will have a heavy impact on the environment and make it difficult to sustain cultivation.

New land clearing for shrimp estate has also been carried out in the Agam regency of West Sumatra province, while the estate development in Gasak Ketek of Nagari Tiku Selatan in Tanjungmutiara district was cancelled based on the Environmental Protection and Management Act (Law No. 32 of 2009). The land clearing did not satisfy the environmental obligations under the law, which states that every business that is required to have an AMDAL or UKL/UPL must have an environmental permit. In addition, the shrimp estate development was planned on land with mangrove forests earmarked for conservation.

Damage caused by a shrimp estate built in the Padang Pariaman regency of West Sumatra has led to a deterioration in habitat quality, adverse impacts on the ecosystem and threatened environmental sustainability. Masarul, a fisher in Ulakan village, complained about the chemical waste from shrimp ponds dumped along the riverbanks; the impact was felt in the loss of certain types of fish that are a source of their livelihood. Only one out of three existing farming units is still operating; the failure of the other two is evidenced in abandoned ponds and empty shrimp cages.

3.3 Labuan Bajo Premium Tourism

Designated as a National Tourism Strategic Area (KSPN) in 2018, the Labuan Bajo premium tourism site is one of the government's five 'super priority' KSPNs selected from out of a total of 88 regions. The Labuan Bajo area is located at the western tip of Flores Island and was previously the gateway to the Komodo National Park, known for the Komodo dragon (Varanus komodoensis). However, after being designated a KSPN, the site has received investment from several sectors; hotels and restaurants are the largest contributors of investment, reaching IDR 1.348 trillion from 2021 to 2023. The local government has also issued regulations that make it easier for prospective investors, by providing tax and fiscal incentives.

Around 60,439 tourists visited Labuan Bajo in 2021, according to data from the Tourism, Creative Economy and Culture Office of West Manggarai regency. This rose to 170,354 tourists in 2022, an increase of 129 per cent. Unfortunately, this increase in tourist footfalls has not been balanced by a concomitant increase in the management of tourist destinations. In August 2022, then president Joko Widodo announced changes to tourism management in Komodo National Park.

As well, Rinca Island was earmarked as a tourist destination, with a target of up to 1.5 million tourists per year. Meanwhile, the Padar and Komodo Islands are designated for exclusive conservation tourism at special rates. With this scheme, the entrance fee for tourists to the Islands has increased from IDR 150,000 to IDR 3,750,000 per person. In addition, the entrance tickets to the exclusive area are no longer managed by the national park authority, but by a regional company called PT Flobamor, along with its business partners.

In the 1970s, the indigenous fishing community in Loh Liang were forced to move under the guise of conservation. After the Indonesian government designated the Komodo Island area as a nature reserve in 1996, the people living on Komodo Island and Loh Liang were evicted again. Between 2010 and 2012, conflict broke out when the community resisted further attempts at eviction from Loh Liang. In 2019, there was again talk of both closing the Komodo National Park and the eviction of the community living in the area.



Fishing craft during low tide at Waraloka Pesisir harbour, Indonesia by Marthin Hadiwinata

In under 30 years, the people of Komodo Island have changed their livelihoods three times. They used to hunt and gather, working as traditional fishers, before being forced to transition to sculpting in order to sell souvenirs and merchandise to tourists. The Komodo national park was established to conserve the ecosystem using a zoning system; it also aimed to support research, science, education, tourism and recreation. However, these benefits have come at a high cost, with barriers and limits being placed on human involvement and activities. The situation began to change in 1997, when some people began making statues and selling souvenirs. Meanwhile, the number of fishers decreased drastically as access to fishing areas was reduced. The zoning system, intended to realise an optimal national park management structure, accelerated the change in livelihoods of the Komodo population. (see Table 6).

Table 6. Chronology of drastic change of community livelihoods affected by Komodo National Park

Year	Event
1965	The designation of Komodo Island as a Wildlife Sanctuary
1969	The designation of Komodo Island, Padar Island and Rinca Island as Tourism Forests
1977	UNESCO (United Nations Educational, Scientific and Cultural Organization) designates Komodo Island, Rinca Island and Padar Island as Man and Biosphere Reserves
1980	The government designates the Komodo National Park (KNP)
1991	UNESCO designates KNP as a World Heritage Site
1992	The designation of the surrounding sea waters over 132,572 hectares as KNP
1995	The Nature Conservancy begins to be involved in KNP management. The environmental organization, founded in 1951 and headquartered in Arlington, Virginia, USA, is heavily involved in business and conservation throughout the world. It is involved in zoning arrangements in KNP that narrow the living space of Komodo people and open up tourism business space, both on land and the sea
2003-2011	Privatisation of KNP management begins under the charge of Putri Naga Komodo (PNK), a joint venture between PT. Jayatsa Putrindo and The Nature Conservancy. PNK was dissolved without clear accountability in 2011
2012	KNP gets selected as one of the new seven wonders of nature by the New7Wonders Foundation
2013	To promote tourism in Labuan Bajo, the Government holds a Sail Komodo event at a cost of about IDR 3.2 billion
2012-2018	Privatisation continues. At least seven corporations, national and transnational, apply for business permits to provide natural tourism facilities in the KNP area. In 2018, two of the seven companies receive permits and begin operations. They are PT Komodo Wildlife Ecotourism (in 2014) and PT Segara Komodo Lestari (in 2013)
2017	Then-President Joko Widodo designates Labuan Bajo as one of ten national priority destinations
2018	The community and environmental networks in East Nusa Tenggara province join the #SaveKomodo Movement to protest. Under public pressure, the Indonesian minister of forestry temporarily stopped the construction of business facilities by two companies that already had permits
2018	Then-President Joko Widodo establishes the Labuan Bajo-Flores Tourism Authority Body to accelerate tourism. The body carries out authoritative and coordinating functions and its board of directors is inaugurated in January 2019
2019	Labuan Bajo is designated as a super priority destination based on tourism business in the KNP
Late 2018-Early 2019	Provincial governor announces plan to close Komodo Island and relocate residents. On a visit to Labuan Bajo and Rinca Island, then-President Joko Widodo expresses his support for the closure
2018-2019	KNP's area is determined, along with its surroundings, as the National Strategic Area of the Komodo National Park Area
2019	On July 4, the director of Tenure Conflict and Customary Forest Management receives information that the LPRA proposed by the community had become an Other Use Area

Source: Sunspirit For Justice and Peace Report, on the History of Land Tenure, Agrarian Conflict and Evidence of Land Tenure

4. Strategy to protect Small-scale Fisheries actors in Indonesia

4.1 Conclusion

The concept of the blue economy has undergone an expansive shift (ideologically and otherwise) from what was proposed by Gunther Pauli. Normatively, the blue economy has been recognised in the Indonesian Ocean Policy, providing a maritime perspective on the matter. However, this approach has led to many problems caused by the lack of involvement of local communities, especially fishers, in the planning and implementation of blue economy programmes. In 2024, the UN Special Rapporteur for the Right to Food encouraged governments to conduct reviews of the blue economy, blue transformation and blue finance approaches, which are focused on economic growth, while often neglecting human rights, food security and the needs of small-scale fishermen.

4.2 Recommendations

The following section highlights the strategy to respond to the blue economy agenda so that it does not impact local communities and small-scale fisheries.

(i) Full recognition

This is critical to determine SSF actors and subjects. The SSF sub-sector includes small fishers, traditional fishers, fish processors and fish sellers; also fisheries households, in which women play an important role in pre-production, production and post-production activities. The government's current definition of small-scale fishers is limited in scope because it covers only subsistence fishing, whether using fishing craft or not. The 2014 SSF Guidelines do not provide a specific definition for small-scale fisheries. However, they provide guidance for determining activities and actors that can be called smallscale fisheries by identifying vulnerable and marginalised groups that require greater attention. In identifying these groups, the government must ensure a substantive, meaningful and participatory process, carrying out consultations at various levels and involving all parties, both men and women.

After determining SSF actors, it is necessary to collect data about them. Data collection on fisheries actors is currently not the government's burden, especially for SSF, according to Article 61 section 5 of the Fisheries Law (No. 31/2004). Thus, the onus falls on the SSF and small-scale fish farmers to register themselves, their businesses and their activities with the local fisheries agency for statistical purposes. This prevents many SSF from being registered; as a consequence, the government's data may be invalid, compromising the protection of their basic rights.

(ii) Human rights

The human rights-based approach in fisheries encourages the government to go beyond basic rights in order to realise and protect social justice, equity and gender equality, along with other related matters. The SSF Guidelines provide the framework for enforcing this. Since their endorsement in 2014, the Indonesian government has stated that the SSF Guidelines are very important, considering that 90 per cent of fishers in Indonesia fall in the SSF category. However, even over a decade later, neither the MoMaF nor other government agencies have issued a National Plan of Action for the implementation of the SSF Guidelines.

In 2016, two years after the endorsement of the guidelines, Indonesia's National Policy on the Protection and Empowerment of Fishermen, Fish Raisers and Salt Farmers (Law No. 7/2016) came into effect. However, nearly a decade later, no implementing regulations have been issued, indicating that the government has no intention of implementing the SSF Guidelines. Both the law and policy have been criticised for not recognising gender justice and equality. Even the limited protections afforded by the 2016 law have been undermined by the 2020 Omnibus Law on job creation, which hints to the Indonesian Government's ambition to conduct neo-liberal 'reforms' across the economy, including the fisheries and marine sectors.

(iii) Tenure rights protection

This is fundamental to avoiding agrarian conflicts between SSF and competing actors and activities that access and utilise coastal land and the waters. Tenure rights are still limited in the form of access rights, control and participation in the utilisation of marine and fisheries resources. While access rights are granted, the rights to control and participate in the management and utilisation of resources are still absent. In each of the fisheries management areas, there is a management plan with institutions responsible for it. Despite this, there is no representation from the SSF sub-sector.

(iv) Social protection

Insurance cover, and other protection measures, are crucial, considering that fishing activities inherently carry high levels of risk to life. This risk has been exacerbated by climate change, which has increased the intensity and impacts of several natural disasters. Other concerns that require social protection coverage include the right to health and education, the right to food and nutrition, and the right to land for housing. Social protection of employment in fishing covers only 486,000 fishers and crew members, without any specificity for SSF actors. It is important that social protection schemes should not be limited in scope to employment insurance, but expanded to include other aspects of social development.

(v) Incentives

The final element of strategy is to give economic incentives for SSF activities. It is understood that SSF play a critical role as an economic and social engine; guarantee food and nutritional security; employment; and provide multiplier effects to the local economy. The lack of regeneration of the SSF sub-sector multiplies existing threats and prevents small-scale fisheries from being recognised as an economic solution.

Most young people do not want to become fishers or work in the SSF because they do not consider a life in fishing economically viable. There are reasons for such apprehensions. Access to equipment and fuel for going to sea is still limited and cannot be easily accessed by Indonesia's SSF actors. An important economic incentive can be for the

government to procure fishery products directly from small-scale fishers. This is a way to provide sufficient and stable income for small-scale fishers, while encouraging the allocation of a part of their catch for personal consumption, increasing the security of food and nutrition.



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Fishing craft parked during low tide at the premium tourist site in Labuan Bajo, Komodo Island, Indonesia by Marthin Hadiwinata



This case study of **blue economy** in **Indonesia** undertakes an assessment of policy, legislation and investment in the context of the blue economy development framework and examines the implications for small-scale fisheries in Indonesia. It reviews the status of blue economy projects, in this context, explores their impact on SSF and makes recommendations to protect space for sustainable and equitable SSF policy and practice (including gender equality).

The case study finds that Indonesia's small-scale fisheries sub-sector is facing numerous challenges, particularly after BAPPENAS (Ministry of National Development Planning of the Republic of Indonesia) published a roadmap for the blue economy. The case study investigates the impacts of blue economy development projects on the economic well-being of small-scale fisheries in

Indonesia. The research methodology includes literature reviews and desk-based research, field visits to communities, and in-depth interviews with main actors such as small-scale fishers.

The case study shows that while the blue economy initiatives aim to promote sustainable development of coastal communities, they overlook the contribution of SSF. The implementation of the blue economy programme through the quota system (Perikanan Terukur), shrimp estate, and premium tourism clearly illustrates the tensions between development objectives and the human rights and livelihoods of SSF and coastal communities. The research underscores the need for inclusive policy frameworks that protect the human rights of SSF, while ensuring their equitable participation in the broader context beyond the blue economy project.



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Marthin Hadiwinata, is founding member of Ekologi Maritim Indonesia (EKOMARIN) and currently serves as National Coordinator of FIAN Indonesia. He is based in the Greater Jakarta area of Indonesia.

