

"Indonesia Fisheries: 2015 Review"

A report on trends in coastal marine resources and fisheries management in Indonesia Prepared for The David and Lucile Packard Foundation

CEA CALIFORNIA Environmental Associates

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Introduction from the Packard Foundation

Dear Colleagues,

The David and Lucile Packard Foundation is pleased to share with you a baseline report on fisheries management and coastal marine trends in Indonesia. This report, "Indonesia Fisheries: 2015 Review," identifies trends in key categories that are relevant for monitoring fisheries management and reform.

As part of our commitment to continuous learning, the Packard Foundation currently plans to issue this report on an ongoing basis to track changes in the status of marine resources and fisheries management in Indonesia. The Foundation's strategy in Indonesia is focused on protecting the health and productivity of the country's coastal marine environment, and as such, the Foundation depends on timely updates in order to make well-informed decisions. This report seeks to aggregate the best available data on fisheries statistics and trends in order to provide that evidence base.

We also expect that this report will be useful for our partners. Having access to consistent, valid information will support the field in drawing upon verified data sources to facilitate decision-making and streamlined collaboration.

Thank you for your interest. We welcome your feedback on this report as we seek to improve and enhance future editions.

John Claussen Program Officer, Western Pacific The David and Lucile Packard Foundation

About this report (1/2)

• Who is the audience for this report?

The report was commissioned by the David and Lucile Packard Foundation and produced by California Environmental Associates (CEA).

The Packard Foundation will use the findings to inform its monitoring, evaluation, and learning (MEL) approach in Indonesia. Through its MEL activities, the subprogram seeks to instill learning and continuous improvement in its grantmaking philosophy—and ultimately to refine its grantmaking.

As part of its commitment to share key learnings with the field, the Packard Foundation will also share the report with partners in the marine conservation and management community.

• What is the timeline for the report?

This report is the 2015 baseline edition of what is intended to be a regular series for monitoring and tracking relevant changes in coastal marine resources and fisheries management in Indonesia. Since the objective is to update the report on a regular basis, this baseline report tracks data for the most recent year available by each indicator. In certain sections, such as political trends, the report includes highlights from the past few years in order to provide necessary context for the baseline edition.

What are the indicators tracked in this report?

This report monitors trends in six key categories that are important for fisheries reform: fisheries statistics, marine reserves, public funding flows for fisheries management, marine-focused philanthropic funding, public reform commitments in the fisheries sector, and political highlights in recent years in Indonesia.¹ (See slide 6 for additional detail on individual indicators.)

These indicators were selected for the baseline report as they correlate with the MEL framework at the Packard Foundation and provide a proxy on the health of marine resources and the level of public and private funding to support fisheries management in Indonesia. Future editions of this report may include supplemental information, such as grantee stories on work implemented in the field.

About this report (2/2)

• What are the objectives for this report?

A key impetus for this report was the recognition that decision-makers (whether in the public, private, or civic sector) require good information to make sound decisions. This report, which attempts to aggregate fisheries statistics and trends, will also help provide context for the Packard Foundation's overall strategy and funding plan in Indonesia. We anticipate that the report will also be useful to partners in the field.

• Are there data limitations for any of the indicators? This report attempts to amalgamate available information about the health of marine resources in Indonesia. Although data can be limited and of variable quality, it attempts to identify large-scale trends that influence the context for grantmaking in Indonesia.

Relying on regularly updated data sources such as the FAO as well as analysis from in-country experts, this report seeks to provide a fact-based overview of trends in the landscape (see section, "About the sources" for more details).

• Are the opportunities to provide feedback on the report?

The Packard Foundation sees this baseline report as a discussion piece. Through this, we are extending an open invitation to partners for feedback so we can collaboratively work to improve and enhance the report year after year.

Partners are also invited to provide direct feedback to the Packard Foundation through a survey that can be found at the following link: <u>http://bit.ly/2a4qlZR</u>.

Indicators tracked in this report

This report monitors the following indicators, which are elements currently included in the Monitoring, Evaluation, and Learning (MEL) Plan for the Indonesia strategy at the Packard Foundation. This report intends to track the specified indicators on an annual basis, with the possibility of adding new indicators based on need. The Packard Foundation initially selected these indicators as proxies for assessing overall governance and fisheries health, given that this information provides important context for the Foundation's strategy in Indonesia.

Title	Indicator description	Indicator questions
Political moments	Political moments/trends	What key political moments have occurred, including elections, appointments, policy decisions, public commitments, etc.?
Fishery statistics	Fishery sector statistics	What are the total fish landings, commercial value, stock status, fishing effort, fishing trade, etc., that make up annual or semi-annual national fisheries data?
National marine reserves count	Number of national marine reserves	How many marine reserves have been declared (in number and area)?
Public funding flows	Amount of public funds flowing to sector	How much public funding flows for major elements of marine fisheries management (including stock assessments, enforcement, management planning and implementation, staffing levels, etc.)?
Ocean funding	Philanthropic ocean funds	What are the annual ocean-focused funding commitments, in U.S. dollars, from philanthropic partners?
Private sector commitments	Private sector commitments	What are the public fish reform commitments of key private sector fishing, buyer, or retail actors?

Background on the Packard Foundation in Indonesia

- Indonesia is endowed with rich marine biodiversity as well as a fast-growing population and economy. This makes the region a priority for both conservation and sustainable development.
- Over the past several decades, significant investments have been made to improve coastal and marine resource management in the region. The David and Lucile Packard Foundation began making grants in the Western Pacific region in 1999.
- The stated goal of the current strategy is "to restore and ensure the health and productivity of coastal marine environments in the face of rapidly increasing fishing pressures."
- The following approaches direct its grantmaking:
 - Investing in reliable marine fisheries governance systems and initiatives to model improved management and regulation of important fisheries;
 - **Conditioning the policy climate** for effective fisheries management and marine conservation;
 - **Building institutional capacity and leadership** of public, civil society and private sector decision makers, institutions and systems.

- Its strategy also seeks to:
 - Integrate work across all of the Packard Foundation's programs and its overarching "Ocean Vision"
 - Support improved scientific and economic data collection and use through links with the Foundation's Science program; and,
 - Promote the use of market and supply chains incentives for improved marine resource management alongside the Foundation's Marine Fisheries program.

Indonesia: a biodiversity hotspot at threat

Indonesia contains some of the highest marine biodiversity on the planet, as shown in the map at right. It is part of the Coral Triangle, which covers only 2 percent of the global ocean but comprises 76 percent of all known coral species. Yet marine resources are threatened by overfishing and coastal development, limited spatial management of coastal ecosystems, and other pressures. Although the Packard Foundation does not explicitly track biodiversity (to date), the work of the Foundation and numerous partners seeks to protect the region's critical biological diversity and marinedependent livelihoods.

Patterns of marine species richness



The map shows the global patterns of marine biodiversity (species richness) across 13 major species groups, ranging from marine zooplankton to marine mammals.

Species richness



Source: Tittensor DP, Mora C, Jetz W, Lotze HK, Ricard D, Vanden Berghe E, Worm B (2010). Global patterns and predictors of marine biodiversity across taxa. Nature 466: 1098-1101. doi: <u>10.1038/nature09329</u>.

EXECUTIVE SUMMARY



Indonesia is the largest and, arguably, most important country in the Western Pacific region when it comes to marine resources. (1/2)

- Wild-catch in Indonesia has continued to increase, albeit more slowly than reported aquaculture.¹ Data is limited, as it is difficult to track and IUU fishing may have been a significant component of catch. Indonesia capture fisheries target a variety of different species, including: Tuna, scads and mackerels; groupers and snappers; Sardines and hairtails; other fishes; and crustaceans and mollusks. Good data on stock status is scarce. Anecdotal information suggests that on the whole, stocks are reaching overfished levels across the country, with the geographically isolated east Indonesia stocks healthier than the more populous west.
- Indonesia's tuna catch is the largest in the world, contributing roughly 16 percent of the world's tuna supply. In 2014, the country's catch reached 185,675 metric tonnes (MT), composed of skipjack tuna (79,999 MT), yellowfin tuna (65,686 MT), bigeye tuna (34,400 MT), and albacore (5,590 MT).² Blue Swimming Crab accounted for US\$329 million in exports in 2012, making it Indonesia's third most important seafood product after shrimp and tuna.

- More vulnerable species of fish such as grouper, snapper, some tunas are showing signs of overfishing. Patterns of overfishing are also seen with humphead wrasses, many species of sharks, some species of parrotfishes and blue swimming crab.
- Shrimp, tuna, crab, squid, and octopus are among the most valuable exported species, accounting for more than USD \$3B in exported value in 2011 (and probably much more presently).

Indonesia is the largest and, arguably, most important country in the Western Pacific region when it comes to marine resources. (2/2)

- A boom in aquaculture is driving growth in the sector. Aquaculture has grown at an average annual rate of 20%, reaching 3.8 MT in 2013. Most of the country's aquaculture is not farm-driven and mechanized; instead, single seaweed farmers make up a majority of the sector. Fish production is coming from a mix of species, including freshwater species (tilapia, pangasius, catfish) and marine species (milkfish, shrimp). Some of this production (e.g., tilapia) is going to domestic markets whereas others are exported, including to key markets in the U.S., China, Japan, and the EU.
- Development aid funding is generally not catalogued in a consistent manner, but a review of available information indicates that the international donor community is contributing dozens of millions of dollars to fisheries and aquaculture-related activities in Indonesia. Key donors include the World Bank, GEF, FAO, USAID, and JICA. Current initiatives are closely focused on combatting IUU, supporting sustainable development of aquaculture industry, and providing capacity to government institutions and professionals.

 A wide range of multilateral and philanthropic grantmakers are investing tens of millions of dollars in Indonesia. Though these investments are a fraction of development aid investments, they nonetheless play a targeted role in fisheries management in the country. The Indonesia Marine Funders Collaborative is an important platform for these grantmakers to coordinate their work. (Additional detail about the IMFC is provided on slide 69.)

INDONESIA

Political moments in 2015

A profile of key political moments, including elections, appointments, policy decisions, and public commitments

Overview of Minister Susi Pudjiastuti's first year in office

- The appointment of Susi Pudjiastuti in November 2014 as Minister of Ministry of Marine Affairs (KKP) was a headline item for the country's fisheries sector. Minister Pudjiastuti, a former businesswoman, quickly emerged as one of the most well-known and popular ministers in Joko Widodo's administration. At the same time, she has made no shortage of critics who oppose her major reforms.
- Minister Pudjiastuti has made combatting illegal fishing by foreign-owned and operated vessels her top priority. The administration's sinking of more than 150 illegal foreign-flagged vessels has received widespread media coverage. Though the minister's efforts have made illegal fishing an inherently riskier activity in Indonesia, the actual extent of progress from the efforts is difficult to estimate. President Widodo assigned Minister Pudjiastuti as head of the newly established Presidential Anti-illegal Fishing Taskforce.
- In addition to combatting IUU, Minister Pudjiastuti has sought to reform the capture fishing licensing system. At the start of her term, she imposed a one-year moratorium on new licenses for foreign-built vessels and ordered a review of over 1,000 vessel and company licenses. Coupled with a circular that

prohibited the issuance of new licenses to vessels over 150 GT, this has meant that Indonesia will not operate as many large fishing vessels in the near to medium term. Some have interpreted Minister Pudjiastuti's actions as consistently damaging to the industrial fishing sector and contradictory to her calls for expanding investment into the fisheries sector.

- The regulation of small-scale fisheries (vessels under 5 GT), which make up 95% of Indonesia's fishing fleet, is is considered a politically sensitive and complex pursuit given the decentralized government structure and remoteness of numerous fishing communities. Provinces oversee nearshore waters out to 12 nautical miles (nm); and the national government oversees from 12-200 nm. Jurisdictional overlap over nearshore fisheries and marine resources can occur, often between subnational governments and MMAF.
- One of the most important issues to watch going forward is whether the minister provides a plan for meeting the dual goals of increasing fisheries production to meet ambitious government targets while simultaneously improving sustainable resource management.

Release of MMAF Strategic Plan 2015-2019: Includes plans for annual increases in production targets and revenue generation, but lacks a sustainability blueprint

- In September 2015, Minister Susi Pudjiastuti released the MMAF Strategic Plan 2015-2019 in the form of a Ministerial Decree, which makes it a legally binding document to which the MMAF must adhere. The Strategic Plan will help shape the MMAF's policy direction and priorities during the next five years.
- The Strategic Plan seeks to provide policy guidance to tackle: IUU fishing, unresolved maritime territorial disputes; lack of clear zoning regulations and low productivity in the aquaculture sector; low competitiveness and quality of fisheries products; tariff and lack of market access; and lack of access to capital and financing.
- The plan includes sustainability as one of the three pillars: Sovereignty, Sustainability, and Prosperity. However, it is framed as a loosely-defined goal with no clear definitions or binding indicators to measure progress on fisheries sustainability. Few details are provided on how the MMAF will actually seek to address sustainability challenges. The plan does not appear to outline a strategy for achieving the twin goals of increased production and fisheries sustainability.

Overview of political moments (1/2)

- The past two years have seen dramatic political changes with respect to Indonesia's maritime policies and marine capture fisheries governance. An archipelagic nation spanning more than 17,000 islands and 2.7 million km² of marine waters (world's sixth largest EEZ), Indonesia is among the world's most important fisheries producers, ranking number two (after China) in marine capture fisheries production.¹ Yet, Indonesia's fish resources have been exploited with limited or no concern for sustainability, leading to overfishing of shrimp, demersal fishes, tuna and other pelagic species, while heavy and chronic overfishing and destructive fishing practices in coral reef areas have resulted in lost productivity and cascading effects on other components of the ecosystem.²
- The government has stated that losses due to Illegal and Unreported (IUU) fishing by foreign vessels in Indonesian waters was costing the country IDR 240 trillion (US\$20 billion) a year, while this large illegal fishing presence also facilitated other abuses, including wildlife trafficking, drug smuggling, and

exploitation of forced labor on fishing boats.³ (It should be noted that the government has not provided a breakdown or explanation of these costs to date.)

 The election of Joko "Jokowi" Widodo as president of Indonesia in July 2014 catalyzed a series of important changes in Indonesia's maritime and fisheries management policies. The president had begun to articulate a new strategic doctrine positing Indonesia as a maritime axis spanning the Western Pacific Ocean and the Eastern Indian Ocean even before the election. Widodo's vision for a maritime Indonesia focused on an expanded naval and coast guard presence to secure freedom of navigation and the protection of marine natural resources, and buttressed by an ambitious program to upgrade ports and shipping infrastructure to enhance economic and political integration.

Source: Starling Resources, 2016. 1) Food and Agriculture Organization (FAO) of the UN, *The State of World Fisheries and Aquaculture: Opportunities and Challenges* (2014), p. 10. 2) Asian Development Bank, *State of the Coral Triangle: Indonesia* (2014), pp. 36-37. 3) Phmad Almaududy Amry, "Is Indonesia's 'Sink the Vessels' Policy Legal, *The Diplomat* (17 January 2015); Simon Roughneen, "Maverick minister widens net for illegal fishing", *Nikkei Asian Review* (14 December 2015).

Overview of political moments (2/2)

- The MMAF budget nearly doubled in 2015 (from 2014 levels) to US\$784.8 million. With these expanded resources, Minister Pudjiastuti has spearheaded a crackdown on IUU fishing by foreign vessels and a ban on transhipment of fish at sea, seizing 157 illegal foreign vessels and sinking more than 150 illegal foreign-flagged vessels. The ministry established an IUU task force, imposed a moratorium on operations by foreign-owned and/or foreign manufactured fishing vessels, and carried out an audit of 1,132 foreign-owned or foreign-built vessels, and took new steps to support mandatory vessel monitoring systems (VMS) for Indonesian waters.
- In order to remove doubts around destructive and overly exploitative fishing gears, the Ministry has prohibited trawling nationwide (Permen KP2/2015, which reinforced the 1980 Presidential Decree), established new minimum size limits for lobsters, crab, and blue swimming crab, and accelerated work on developing ecosystem-based management plans for

territorial fisheries. These initiatives are now in the process of being coupled with programs to: a) increase government and private sector investment in fisheries and fisheries infrastructure, including cold storage, processing and handling capacity; and b) require capture fishing companies to obtain certification and to observe human rights principles as a condition of operating.

 Many initiatives have not yet been fully realized with some being announced only recently, and more new measures are almost certain to appear in the months to come. While it is premature to try to assess the success of these programs – and, inevitably, there has been pushback from industry which enjoys advantages with business as usual or fishers who feel immediate consequence of the long-term reforms – it is clear that President Jokowi and Minister Pudjiastuti have overseen a shift in the management of marine resources and fisheries in Indonesia.

Key political moments 2014-2015 (1/8)

• June 2014: Law 6 on Villages increases development budgets for coastal villages

Law No. 6/2014 (the "Village Law") increased the national government spending for rural villages from 2015/2016 to an average of Rp. 1.4 billion (US\$101.8 million), roughly ten times the previous level of funding to villages under the Program Nasional Pemberdayaan Masyarakat or PNPM-Mandiri (National Program for Community Empowerment), expanding the economic resources available to coastal villages.

July 2014: Joko "Jokowi" Widodo elected President of Indonesia

After winning the election, President-elect Widodo reaffirmed his earlier campaign commitments to make Indonesia into a regional "maritime axis" power in the Indo-Pacific region, reflecting the country's archipelagic identity; the need to develop marine resources, fisheries, ports and other maritime infrastructure; and boost maritime defense of its territorial waters, outer islands and EEZs to address illegal, unreported and unregulated (IUU) fishing, piracy and other threats.¹

• October 2014: Law 23 on Local Government

Law No. 23/2014 on Local Government granted provinces the authority to manage natural resources in the sea, including exploration, exploitation, conservation, and management of marine resources other than oil and gas, from the coastline out to 12 nautical miles (nm) from shore. Previously, under Law 22/1999 and Law 32.2004, management of marine resources within 4 nm of the coast had been under the authority of regency (kabupaten) or municipal (kota) governments, with the provinces responsible only for marine resources within a range of 4-12 nm. The law makes provinces responsible for management of all near-shore fisheries and other marine resources other than oil and gas.

• December 2014: MMAF Minister Pudjiastuti and the Indonesian Navy Chief of Staff Admiral Marsetio signed an MOU on marine cooperation

The memorandum covered cooperation in hydrographic services (maps and charts), mapping Indonesia's fishing regions, improving understanding of fishing seasons, education and training on maritime law and the Law of the Sea. Although the MOU did not specifically address TNI participation in enforcement activities against IUU fishing, the agreement established a basis for formal cooperation and coordination between the ministry and the Indonesian military.²

Key political moments 2014-2015 (2/8)

- December 2014: (a) Vietnamese fishing boat seized by Indonesian Navy near Riau is blown up
- January 2015: (b) MMAF Minister Susi Pudjiastuti introduces moratorium on new fishing licenses and renewals
 - Indonesia had been losing a substantial sum due to IUU fishing by licensed companies and pirate trawlers, including through illegal transshipments – the offloading of catch to foreign reefer vessels and processors at sea, according to Minister Pudjiastuti. Figures on the costs of IUU fishing can vary, though MMAF estimates that illegal fishing costs Indonesia around US\$3 billion annually.¹
 - The moratorium on foreign-owned and/or foreign manufactured fishing vessels was extended through October 2015 to allow time for the ministry to carry out an audit of 1,132 foreign-owned or foreign-built vessels operating in Indonesian waters. More than 280 fishing vessels had their business and/or fishing licenses revoked or suspended. Some ex-foreignowned vessels were subsequently allowed to resume operations, provided that they carry an Indonesian observer, install a vessel monitoring

system (VMS), and sell all their fish within Indonesia.²

 Between October 2014 and December 2015, Indonesia seized 157 illegal foreign vessels and sank 121 of them. The sinking of illegal vessels has become the most visible aspect of the ministry's crackdown on illegal, unreported and unregulated (IUU) fishing by foreign vessels in Indonesian waters. President Widodo and Minister Pudjiastuti stated that more than 5,000 foreign vessels.³ In January 2015, the Indonesian government announced that illegal fishing by foreign vessels had declined 90% by year-end 2014.

• February 2015: Transhipment ban extended with exceptions

 A ban on transhipment that had been issued in November 2014 under Ministerial Regulation 57/2014 was extended with exceptions to allow legal operators to ensure that fish catches could still be landed at Indonesian fishing ports provided an independent observer was on board to monitor illegal transhipment practices.

Source: Starling Resources, 2016; 1) Heriyanto, P. "Illegal Fishing Costs Indonesia 3 Billion Dollars A Year." ASEAN News.

http://www.aseannews.net/illegal-fishing-costs-indonesia-3-billion-dollars-a-year/ 2) "Indonesia's new marine laws threaten sustainable fisheries", undercurrenetnews, (15 January 2015); "Moratorium Lifted, What's Next?" GRESNews (3 November 2015); "Jakarta to ban foreign trawlers and transport ships in Indonesia", *The Citizen Daily* (31 October 2015). 3) "Indonesia's Fisheries Minister leads the way to Ocean Sustainability, Center for Ocean Solutions (18 March 2015); John McBeth, "Indonesia's maritime minister 'a bit crazy'", *Nikkei Asian Review* (20 January 2015); Ben Bland, Indonesia's fisheries chief hooks public imagination," *Financial Times* (2 January 2015). Wahyu Sudoyo, "Menteri Susi Lantik 20 Pejabat Eselon II", *Berita Satu.com* (15 December 2015); Prasanth Parameswaran, "Explaining Indonesia's 'Sink the Vessels' Policy under Jokowi," *The Diplomat* (13 January 2015).

Key political moments 2014-2015 (3/8)

- May 2015: OJK expands supply of private sector credit to fisheries industry
 - Indonesia's Financial Services Authority (Otoritas Jasa Keuangan, or OJK), announced new programs to expand credit to maritime and fisheries sectors. New committed lending in 2015 rose to Rp 5.37 trillion (U\$382.8 million) and is expected to reach or exceed Rp 10 trillion (U\$\$722.4 million) in 2016.
 - Eight Indonesian banks and a non-bank financial institution are participating in the OJK's JARING (net) program, initiated on 11 May, to facilitate lowinterest loans to fishers to finance gear exchanges and improvements. (Some of the banks have direct individual MOUs with MMAF.) In late 2014, the OJK also launched new "Laku Pandai" (branchless banking) initiatives aimed at providing micro-access to banking services to rural communities, including fishers.¹

• June 2015: Task Force on Prevention, Detention and Elimination of Illegal Fishing established

Formalized by Presidential Decree No. 115/2015, the Task Force was created to investigate IUU fishing, develop policy recommendations, carry out fisheries license reform, monitor and support enforcement operations, and strengthen coordination among enforcement agencies by developing tracking systems. Enforcement agencies engaged in anti-IUU fishing operations include the Indonesian Navy, the Indonesian Maritime Security Board, or Coast Guard (Bakamia), the National (Water) Police and the Maritime Council.²

Source: Starling Resources, 2016; 1) Tassia Sipahutar, "OJK wants more money pumped into fisheries, maritime sector", *The Jakarta Post* (5 May 2011); "JARING expedites funding distribution to Maritime and Fishery Sector", *Nusantara Maritime News* (11 May 2015); Grace D. Armianti, "Four Major Banks Launch Branchless Banking Program", *The Jakarta Post* (27 March 2015); "Pengalihan Alat Cantrnag Dimulai", *Kompas* (19 June 2015). 2) Mas Achmad Santosa, "Strategy on the prevention and eradication of IUU fishing and post-moratorium policies, MMAF (9 November 2015); Tama Salim, "Government forms another anti-illegal fishing task force", Jakarta Post (4 June 2015); Prasahanth Parameswaran, "Indonesia could sink 57 more vessels in war on illegal fishing", *TheDiplomat.com* (8 January 2016).

Key political moments 2014-2015 (4/8)

• August 2015: MMAF establishing tax deductions for fishery sector investments

Ministerial Regulation 17/2015 Regarding Criteria and Conditions for Granting Income Tax Deductions for Investments in Business Fields and/or regions related to Marine and Fisheries Sectors enacted, establishing tax deduction for investments in business fields and/or regions related to marine and fisheries sectors.

• August 2015: Minister Pudjiastuti encourages the development of coastal airstrips

The minister announced that the government is encouraging private sector companies to build small airstrips to improve fishing communities' access to domestic and international markets. The effort currently relies on private sector companies CSR (corporate social responsibility) expenditures to build new airstrips for fishing communities, but the program to establish more integrated fishing villages with direct access to external markets could receive direct or indirect government support.

• October 2015: Indonesia announces collaboration with Global Fishing Watch to implement VMS

Global Fishing Watch, a partnership among SkyTruth, Oceana and Google, will enable smarter use of Indonesia's existing Vessel Monitoring Systems (VMS) data and fishery information and use of on-line tracking systems to improve surveillance, monitoring and enforcement and compliance in controlling IUU fishing, with new programs starting to go in effect from 2016.¹

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Source: Starling Resources, 2016; 1) Yunus Husein (Deputy Head of IUUH Task force), "Strategy on combating IUU fishing and post-moratorium policies plan", presentation delivered at Symposium on FishCRIME (12-13 October, 2015) in Cape Town, South Africa; MMAF and Global Fishing Watch Press Release: "Indonesia and Global Fishing Watch Announce Collaboration to Make Nation's Commercial Fishing Data More Transparent (30 October 2015).

Key political moments 2014-2015 (5/8)

• October 2015: Indonesia and the US sign MOU on maritime cooperation

In a meeting between Indonesian President Joko Widodo and US President Barack Obama which saw the elevation of bilateral ties to the level of "strategic partnership", the two sides signed a Memorandum of Understanding (MOU) on Maritime Cooperation to "deepen cooperation on maritime security, maritime economy, marine resources and fisheries conservation and management, maritime safety and navigation, marine science and technology, and other areas" and jointly identify "actions to strengthen bilateral cooperation and build capacity to combat IUU fishing." The MOU includes the improvement of capacity to meet data requirements of seafood traceability programs.¹

November 2015: Minister Pudjiastuti urges recognition of IUU fishing as a transnational crime.

The minister encouraged the international community to recognize illegal, unreported and underreported fishing as a transnational crime. The 11-month compliance audit of 1,132 foreign-built fishing vessels (see above) operating in Indonesia uncovered evidence that almost all vessels were involved in multiple kinds of crime, including forging and illegal duplication of vessel licensing documents, narcotics and human trafficking, the Minister said at a conference on Environmental Compliance and Enforcement sponsored by UNEP and Interpol.²

Source: Starling Resources, 2016. 1) The White House, "Joint Statement by the United States of America and the Republic of Indonesia" <<u>https://www.whitehouse.gov/the-press-office/2015/10/26/joint-statement-united-states-america-and-republic-indonesia</u>> and "Fact Sheet: U.S.-Indonesia Maritime Cooperation", (26 October 2015) <<u>https://www.whitehouse.gov/the-press-office/2015/10/26/fact-sheet-us-indonesia-maritime-cooperation</u>>. 2)"Indonesia's minister of fisheries: IUU fishing 'not just about stealing fish", *undercurrent news*, 18 November 2016; Tama Salim, "IUU fishing a transnational crime", *Jakarta Post* (18 November 2015).

Key political moments 2014-2015 (6/8)

• November 2015: Minister Pudjiastuti announces Blue and Healthy Ocean program

The new program is aimed at reducing waste, pollution and emissions at sea. The program was announced following reports that Indonesian products had been blocked from import into some countries due to high level of plastic particles. In September 2015, studies by University of California scientists carried out in Makassar, Indonesia and Half Moon Bay, California found that 55% of the Indonesian fish samples were contaminated by human-derived debris (mostly plastic particles and pieces), while 67% of the California fish samples were contaminated, primarily by textile fibers.¹

• December 2015 Minister Pudjiastuti issues new Fisheries Management Plan for Tuna

In late 2015, the minister issued a fishery management plan (Marine and Fisheries Ministerial Decree Number 107/2015) to regulate capture of yellowfin, bigeye and skipjack (tongkol) tuna in three of Indonesia's fisheries management zones, or WPP (713, 714, 715). The plan, known as Rencana Pengelolaan Perikanan Tuna-Cakalang-Tongkol (RPP-TCT), was drafted in coordination with other countries participating in the Western and Central Pacific Fisheries Commission (WCPFC) and in compliance with WCPFC guidelines. The first stage of work will include pilot studies and planning over 2016-2017, with the objective of putting harvest control rules in place in the designated WPPs by 2018. The program also includes development of generic tools and software to develop harvest control rules for other fish and marine species.²

Source: Starling Resources, 2016. 1) "Plastic in the food chain: Artificial debris found in fish", New Scientist (25 September 2015); Chelsea M. Rochman et al, "Anthropogenic debris in seafood: Plastic debris and fibers from textiles in fish and bivalves sold for human consumption", *Scientific Reports*, 5 (14340 (2015); Adam Baske, "WCPFC outcomes are positive for one-by-one fisheries", *International Pole and Line Foundation*, 21 December 2015; interviews. 2) Partners engaged in helping MMAF develop harvest control rules for marine capture fisheries include CSIRO, Sustainable Fisheries Partnership (SFP), IOTC, MDPI, IPNLF, AP2HI, Greenpeace, TNC, WWF, Indonesian tuna fisheries associations, Puslitbangkan, and heads of provincial fisheries offices. Wiro Wirandi, "Collaboaration and support to MMAF: MDPI as member of working group to contribute to national tuna fisheries management plan", *Yayasan Masyarakat dan Perikanan Indonesia* (5 January 2016).

Key political moments 2014-2015 (7/8)

- December 2015: Minister requires capture fishing companies to adopt human rights principles
 - In April 2015, the Indonesian government established a team to investigate allegations of slavery in the fishing industry. The International Organization for Migration has estimated that as many as 4,000 fishers may be stranded or held in remote parts of Indonesia as workers or former workers in the illegal fishing industry. MMAF's investigation found that 365 persons working on fishing boats in Ambon and 682 persons in Benjina were victims of trafficking and modern slavery, required to work for 18-22 hours per day seven days a week with only 2-4 hours of rest time per day, and subject to physical and mental abuse.¹
 - Many fishers engaged in illegal fishing may be victims of trafficking, including fishermen from Cambodia, Laos, Myanmar and Thailand as well as Indonesians. In its July 2015 Trafficking in Persons Report - Indonesia, the US State Department noted that the Indonesian government "reported an

increase in foreign and Indonesian fishermen subjected to forced labor on Indonesian and foreign-flagged vessels — many operating out of Thailand's fishing industry — in Indonesian waters.

- The MMAF foreign vessel license audits discovered "rampant human rights abuse in the form[s] of human trafficking, people smuggling, child labor, forced labor, workers without any form of social protection, wage discrimination and physical abuse. Human trafficking and forced labor occurred on at least 168 (or 14.8%) of the 1,132 vessels audited, Minister Pudjiastuti said.
- Under Ministerial Act No. 35/2015, all fisheries businesses are required to issue a declaration of commitment to uphold human rights and to conduct due diligence to identify potential human rights violations in their operations, and all firms will be required to obtain a human rights certificate in order to operate.²

Source: Starling Resources, 2016. 1) McDowell, et al. "AP Investigation: Slaves may have caught the fish you bought." Associated Press, March 25, 2015. 2) Hans Nicholas Jong, "Government to protect the rights of fishermen", Jakarta Post (11 December 2015); "Indonesia forms team to probe fishing slavery allegations", *ChannelNewsAsia*, 8 April 2015; "2015 Trafficking in Persons Report – Indonesia", US Department of State, 27 July 2015; interviews; "Indonesia navy nabs cargo ship loaded with slave-caught fish", *Al Jazeera* (13 August 2015).

Key political moments 2014-2015 (8/8)

• December 2015: MMAF announces new infrastructure spending to improve access to export markets.

The government will allocate Rp 1.5 trillion in 2016 to improve logistics, marketing and procurement systems and the construction of new refrigerated warehouses and other infrastructure in order to expand Indonesian fisheries' access to export markets.¹

There are also plans to allow foreign businesses to take 100% ownership shares of cold storage facilities, replacing maximum caps on ownership of 33%-67%, in order to attract more foreign investment in the sector.²

Source: Starling Resources, 2016. 1) Robert Endi Jaweng, "Overcoming problems in the new autonomy era", *Jakarta* Post (22 December 2014); Law Number 23 of 2014 About Local Government <u>http://www.indolaw.org/UU/Law%20No.%2023%20of%202014%20on%20Local%20Government.pdf</u>. 2) "*Produksi Miningkat, Akses Pasar Produk Masih Tersendat*", Kompas (8 December 2015); Safyra Primadhyta, "*Di Era Susi, Kementerian Kelautan Kelola Anggaran Terbesar", CNN Indonesia* (31 February 2015).

Communications coverage of fisheries issues in 2015

- Tracking media coverage of fisheries issues is another tool for better understanding the level of awareness and salience of fisheries issues in a country. During the period September 2014 to January 2016, six top news media outlets in Indonesia produced 2,979 on fisheries-related issues in the country (including 259 articles in English and 2,719 in Bahasa Indonesia).
- As shown on the following slide, illegal fishing received high coverage during several months, a reflection of the media's reaction to covering hot-button events such as the administration's sinking of illegal ships. Minister Pudjiastuti also received consistent coverage, with coverage being the highest during the start of her term.

Notes on methodology: This analysis was conducted in February 2016. Mongabay developed a set of 16 fisheries-related keywords (10 Indonesian, 6 English) and identified six mainstream media outlets that have wide readership and functional site search capabilities.

Tracking communications coverage of fisheries in 2015



Article count by keyword, September 2014-January 2016

Source: Mongabay analysis, 2016. Notes on methodology: This analysis was conducted in February 2016. Mongabay developed a set of 16 fisheriesrelated keywords (10 Indonesian, 6 English) and identified six mainstream media outlets that have wide readership and functional site search capabilities.

Media outlets covering fisheries issues

The news outlet Detik carried the most fisheries-related stories, followed by Tempo and Kompas during the period January 2014 to January 2016. Detik, Tempo, and Kompas provided the highest coverage in Bahasa Indonesia, while Jakarta Post provided the highest coverage in English.



Source: Mongabay analysis, 2016. Notes on methodology: This analysis was conducted in February 2016. Mongabay developed a set of 16 fisheriesrelated keywords (10 Indonesian, 6 English) and identified six mainstream media outlets that have wide readership and functional site search capabilities.

Fishery statistics

A profile of elements that make up annual national fishing profiles, including total fish landings, commercial value, stock status, fishing effort, and fishing trade

Trends in Indonesian seafood production

Like the overall Indonesian economy, the volume and value of the country's fisheries has grown substantially in recent years, with total seafood production growing at a average annual rate of 10% during the past three years. Much of this growth is associated with aquaculture production (which grew at an average annual rate of 20%, reaching 3.8 MT in 2013). Capture fisheries production has grown at an average rate of 4%, reaching 5.7 MT in 2013.



Aquaculture and wild capture production (2000-2013)

30

2013 Breakdown of wild capture

Wild catch trends: Indonesia catch continues to grow across most categories, while aquaculture has been expanding rapidly.

- Catch data shown on the following slides is from FAO FishStat. Data is reported by the source country, but data quality is poor. FAO estimates annual unreported fish catch in Indonesia at 1.5 million tons (MT). Thus, significant trends could be obscured by the lack of data.
- In many cases, 2013 catch has reached the highestever levels. Tuna, miscellaneous pelagic fish, and miscellaneous coastal fish catch are up significantly since 2000.
- The past year of available data (2012-2013) saw an uptick in catch across a number of species, including tuna, miscellaneous coastal fish, and marine fish.
- Catch of herring, sardines, and anchovies is down slightly over the past 3 years.
- Catch of species with smaller volumes overall, such as shrimp, octopus, and crabs, are mostly flat. Shark and ray catch is mostly flat 2010-2013; given recent policy wins, it is hoped that catch will trend downwards when 2014 and 2015 data are available.

Indonesian wild catch trends: Since 2000, catch has grown across most categories, particularly for tuna, coastal fish, and marine fish.



*Diadromous fish spend a portion of their life cycle in freshwater and a portion in salt water.

Source: FAO FishStat.

Recent trends in Indonesian tuna catch

- Indonesia is in a unique position in that the country has an Indian Ocean and a Pacific Ocean Tuna stock. The Western Central Pacific Ocean provides the largest industrial tuna fishery in Indonesia, contributing nearly 80 percent of total Indonesian commercial tuna production. The Eastern Indian Ocean accounts for 20 percent of commercial tuna catch in Indonesia.
- Skipjack tuna is by far the largest species of tuna by volume (roughly 450,000 MT in 2013). Caught volume has nearly doubled since 2000, and has continued to grow year-on-year for the past 3 years.



Recent trends in Indonesian reported tuna catch: Several species (particularly skipjack and yellowfin) have increased catch in recent years.



*"Other" category includes about 16 species, such as frigate/bullet tunas, Indo-Pacific king mackerel, albacore, Indo-Pacific sailfish, and swordfish. Source: FAO FIshStat. 34

Recent trends in Indonesian crab catch

- Though catch varies from year to year, Indonesian crab catch continues to rise rapidly overall. Blue Swimming Crab production has increased nearly 300% since 2000.
- There are few indications that the rise in catch will abate in the near future, given trends of smaller crabs, smaller carapace size, longer fishing time, and the increasing number of fish traps or nets to catch the same quantity of crab.



Recent trends in Indonesian "coastal" fish catch

- Data on coastal fisheries is poor. Many of these fishes may be captured in catch-all categories like "marine fishes not elsewhere indicated," which are not shown here.
- Over the past decade and more, snappers have catapulted to be the most commonly-caught coastal fish.
- Other important fish include sea catfish, fusiliers, ponyfish, and goatfishes. In general, catch trends have been flat or slightly ncreasing over the past 3 years.


Trends in aquaculture

- Indonesian aquaculture has experienced explosive growth over the past 5 years, with pangasius, milkfish, and carps leading the way. In recent years, the sector has followed double-digit growth; it is expected to continue growing at a compound annual growth rate of 21.9% through 2018.
- While some of this product is traded, much of this production is consumed domestically or by other Asian markets (e.g., as with milkfish).



Summary of Indonesian seafood trade

- Marine fish, shrimp, and tuna are Indonesia's leading export commodities (by production).
- Marine fish includes products frozen, dried, salted, in brine, or other preparations where the specific species is not identified.
- Significant volumes of shrimp, tuna, and other fish may be included in "marine fish NEI."



Indonesian seafood trade (average, 2007-2011)

Seafood exports (by volume and value)

- Indonesia exported more than \$3B of seafood in 2011.
 Shrimp, tuna, and crab are the most important species.
- Indonesia's most important export markets for tuna, shrimp and other fisheries products include the US (roughly 30 percent), Japan (23 percent) Europe, and Japan (13 percent).
- Indonesia's seafood exports continue to grow rapidly. The Indonesian government has set aggressive targets for increasing the value of seafood exports with a target of 9.5 billion USD in 2019.
- In addition to growth in overall production, the country's development plan emphasizes increasing the processing of fishery products in-country and improvement in cold storage to preserve product quality.

Seafood exports (by volume and value)



Seafood exports (by commodity and trading partner)

- Shrimp and tuna are Indonesia's primary seafood exports by value; crab is an important export to the U.S.
- Indonesia exported about \$4.9 billion worth of fish in 2013, up from \$3.85 billion in 2012. Most of Indonesia's wildcapture export product goes to the US, Japan, EU, and China.



Source: FAO FishStat.

Contribution of fisheries to food security

- In addition to providing a key source of livelihoods, fisheries provide a critical source of protein for many Indonesians.
- Seafood consumption In Indonesia is roughly 32 kilograms per capita per year, which is nearly double the global average of 19 kilograms per capita per year.¹ In certain remote islands in Indonesia, seafood contribute up to 90 percent of the protein requirements for local populations.
- In 2012, the Indonesian Government adopted Law No. 18/2012 on Food Security, which states that food security in Indonesia must be based on local food availability and food sovereignty. Agendas such as the "Blue Growth" platform acknowledge the role of fisheries not only as a key export product for the country, but as source to maintain Indonesian food security.
- The terms "Blue Growth" and "Blue Economy" have been gaining momentum both at the global level as

well as in many island countries, including Indonesia. Although the interpretation of these terms can vary by entity, some governments as well as agencies such as the FAO promote "Blue Growth" as an approach for promoting sustainable production in the fisheries sector to enhance food security and poverty alleviation.

 Ensuring that fishing regulations are properly enforced is a key step in supporting that fisheries are sustainably managed and better positioned to support the country's domestic demand. Certain actions by the MMAF—such as banning large foreign fishing vessels and the transhipment of fish at sea, as well as efforts to combat IUU—have reportedly boosted economic growth in the fishing industry and thus may support food security goals, at least indirectly.

Source: FAO FishStat, 2015; 1) Future Directions, 2016. "Food security in Indonesia: continued reliance on foreign markets." http://www.futuredirections.org.au/publication/food-security-in-indonesia-a-continued-reliance-on-foreign-markets/.

Seafood imports: While most of the high-value captured and cultured fish leave the country, the majority of captured fish—about 75 percent—stays within Indonesia (e.g., reef fish, small pelagics).



Source: FAO FishStat.

Roughly 15% of Indonesian landings' stocks are in good health; 40% of national landings are fully-exploited, without known mortality estimates (based on 2011 data).

Proportion of wild capture landings by stock status*





Note: "Poor" indicates low current biomass levels relative to the biomass that would be achieved from harvesting the fish populations for maximum sustainable yields (B/Bmsy=0.4-0.8). "Fair" indicates B/Bmsy between 0.8-1.2. "Good" indicates B/Bmsy >1.2. Source: CEA Analysis, 2016; FAO, "Review of the state of world marine fishery resources," 2011; Costello et al, 2012. "Status and Solutions for the World's Unassessed Fisheries." Science (338): 517.

Number of fishers: The wild catch and aquaculture sectors are an important source of livelihoods in Indonesia.

- Estimates of the number of fishers vary widely depending on source.
- It is estimated that Indonesia has 2.5-3.7 million fishers out of a population of 250 million, with a large proportion of those considered small-scale fishers. This figure includes individuals who are directly employed in the sector, as well as those with secondary employment (i.e., post-harvest activities such as processing).

Direct Employment			Secondary Employment			
		Subtotal		Subtotal	Total	
	Small-Scale (SSF)	(Reported + SSF		(estimate	Employment	
Reported	Estimate	estimate)	Reported	including SSF)	(thousands)	
3,300	1,100±485	4,400±480	1,200	21,000±12,000	25,000±12,000	

Fisheries sector employment in Indonesia

Official MMAF estimates of numbers of people employed in fisheries and aquaculture (millions).

National marine reserves

A profile of Indonesia's marine reserves and marine protected areas (MPAs), including national-level MPAs, district-level and local MPAs, marine conservation and recreation areas

Overview of reserves in Indonesia

With the sixth largest EEZ in the world, Indonesia's coastal and marine resources are a substantial asset to the country. In 2009, President Susilo Bambang Yudhoyono announced an ambitious target to protect 20 million hectares of marine and coastal resources by 2020. In 2010, the country committed to a longer-term target of increasing coverage of marine reserves to 10% of its territorial waters, in line with Aichi Target 11. Due to the high level of decentralization in Indonesia, local governments will play a key role in implementation and management of these reserves over the coming years. Providing training and capacity building support to local governments is a key focus of many environmental NGOs engaged in the country.



Source: IUCN and UNEP-WCMC (2015), The World Database on Protected Areas (WDPA) [On-line], [01/2016], Cambridge, UK: UNEP-WCMC. Available at: www.protectedplanet.net.

Indonesia Reserves Overview

Designation	Count
District Marine Protected Areas	31
Locally Managed Marine Area	25
Marine Nature Recreation Park	14
Marine Nature Reserve	10
Marine National Park	8
Marine Recreation Park	6
Marine Wildlife Reserves	4
Coral Reef Management Area	1
Marine Conservation Area (Freshwater)	1
Marine Management Area	1
Terrestrial Reserves	504
Total	605



Note: Data for the Protected Planet is self-reported and collected from international convention secretariats, governments and collaborating NGOs. The database is not comprehensive in capturing data on locally Managed Marine Areas (LMMAs) to the fullest extent.

Source: IUCN and UNEP-WCMC (2015), The World Database on Protected Areas (WDPA) [On-line], [01/2016], Cambridge, UK: UNEP-WCMC. Available at: www.protectedplanet.net.

Public funding flows

A profile of public funding flows for fisheries management (including stock assessments, enforcement, management planning, implementation, and staffing levels)

Budget of the Ministry of Marine Affairs and Fisheries for 2015 (1/10)

- In 2015, the budget for the Ministry of Marine and Fisheries (MMAF) was increased to IDR 10.6 trillion (US\$785.0 million)¹, an 80.6% increase in IDR terms over actual budgetary spending during the previous year and the biggest annual allocation to this ministry in history.² The dramatically increased allocation marked President Joko "Jokowi" Widodo's decision to make maritime and fisheries policy a central priority for his administration, and also reflected his commitment to shift funding freed by elimination of Indonesia's fuel subsidy fund toward other more productive sectors.³
- Broken down by spending categories, 9.7% of the MMAF budget went to salaries and allowances; 18.6% to purchase of goods and materials, and 9.2% for services. Capital expenditures accounted for 21.5%, of which nearly a third (29.1%) was allocated to goods to be transferred to local communities and governments. Most spending in this category was for purchase of new fishing boats, fishing gear, other equipment, fish fry (for use in aquaculture), and building or repairing fisheries-related facilities. The remainder was expenses for travel and meetings (9.6%) and maintenance (2.2%). (See Table on following slide.)

Sources and Notes:

1) This report uses a rate of 1:13,500 US dollar – Indonesian rupiah exchange for both 2014 and 2015. The actual average US\$ - IDR exchange rate in 2014 was 11,827.8, while the average exchange rate in 2015 13,337.6, an effective devaluation against the US dollar of 12.8%. Using a single exchange rate makes it possible to express large rupiah sums in US dollars while correctly expressing the actual percentage increases in budgetary allocations in 2015 over actual spending in 2014 in IDR terms. 2) *Anggaran Susi Terbesar dalam Sejarah Kementerian Kelautan*". CNN Indonesia; http://www.cnnindonesia.com/ekonomi/20150126154234-78-27446/anggaran-susi-terbesar-dalam-sejarah-kementerian-kelautan/ downloaded on December 28, 2015.

3) Fulfilling one of newly-elected president Joko Widodo's campaign promises, Indonesia's fuel subsidies were sharply reduced in November 2014 by IDR 2,000 (US\$ 0.148) per liter for both benzine and diesel fuels, with the remaining gap between market prices and pump prices to be eliminated over the following two years.

MMAF 2015 Budget (2/10)

MMAF Budget (2015) by spending categories

Spending Category	US\$ million	% Share	
Goods for communities	228.3	29.1%	
Capital expenditures	169.1	21.5%	
Goods and materials	145.8	18.6%	
Salary and allowances	76.5	9.7%	
Travel and meetings	75.7	9.6%	
Services	72.4	9.2%	
Maintenance	17.3	2.2%	
TOTAL	785.0		

MMAF 2015 Budget (3/10)

MMAF Budget Actual Spending (2014) and Planned (2015)

Directorate	2014 Actual		2015 Actual		% change
	IDR billion	US\$ M	IDR billion	US\$ M	IDR terms
Capture fisheries	1,508.5	111.7	2,684.2	198.8	77.9%
Aquaculture resources	883.3	65.4	1,360.8	100.8	54.1%
Surveillance of marine & fisheries resources	649.9	48.1	1,529.5	113.3	135.3%
Management of Marine, Coastal, and Small Islands	597.2	44.2	1,382.3	102.4	131.4%
R&D of marine and fisheries sciences and technology	558.4	41.4	762.2	56.5	36.5%
Human resources development	511.0	37.9	906.4	67.1	77.4%
Upgrading fisheries businesses and product competitiveness	480.2	35.6	1,008.9	74.7	110.1%
Management and technical support	313.1	23.2	399.0	29.6	27.4%
Fish products quarantine, quality control, and fisheries safety	307.1	22.8	491.4	36.4	60.0%
Internal controls and accountability	57.8	4.3	73.2	5.4	26.7%
TOTAL	5,866.6	\$434.6	10,597.7	\$785.0	80.6%

MMAF 2015 Budget (4/10)

- Every ministry directorate general received funding in 2015, ranging from 26% to 135% compared to actual spending in the previous year (See previous slide). The biggest increases went to maritime surveillance (135%) and management of marine, coastal and small islands development (131%). Budgetary funding for business and product competitiveness program also more than doubled (110%). The budget for Capture Fisheries, at IDR 198.8 billion (US\$87.1 million) still the biggest single program component of MMAF spending, was increased by 78% from actual spending in the previous year.
- Increased allocations for Surveillance and Capture Fisheries Director General's represented a strategic reallocation of national spending on fuel subsidies toward revitalizing Indonesia's domestic fisheries

industry through strengthening the capacity of the ministry to conduct surveillance to reduce IUU fishing activities and replacing or upgrading 5 to 10 gross ton (GT) fishing boats to 30 GT.¹

 Within the Capture Fisheries program budget of US\$198.8 million, almost half (US\$95.2 million) was allocated to developing and maintaining fishing ports. US\$12.0 million went to management of fisheries resources to improve sustainability and for the collection and management of fisheries data. Management of fishing fleets, fishing gear and crew certification was allocated US\$36.4 million, of which \$14.9 million was to go to revitalize fishing boats and fishing gear.

MMAF 2015 Budget (5/10)

A \$20.2 million project aims to increase local fishers' access to basic social services, develop basic infrastructure, and develop local livelihood capacities. The Sekaya Maritim Program ("One thousand independent, beautiful and resilient fishing villages") was established under the Directorate of Fishers' Affairs (Direcktorat Kenelayanan) within the Directorate-General of Capture Fisheries and will be supported by Indonesia's Financial Services Authority (OJK).1



MMAF Budget 2015: Capture Fisheries Program Budget

MMAF 2015 Budget (6/10)

The allocation for the DG in Research in Marine and Fisheries Science and Technology in 2015 was US\$56 million. Of this, US\$16.46 million went to research related to fisheries sciences and technology in general, and US\$6.4 million was allocated to conduct research related to biological characteristics of Indonesia's eleven Fisheries Management Areas (WPPs).

MMAF Budget 2015: Research and Development of Marine and Fisheries Science/Technology



MMAF 2015 Budget (7/10)

In 2015, MMAF allocated US\$113 million for the DG of Surveillance. US\$57.0 million was allocated for improving surveillance infrastructure including new patrol ships, communications equipment, office, outpost, and IT systems. In order to fight IUU, MMAF allocated \$36.8 million for sea and air patrol operations. MMAF allocated \$392,000 specifically for marine conservation areas surveillance.

Management and technical support, 12.6 Marine patrol boat/ship operations, 36.8 Fisheries resources management surveillance, 3.1 Marine and fisheries Case management of resources surveillance marine and fisheries and infrastructure, law violations, 2.1 57.0 Marine resources management surveillance, 1.7

MMAF Budget 2015: Surveillance of Marine and Fisheries Resources program

MMAF 2015 Budget (8/10)

- MMAF allocated \$102.4 million to the Directorate General of Marine, Coastal and Small islands in 2015.¹ Of this, US\$15.3 million was earmarked for the protection and utilization of conservation areas and biodiversity and US\$12.1 million for marine spatial planning, with the largest share, (US\$37.3 million) set aside for Development of Marine Services Utilization.
- Funding for Marine, Coastal and Small Islands also included an allocation of US\$12 million for optimizing small islands resource utilization through integrated fishery businesses on outlying islands. The integrated fishery business investments include procurement of fishing vessels, transport vessels, cold storage facilities, and fish-processing units. This program focused on five islands in 2015—Simeulue (Aceh), Natuna (Riau),

Sangihe (North Sulawesi), Merauke (Papua) and Saumlaki (Maluku). The ministry is targeting a total of 31 undeveloped outlying small islands over the next five years.² The National Board for Border Area Management was also allocated the same amount of budget.³

Sources: Starling Resources, 2016. 1) Note that In 2015 MMAF changed the name of Directorate General (DG) of Marine, Coastal and Small Islands (Ditjen KP3K) to DG of Marine Spatial Management (Ditjen PRL). 2) <u>http://www.tribunnews.com/bisnis/2015/08/20/kucuran-dana-rp-100-miliar-untuk-pulau-pulau-terluar-dari-menteri-susi</u> and <u>http://maritimenews.id/business-activities-in-15-outermost-islands-prioritized/</u> 3) BNPP, which is the National Body for Border management (MMAF is also a member of it) allocates the same amount of money. <u>http://www.kabarinvestigasi.com/2013/10/rencananya-bnpp-bantu-100-milyar-untuk_10.html?m=0.</u>

MMAF 2015 Budget (9/10)

MMAF Budget 2015: Directorate General of Marine, Coastal and Small Islands Development & Management



MMAF 2015 Budget (10/10)

The total allocation to the Directorate General of Upgrading Fisheries Businesses and Product Competitiveness was US\$74.73 million. One highlighted project in 2015 was construction of 58 new cold facilities in 22 provinces. The ministry plans to build 280 more cold storage facilities over the next five years.¹ This project is managed by the Directorate General of Fisheries and Marine Product Competitiveness Improvement (PDSPKP). The agency is working with the Indonesia Cold Storage Association (*Asosiasi Rantai Pendingin Indonesia*, ARPI. Exploration of potential locations for the facilities is still underway, with Ambon, Sorong, and Ternate identified as potential locations.

MMAF Budget 2015: Upgrading Directorate General Fisheries Business and Product Competitiveness



Sources: Starling Resources, 2016; MMAF Budget 2015. 1) <u>http://www.tribunnews.com/bisnis/2015/03/04/pemerintah-siap-bangun-58-unit-cold-storage</u>.

In 2015 MMAF allocated \$15.3 million for the protection of conservation areas and biodiversity in 2015. This represented 14.9% of funding for the Development of

Marine, Coastal and Small Islands program, and 1.9% of the total funding for the ministry.

MMAF Budget 2015: DG of Marine, Coastal and Small Islands development & Management



- The Ministry of Environment and Forestry (MEF) in 2015 allocated US\$114.6 million for its Natural Resources and Ecosystem Conservation program,¹ an increase of 19.5% in IDR terms over total conservation funding in 2014 (US\$95.9 million).² The name for the department handling conservation program changed after the merger between the Ministry of Environment and the Ministry of Forestry. Formerly the Directorate General of Forest Protection and Nature Conservation (PHKA), this office is now the Directorate General of Natural Resources and Ecosystem Conservation.
- The structure of conservation program activities has changed under the new merged MEF. Previously, under the former Ministry of Forestry, PHKA programs consisted of just six activities, but this has been increased to eight activities under the new merged Ministry. In 2014, the budgets for Indonesia's 50 national parks were distributed under different activities categories. For 2015, MEF has concentrated the budgets for national park management under a single category, National Park Management. The budget for this activity in 2015 was set at US\$57.8 million. National parks managed under MEF also include marine national parks, whose management is planned to be turned over to MMAF in the future.

Sources: Starling Resources, 2016; MMAF Budget 2015. a) Program dan Anggaran Kementerian Lingkungan Hidup dan Kehutanan Tahun 2015. Presentation 2-3 March 2015 downloaded from: <u>http://slideplayer.info/slide/3077077/</u> b) Directorate General of Forest Protection and Nature Conservation (Dirjen PHKA) Work Plan 2014, Ministry of Forestry. Downloaded from http://www.dephut.go.id/uploads/files/ceab76376ac30394850daa67df9b1620.pdf on January 4, 2016.

MEF Conservation program budget (2015) by activities



US\$ millions

MEF-PHKA Conservation program budget (2014) by activities



US\$ millions

Ten of Indonesia's national parks are either marine parks or else contain significant marine ecosystems as well as terrestrial areas within park boundaries. The total amount allocated for Marine Conservation under the MEF 2014 budget was US\$9.07 million. Assuming the 2015 allocation for national parks management would have represented an average increase of 20-33%, then based on spending on the ten national marine parks in 2014 under PHKA, we can estimate the total budgetary allocation for marine conservation in 2015 by the MEF to be US\$10-12 million.



MMAF Budget (2015) estimated allocations for marine national parks

Preview of MMAF 2016 budget

- At the finalization of the 2016 state budget, President Widodo praised Minister Pudjiastuti, stating that other ministers should use the MMAF draft 2016 budget as an example for their own budgets.
- The president particularly applauded Minister Pudjiastuti for including detailed language for how the MMAF budget will be used. For instance, the 2016 budget shows the amount to be allocated for the "purchase of vessels," whereas previous budgets have used more ambiguous language that did not provide a clear indication of the line item's purpose.
- The MMAF 2016 budget allocates 80 percent for programs directly affecting fishers, while 20 percent is allocated for staff and operational expenses. In past years, this split was 50-50.

 In order to increase the competitiveness of Indonesian seafood products for foreign markets, Minister Pudjiastuti launched a plan for modernizing the country's fishing fleet. Through its 2016 budget, MMAF will spend IDR 3.72 trillion (roughly \$286 million USD) on fish transportation, fishing vessels, cold storage, and surveillance. Minister Pudjiastuti stated that MMAF will deregulate and simplify certain aspects of the fisheries sector in order to encourage foreign and domestic companies to submit tenders.

Source: Asia Group Advisors, 2015; Innovation Norway, 2015. "Indonesian plans for USD 216 million procurement for modernizing their fishing fleet." <u>http://nmexporters.no/wp-content/uploads/2015/11/2015.10.28-Ole-Schanke-Eikum-presentation-of-the-Indonesian-procurement-on-3540-fishing-vessels.pdf</u>.

Ocean funding

A profile of annual ocean-focused funding commitments from philanthropic partners and the donor community

Support for Indonesia marine resources from U.S.-based private foundations

Marine-focused philanthropic investment in Indonesia has been increasing over the past six years. The Walton Family Foundation has long provided support to Indonesia, in particular to the Bird's Head Seascape. Overall support has increased with the entry of the Margaret A. Cargill Foundation into Indonesia in 2012, and the expansion of the David and Lucile Packard Foundation portfolio beginning in 2014. The MacArthur, Moore, Rockefeller, Quadrivium, Marisla, and Paul G. Allen Family Foundations, among others, also contribute to the region.

Philanthropic funding directed towards Indonesia (approximate)



*2015 data is not complete for all foundations. All estimates are approximate. For grants that involved multiple geographies, only a portion of funding was considered to be going to Indonesia. As best as possible, the sums above represent funding *disbursed*, so that multi-year grants do not appear as spikes. May not include funds given as core support to organizations such as WWF or Rare that are then allocated to Indonesia. Source: CEA, 2016.

Indonesia Marine Funders Collaboration (IMFC)

- The John D. and Catherine T. MacArthur Foundation, the Walton Family Foundation, the Margaret A. Cargill Foundation, and the David and Lucile Packard Foundation have, since late 2012, convened multiple meetings to discuss their mutual interest in the longterm health of Indonesia's ocean ecosystems. Through these meetings they have attempted to learn directly from fellow Indonesian colleagues, international experts, and each other about how donors can make the best use of their financial resources to foster positive change. Other foundations have occasionally joined these dialogues.
- Together, these four foundations are expected to account for more than \$35M in joint investment 2015-2017.
- The foundations have developed shared documents and a broad strategic framework that will guide that collaboration.

- They have also committed to:
 - More regularly and purposefully convene meetings and dialogues
 - More proactively pursue ideas and opportunities suitable for joint investment
 - Explore opportunities to improve measures and simplify reporting requirements for grant recipients
 - Explore the value of cultivating a shared advisory group on specific priority issues of common interest
- These foundations plan to further engage additional grantmakers in the coming year.

Philanthropic investments in capacity building and institutions

- There is growing interest from the international community, particularly among philanthropic funders, in supporting the capacity of local partners and institutions in Indonesia to support effective management.
- A key component of the Packard Foundation's Western Pacific strategy is to support the development of skilled managers, effective policies, and capable institutions to co-manage coastal marine resources. During 2010-2015, the Packard Foundation awarded approximately \$17.5 million in grants in Indonesia for coastal resources and fisheries management.¹ Of this amount, over one-third of the grants (\$6.3 million) specifically targeted capacity and institution building in the country, which demonstrates the Foundation's commitment to enhancing capacity.
- Future versions of this report will provide more comprehensive metrics for tracking capacity building in the region, including investments from the wider sector.



Packard Foundation Western Pacific Grantmaking (2010-2015)

Source: CEA analysis, based on Packard Foundation grantmaking (2010-2015). Note : 1) Includes grantmaking in the Western Pacific, Organizational Effectiveness, Marine Fisheries, Strategic Opportunities subprograms at the Packard Foundation.

Commitments for Aquaculture Sector from the Maritime Donors Group (1/2)

The Maritime Donors Group is a collaborative of major development institutions (including the World Bank, FAO, USAID, JICA) that has started to map donor funding for fisheries and marine issues in Indonesia. The following two tables show aquaculture projects for which the collaborative is providing funding.

Donor	Project Title	Type of Fund (Loan/Grant)	Start Date	End Date	Location (District, Province)
Royal Norwegian Embassy	Capacity Building in Fisheries and Aquaculture	Grant	2013	2018	Batam
FAO	Development of preventive aquatic animal health protection plan and enhancing emergency response capacities to shrimp disease outbreaks in Indonesia	Grant – FAO Regular Budget	2013	2015	 South Lampung District, Lampung Province; Tangerang District, Banten Province
FAO	Integrated economic zone development based on blue economy in Lombok Island, Indonesia	Grant	2015	2015	Central Lombok District and East Lombok District - West Nusa Tenggara Province
FAO	Decent Work for Food Security and Sustainable Rural Development : Support to selected coastal communities along the seaweed value chain	Grant	2015	2017	East Sumba District and Kupang District - East Nusa Tenggara Province
FAO	Regional Initiative – Blue Growth - Pilot application of aquaculture planning and management tools for sustainable growth in selected Southeast Asian countries	Grant	2015	2017	National coverage (no specific district or province)

Commitments for Aquaculture Sector from the Maritime Donors Group (2/2)

The following table shows projects that the Maritime Donors Group is providing funding for the aquaculture sector.

Donor	Project Title	Type of Fund (Loan/Grant)	Start Date	End Date	Location (District, Province)
FAO	Strengthening biosecurity governance and capacities for dealing with the serious shrimp infectious myonecrosis virus (IMNV) disease	Grant	2014	2016	National coverage (no specific district or province)
GEF	Mainstreaming Biodiversity Conservation and Sustainable Use into Inland Fisheries Practices in Freshwater Ecosystems of High Conservation Value	Grant	2016	2019	1. Kampar District - Riau Province; 2. Cilacap District - Central Java Province; 3. Sukabumi District - West Java Province; 4. Barito District - Central Kalimantan Province
FAO	Support scaling up of integrated rice-fish farming in Indonesia and its dissemination in the Asia-Pacific region and small-scale aquaponic/Bumina-Yumina development (integrated fish and vegetable culture) in the Asia and Pacific Region	Grant	2015	2015	1. Sleman District - Yogyakarta Province; 2. Lima Puluh Kota District - West Sumatera Province
FAO	The Regional Rice Initiative: Phase II	Grant	2015	2017	 Indramayu & Tasikmalaya district of West Java Pasuruan district of East Java
JICA	Project for Sustainable Fishery Resources Management and Utilization	Technical Cooperation	2015	2019	TBD

Commitments to combat IUU Fishing from the Maritime Donors Group (1/2)

The following two tables show projects that the Maritime Donors Group is providing funding to combat IUU fishing in Indonesia.

Donor	Project Title	Type of Fund (Loan/Grant)	Start Date	End Date	Location (District, Province)
World Bank	Coral Reef Rehabilitation and Management Program - Coral Triangle Initiative	Loan \$47.38 million USD and GEF Grant \$10 million USD	2014	2019	Eastern Indonesia
World Bank	Capturing Coral Reef and Related Ecosystem Services Project (CCRES)	GEF + UQ Grant \$6.7 million USD (WB 4.7, Univ of Queensland 2)	2013	2018	El Nido, Philippines and Selayar, Indonesia
USAID/Indonesia	Sustainable Ecosystems Advanced (SEA)	Grant \$33 million USD	2015	2020	Fisheries Management Area 715 (Maluku, North Maluku, West Papua)
USAID/Indonesia	NOAA mission support participating agency partnership	Grant \$2 million USD	2014	2018	Nation Wide
USAID/Indonesia	TBD	TBD	2015	2018	Nation Wide
World Bank	Coral Reef Rehabilitation and Management Program - Coral Triangle Initiative (COREMAP CTI) Project	Loan \$47.38 million USD and GEF Grant \$10 million USD	2014	2019	Eastern Indonesia
Commitments to combat IUU Fishing from the Maritime Donors Group (2/2)

The following table shows projects that the Maritime Donors Group is providing funding to combat IUU fishing in Indonesia.

Donor	Project Title	Type of Fund (Loan/Grant)	Start Date	End Date	Location (District, Province)
World Bank	Capturing Coral Reef and Related Ecosystem Services Project (CCRES)	GEF + UQ Grant \$6.7 million USD (WB \$4.7M, University of Queensland \$2M)	2013	2018	El Nido, Philippines and Selayar, Indonesia
Japan International Cooperation Agency (JICA)	Project for Sustainable Fishery Resources Management and Utilization	Technical Cooperation (Hibah Langsung)	January 2016 (expected)	January 2020 (expected)	Not specified
Norway/NORAD	FISH INTEL	Grant	Not listed	Not listed	Central
UNIDO (SMART-Fish Indonesia	Increasing trade capacities of selected value chains within the fisheries sector in Indonesia	Grant from SECO (Swiss Government) 4,500,000 USD	2014	2019	Flores (East Nusa Tenggara), East Java, Jambi, South Sulawesi, North Sumatera, Banten, and West Java
Japan International Cooperation Agency (JICA)	Project for Sustainable Fishery Resources Management and Utilization	Technical Cooperation (Hibah Langsung)	2016	2020	Not specified

Commitments with international partners

During 2015, Indonesia held several important meetings and developed cooperative agreements with international government; the following highlights a selection of these events:

- Maritime development MOU between Indonesia and Denmark: Coordinating Maritime Minister Rizal Ramli signed an MOU in October 2015 with the Government of Denmark on maritime development. The MOU includes cooperation on marine and maritime data exchange, development of maritime infrastructure, sustainable ship building, port monitoring policies, human capital training, and other issues.
- Fisheries cooperation enhanced between Indonesia and Norway: Norwegian Minister of Fisheries Elisabeth Aspaker and Minister Pudjiastuti initiated agreements on fish exports, aquaculture development, and anti-IUU cooperation. The agreements were reached during Minister Aspaker's visit to Jakarta in November 2015. On aquaculture development, they signed an MOU to promote sustainable aquaculture which includes collaboration between the Norwegian vaccine company Pharmaq and MMAF Directorate General Aquaculture to develop a vaccine for parrot fish.
- The ministers also discussed plans to increase fish trade between their countries. Indonesia plans to export more yellowfin tuna to Norway. However, Director General for Strengthening Marine and Fisheries Product Competitiveness Nilanto Perbowo stated that tuna exports still encounter challenges entering the European Union (EU) due to low quality. Norway plans to export more salmon to Indonesia. Minister Pudjiastuti added that MMAF is exploring how to incentivize the processing and re-exportation of Norwegian salmon in order to avoid flooding the local market and reducing domestic fish sales.
- Fisheries agreement signed between the Maluku government and France: Governor of the Province of Maluku Said Assagaff signed an agreement on fisheries and tourism cooperation with France during his November visit to the country. Under the agreement, Maluku will export 90,000 tons of fish product annually to Marseille, France, which he hopes can serve as a "gateway to access other EU countries." The governor added that Maluku is working to improve the quality of its fish product in order to meet the EU's high import standards.

Private sector commitments

A profile of the financial position and public fish reform commitments of key private sector fishing, buyer, and retail actors

Overview of operating environment for the private sector

- The private sector in the fisheries industry in Indonesia faced a challenging operating environment in 2015, partly due to new policies and regulations that increased operating costs in the form of permitting, landings taxes, and other costs.
- The following policy events and regulations shaped the operating environment for the fisheries sector in 2015:
 - MMAF issued a one-year moratorium on issuing new licenses to foreign-built vessels, which make up most of Indonesia's large-scale fishing fleet.
 - The moratorium was lifted in November 2015, but two months later, the Directorate General of Capture Fisheries issued a circular that restricted vessels larger than 150 GT from obtaining licenses.
 - In mid-2015, MMAF uncovered aggressive undersizing of vessels. The agency created a commission to resize roughly 15,000 vessels by the end of 2017. In the interim, the agency is enforcing a sizing formula based on gross tonnage (rather than

carrying capacity), which can move companies into higher tax brackets and cut into operating costs.

- In December 2015, MMAF issued a sizeable cost increase (by 1000 percent in some instances) for various charges and fees associated with the capture fishing sector.
- By the end of 2015, small-scale vessels were operating in Indonesia, but there was not a functioning capture fishing industry. Faced with these higher costs, many companies lacked flexibility to take on additional programs, such as upgrading sustainability practices.
- Even as these higher costs were instated in the fisheries sector, President Widodo has put forward a vision of Indonesia as a "maritime nation" and MMAF has committed to improving the quality and competitiveness of Indonesian seafood products (including by building 280 additional cold storage facilities over next five years, among other actions).

Private sector commitments: key milestones (1/2)

- June 2014: MMAF and WWF Indonesia held a discussion entitled "Private Sectors Active Role in Answering Export and Domestic Markets Call for Sustainable Fisheries" in Surabaya to address the "grim conditions" of Indonesia's fisheries.¹
- May 2015: A number blue swimming crab (BSC) fishery stakeholders (Komunitas Rajungan) gathered to identify opportunities for sustainable long-term social, economic, and environmental management of the BSC fisheries. The workshop identified a potential collaborative, sub-WPP management pilot projects with participation from private sector, community, local, regional and national government stakeholders.
- June 2015: At the 4th International Coastal Tuna Business Forum (ICTBF), MMAF announced a commitment to seek full Marine Stewardship Council (MSC) assessment for the country's pole-and-line and handline skipjack and yellowfin tuna fisheries by the end of 2015.² Spearheading the push for MSC certification for these fisheries is the Asosiasi

Perikanan Pole & Line dan Handline Indonesia (AP2HI), an industry association that acts as a unified voice for the country's pole-and-line and handline fishers.³ AP2HI has been active in a number of programs, including the Fishery Improvement Project (FIP), ProActive Vessel Registration (PVR) scheme, and the Training of Trainers (TOT) initiative. AP2HI released a statement regarding the strong interest from tuna fishery business players to achieve MSC certification. However, this effort has so far not been supported by enabling regulations from government, a key factor in facilitating MSC certification.⁴

Source: Starling Resources, 2016. 1) <u>http://www.wwf.or.id/en/?33762/depleted-stocks-threaten-indonesias-fisheries-industries;</u> <u>http://nationalgeographic.co.id/berita/2014/06/pentingnya-praktik-perikanan-berkelanjutan-untuk-kembalikan-sumberdaya-laut</u> 2) <u>http://ipnlf.org/press-release-ngos-applaud-indonesian-governments-commitment-achieving-msc-certification-pole-line-handline-tuna-fisheries/</u> 3) <u>http://www.seafoodsource.com/news/environment-sustainability/indonesia-pole-and-line-tuna-fisheries-aim-for-msc</u> 4) <u>http://www.mongabay.co.id/2015/12/18/nelayan-tuna-kejar-sertifikat-msc/</u>

Private sector commitments: key milestones (2/2)

- September 2015: Greenpeace Southeast Asia released its report, 'Tuna cannery ranking in Indonesia and Phillipines'¹ highlighting 13 (out of 18) tuna canning factories with poor traceability and suggesting that the industry is falling short in addressing IUU fishing.² The International Pole & Line Foundation (IPNLF) and two members of AP2HI (Indonesian Pole and Line and Hand Line Fisheries Association³) reacted to the ranking by asserting that Greenpeace failed to conduct a thorough evaluation.⁴ Some of the canneries have also signed up with FIPs through ISSF following the report.
- November 2015: MMAF held 'Indonesian Fisheries Investment Forum' entitled 'Balancing Sustainable Resources and Business'. This forum was attended by 10 ambassadors and country representatives, as well as government institutions, bank and non bank institutions, universities and fishery business players from Indonesia and other countries.⁵

- November 2015: The Indonesia Financial Services Authority (OJK) Deputy Director for Banking Architecture Edi Setijawan announced that OKJ will instate a "green financing" regulation in 2018 aimed at preventing banks from lending to environmentallydamaging projects in the fishing, agriculture, and energy sectors.⁶
- December 2015: APRI1 and SFP held a workshop with member companies' quality control staff to use control document and launch a pilot in Madura. This control document is one of APRI and SFP's major efforts in improving traceability across BSC supply chain in Indonesia.
- January 2015: MMAF held 'the marine and fisheries business forum and exhibition 2016', to increase investment, build global support to fight IUU fishing, and open information about MMAF's budget allocation. In total, MMAF will manage Rp 13 T in 2016.⁷

Source: Starling Resources, 2016;

1)http://www.greenpeace.org/seasia/id/PageFiles/704134/Canned%20Tuna%20Ranking%20%E2%80%93%20Release%20Date%20Version%2021st %20Sep%202015%20-%20greenpeace.pdf; 2) http://www.greenpeace.org/seasia/id/press/releases/Rapor-Merah-untuk0-industri-pengalengantuna-di-Asia-Tenggara/; 3)_Asosiasi Perikanan Pole and Line dan Hand-line Indonesia; 4) http://www.ap2hi.org/?p=963. 5) Blue Swimming Crab Association. http:kkp.go.id/index.php/pers/pemerintah-tingkatkan-minat-investasi-kelautan-dan-perikanan-berkelanjutan/?print=print_6) Asia Group Advisors, 2015. 7) http://www.beritasatu.com/ekonomi/340386-kkp-gelar-eksebisi-maritim.html .

Private sector engagement in sustainable fisheries: key initiatives (1/8)

Norpac Fisheries Export: new size limits for snapper

- In November 2015, the processing and distribution company NORPAC Fisheries Export announced in a letter its commitment to adjust its purchasing specifications for snapper species, in cases where the catch contains greater than 30% juveniles. It proposed increasing minimum size specifications for five species of snapper, from 500 g to 1500 g. It will also encourage fishers to target more mature fish in cases where juvenile capture exceeds 30 percent.
- The announcement followed a collaboration between Norpac and conservation partners to collect data in the Drop Line Deep Slope Snapper Fishery and analyze the percentage of immature and mature fish captured for each snapper species.
- The company stated that the commitment aligns with its intention to better understand the impact of its participation in the fishery and to help move the fishery towards more sustainable practices.



Private sector engagement in sustainable fisheries: key initiatives (2/8)

Pledge for Responsible Seafood (Seafood Traceability)

- On June 4th, 2015, four hotels in Jakarta signed the Pledge for Responsible Seafood as part of WWF Indonesia's "Responsible Seafood campaign 2015". These hotels includes Shangri-La, The Sultan, DoubleTree by Hilton, and Morrissey. Fish 'n Blues, a seafood retailer and supplier brand under PT Samudera Eco Anugrah (SEA) Indonesia, following on July 2015 and then InterContinental Bali Resort joined the pledge, on August 2015.
- The commitment is designed to ensure responsible origin and provide clear and reliable information to consumers and ensure accountability. Companies that support the pledge are asked to collect as much information as possible about the origin and the supply chain of seafood products such as the fishing location, fishing gear or methods of cultivation used, fishing or harvest time, and the total number of middlemen along the supply chain.









Private sector engagement in sustainable fisheries: key initiatives (3/8)

Commitment toward certification (MSC/ASC and FairTrade)

- Seafood Savers Program
 - Eight companies have joined WWF's Seafood Savers program. This entails a commitment to operational safety, sustainable and responsible use of Indonesian marine resources, and a commitment to more towards MSC/ASC certification. Seafood Savers acts as a bridging mechanism for fishery industry players that may not yet be in the position to attain MSC or ASC certification, but may be able to achieve more sustainable and responsible fishing practices and to better position themselves for eventual MSC or ASC certification.
 - Corporate members of the Seafood Savers program will engage in a Fisheries Improvement

Program (FIP) for capture fisheries companies, an Aquaculture Improvement Program (AIP) for aquaculture companies, and a Chain of Custody Improvement Program (CoCIP) for restaurant, hotel, and supermarket companies. Seafood Savers in Indonesia currently has seven member companies, all wild capture fishing companies, in addition to one candidate member in the aquaculture sector.



Private sector engagement in sustainable fisheries: key initiatives (4/8)

About Seafood Saver Participants

Seafood Savers members engage in activities designed to improve environmental performance, governance, research and data collection, and the fulfilment of corporate social responsibility obligations. Each company is to undergo improvement over a five-year period with regular monitoring every six months by WWF-Indonesia.

Members in Seafood Savers					
Sea Delight, LLC	PT Satu Enam Delapan Benoa				
UD Pulau Mas	PT Samudera Eco Anugrah Indonesia				
PT Arta Mina Tama	PT Asindo Minasegara (Candidate member)				
PT Hatindo Makmur	PT Mustika Minanusa Aurora (Aquaculture)				

Private sector engagement in sustainable fisheries: key initiatives (5/8)

Commitment toward certification (MSC/ASC and FairTrade)

- Indian ocean long line tuna FIP
 - The Indian Ocean Longline Tuna FIP was initiated by Sustainable Fisheries Partership (SFP). In March 2014 this FIP transitioned from SFP to PT Intimas Surya.¹ The first phase (2012 – 2014) involved 28 longliners, and the second phase (2015-2020) will expand to include 35 contracted vessels. The FIP supports and contributes to the development, improvement and sustainability of the tuna fishery industry in Indonesia by promoting traceability, improving the availability and accuracy of data on total catch, retained catch, and bycatch; and collaborating with other institutions working on

tuna fisheries issues in the country, including working together to improve the management and policy towards sustainable fisheries.²

 The species covered by this initiative include yellowfin tuna, bigeye tuna, and albacore. In addition to WWF Indonesia, ASTUIN (Indonesian Tuna Association), ATLI (Indonesian Tuna Longline association) and Indonesian Ministry of Marine affairs and Fisheries, SFP engaged the following companies:

1.	PT Intimas Surya	4.	Open Seas
2.	Cannon Fish	5.	North Atlantic
3.	Amacore	6.	Seafood Exchange

Private sector engagement in sustainable fisheries: key initiatives (6/8)

Commitment toward certification (MSC/ASC and FairTrade)

- Indonesian Pole and Line and handline FIP
 - An MSC pre-assessment for Indonesia's pole and line fishery was held in 2012 and a FIP was established through a stakeholder workshop in 2013¹ with the Indonesian Pole, Line, and Handline Association (AP2HI) as the primary proponent. Development of the FIP Action Plan was facilitated by IPNLF (International Pole and Line Foundation), in collaboration with other NGOs and supported by AP2HI, with the overarching management issues falling to the Ministry of Marine Affairs and Fisheries

(MMAF), Western and Central Pacific Fisheries Commission (WCPFC) and Indian Ocean Tuna Commission (IOTC).

 The pole and line and hand line FIPs also represent collaborative action between industry, MMAF and NGOs such as WWF-Indonesia, Masyarakat dan Perikanan Indonesia (MDPI), Fishing & Living, International Pole & Line Foundation (IPNLF) and the Sustainable Fisheries Partnership (SFP).



Private sector engagement in sustainable fisheries: key initiatives (7/8)

Commitment toward certification (MSC/ASC and FairTrade)

- Blue Swimming Crab FIP program
 - Blue Swimming Crab (BSC) Processors and Exporters Association (APRI), together with SFP and the Crab Council, have worked to improve the BSC fishery in Indonesia through a Fishery Improvement Program since 2007. APRI and its members aim to change practices (no take of small crabs/juveniles, no take of egg-bearing females), increase the stocks, and develop policies that protect and sustain crabs including protection of nursery ground and spawning area. Its workplan includes development of a management plan, community-based management, communication and awareness,

nursery and spawning grounds protection projects, as well as a hatchery project.

 APRI conducted an MSC pre-assessment in 2009, 2010, and 2014. Additionally, APRI has worked closely with SFP to develop, launch and pilot a control document to improve BSC traceability. APRI plans to integrate this control document system within MMAF's quarantine body (BKIPM) to strengthening its cooperation with mini plants and suppliers across the BSC supply chain in Indonesia.¹



Private sector engagement in sustainable fisheries: key initiatives (8/8)

Commitment toward certification (MSC/ASC and FairTrade)

- FairTrade USA
 - The FairTrade Capture Fisheries Program aims to promote resilient livelihoods in coastal communities through enhanced environmental stewardship, ecosystem protection and improved working and living conditions.¹ Anova food announced its commitment to import FairTrade certified seafood from Indonesia in February 2015.² The FairTrade program in Maluku is still in a pilot phase. In order to strengthen its program in Indonesia, FairTrade USA works with local partners including MDPI, WWF, MMAF, and local communities. The first products will be packed under Anova's Natural Blue brand and come from four associations representing 120 small-scale fishermen in the Indonesian Maluku island chain.³ Anova's initiative is led by MDPI, whereas two other

potential sites in Bitung and Banda are run by supplier companies. FairTrade USA held a discussion with buyers in the US to screen potential suppliers for certification. Through FairTrade certification, fishers expected to receive a 10% price premium, which is earmarked to fund community improvement programs that directly promote the sustainability practices for the fishery. FairTrade's main challenge is organizing and cooperating with fishers.⁴



Source: Starling Resources, 2016. 1). <u>http://fishing-living.org/anovafishing-living-partners-with-fair-trade-suppliers-to-improve-tuna-receiving-stations/#sthash.j9yVq1UW.dpbs</u> 2) <u>http://www.seafoodsource.com/news/environment-sustainability/anova-to-sell-world-s-first-fair-trade-certified-seafood-through-safeway-stores 3</u>) <u>http://www.seafoodsource.com/news/environment-sustainability/anova-to-sell-world-s-first-fair-trade-certified-seafood-through-safeway-stores 3</u>) <u>http://www.seafoodsource.com/news/environment-sustainability/anova-to-sell-world-s-first-fair-trade-certified-seafood-through-safeway-stores 4</u>) Phone interview with Sven Blankenhorn, fair trade USA based in Ujung Pandang Indonesia.

SOURCES

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Overview of sources

- This report relied on a variety of resources, including consultations with country experts, government reports, public databases, and individual outreach to multilaterals and foundations.
- As described in the introduction, the intent of this report is to create a baseline of statistics for the year 2015, primarily referencing regularly-updated sources that can provide consistent benchmarks for future editions of this report.
- There are certain fields for which data availability is relatively limited. For instance, the levels of funding from bi/multilaterals for the fisheries sector is not well-catalogued. Although development aid funding databases exist, our experience shows that these organizations code grants and loans using different classifications, leading to somewhat inconsistent results across the databases. We are hopeful that initiatives such as the Maritime Donors Group—which includes development aid partners such as the World

Bank, USAID, JICA, and others—will provide timely information on fisheries funding in the region over the coming years.

 The information presented here is based on the best available resources covering the region's fisheries sector. We welcome feedback from partners as we seek to improve upon the report for future editions.



We welcome your feedback on this report and encourage you to share any comments with the Packard Foundation through a survey found at the following link: http://bit.ly/2a4qlZR.



"Indonesia Fisheries: 2015 Review" Prepared for The David and Lucile Packard Foundation

