







Regional Technical Meeting

on

Fisheries Resource Enhancement in Southeast Asia

Bangkok, Thailand, 24-26 April 2018









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AGENDA 3.1

Country Presentation on Fisheries Resource Enhancement (1)



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Outline:

- Conservation as a fisheries management tool
- Marine Protected Area (MPA) as a National Program for Fisheries Resources
 Enhancement
- Constraints on planning or implementation of national program(s)/activity on
 MPA

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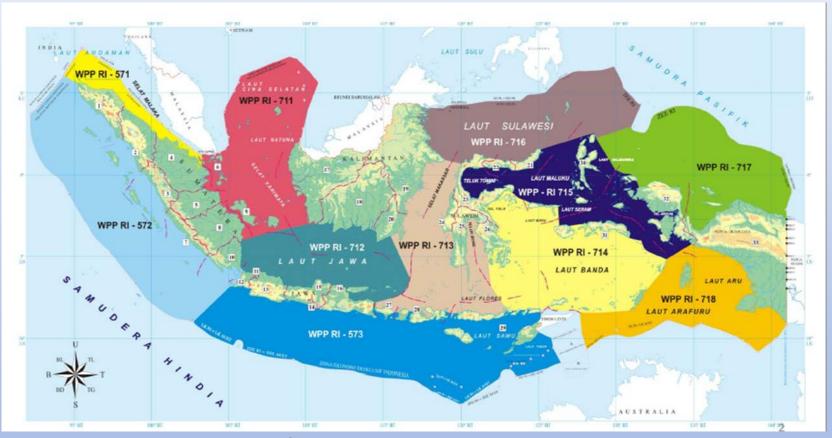




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11 Fisheries Management Area in Indonesia



- > 95,186 km coastline (globally 2nd longest)
- ± 17,504 islands
- 5.8 million square km EEZ (3x land area)
- Includes 37% of world's total fish species
- Global center of marine biodiversity (e.g. > 70 genera of hard corals)
- 18% of world's coral reefs and largest exporter of marine ornamentals in the world





EL TONO FISHERIES AGENCION

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CONSERVATION is currently viewed as necessary for the harmonization of economic needs and expectations of people, with the preservation of existing resources for the future.

Conservation = as fisheries managements tools





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Legal basis on MPA for Fisheries Resource Enhancement

- Law No 5/1990 on Conservation of Natural Resources and its Ecosystem
- Law No 31/2004 Jo Law No 45/2009 on Fisheries Management
- Law No 32/2009 on Environmental Management and Protection
- Law No 27/2007 on Coastal Zone and Small Island Management >> revisi: Law No. 1/2014
- Law No 23/2014 on Regional Governance
- Law No 32/2014 on Marine
- Gov. Regulation No 68/1998 on Nature Reserves and Preservation areas
- Gov. Regulation No 60/2007 on Fishery Resources Conservation
- Some relevant Ministerial Decrees on MPA establishment and management
- Per.17/Men/2008 → MPA in Coastal and Small islands
- Per.o₂/Men/2009 → MPA Designation Mechanism
- Per.3o/Men/2010 → Zoning and Management Plan
- 13/Permen-KP/2014 → MPA Network
- 21/Permen-KP/2014 → Partnership of MPA

- Kep.44/KP3K/2012 → E-KKP3K
- Kep.o2/KP3K/2013 \rightarrow Boundary Marking of MPA
- 9 Supplement of E-KKP3K

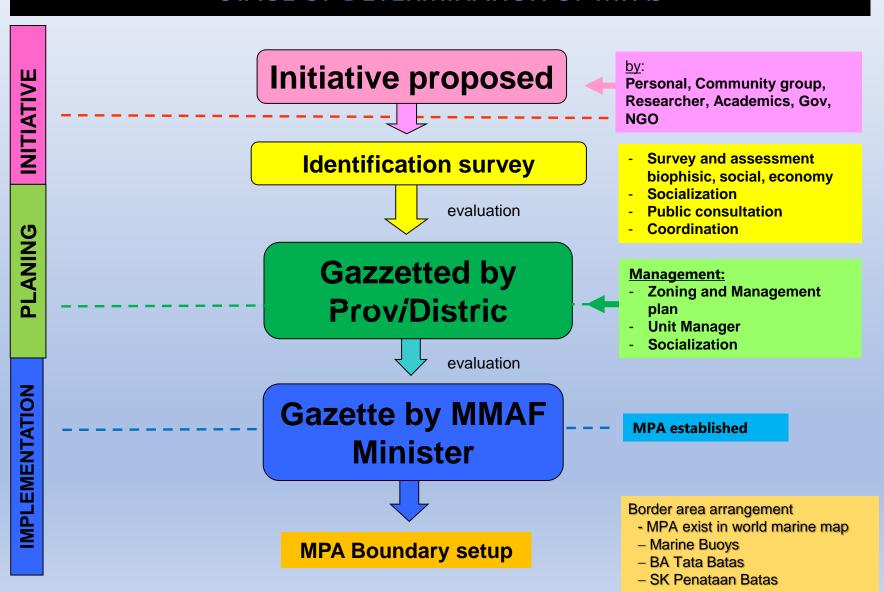




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STAGE OF DETERMINATION OF MPAS











MPA for Fisheries Resources Enhancement

Target:

- 1. Protects 30% of critical habitat
- 2. Reduce habitat degradation rate
- 3. Conservation and management of threatened/endangered species

Management measure

- 1. Increase MPA coverage
- 2. Improve MPA management effectiveness
- 3. Protect, preserve and utilization





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1.Increase MPA coverage

- 1. Fisheries Resources Critical Habitat (30% Coral Reefs)
- 2. Plan of 30 mio hectare in 2030 (10% of waters)
- 3. Target 20 Million hectare MPAs (in 2019)





Existing MPA

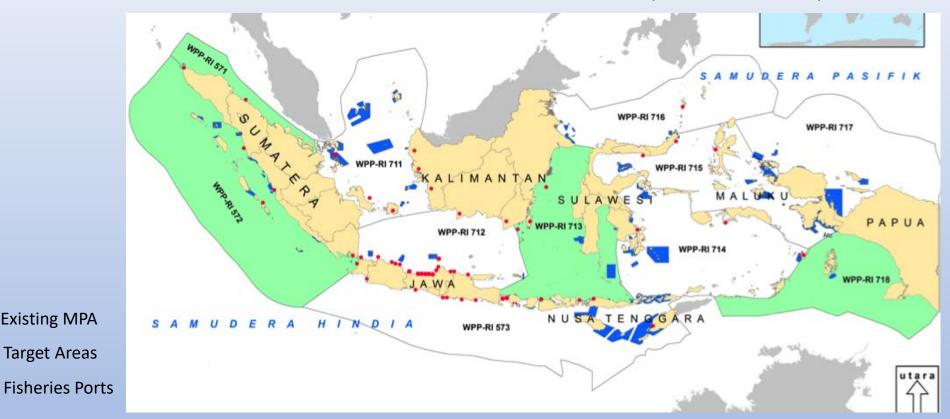
Target Areas

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MPA PLAN FOR CRITICAL HABITATS (2017 – 2019)



- *) Critical habitat protection target according to PISCO (2002) = 30% of total critical area
- Increasing MPA area in 4 WPP (571, 572, 713, 718)
- Gazetted 115 District MPA
- Manage 10 National MPA/KKPN





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MPA Plan 2017 – 2019

WPP	Coral Cover (Ha/WPP)	Coral Reefs in MPA that have been Protected (Ha)	Protected Habitat (%) (C/B)*100%	GAP *) (%) (30%-D)
А	В	С	D	Е
571	2,824.12	122.49	4.32	25.68
572	168,399.69	37,050.48	22.00	8.00
573	177,577.25	101,734.76	57.29	
711	314,882.90	137,931.52	43.80	
712	58,609.50	16,627.08	28.37	
713	541,728.89	123,162.86	22.74	7.26
714	475,043.99	173,791.53	36.58	
715	248,656.72	174,909.86	70.34	
716	135,246.78	75,421.27	55.77	
717	153,379.81	54,747.94	35.69	
718	193,560.99	51,527.85	26.62	3.38





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CONSERVATION TARGET 2014 – 2019

Objectives:

- 1. Maintain / Increase fish resources habitat cover for spawning,
- 2. Maintaining the trend of declining populations of endangered fish species

Protect Habitat and Population Targets:

- 1. 20 mio Hectare MPA in 2019
- 2. 35 MPA showed positive performance in:
 - a. Maintaining fish habitat cover
 - b. Reducing destructive fishing
 - c. Maintaining the marine biodiversity
 - d. Increasing fish biomass
 - e. Increasing income of community in MPA

Protect Endangered, Threatened Species Targets:

- 1. Maintaining population in nature
- 2. Increasing life chance of stranded mamals
- 3. Reducing illegal use

<u>Spesies Targets</u>: Dugong, Penyu, Napoleon, Terubuk, BCF, Karang Hias, Hiu Paus, Arwana, Labi-labi, Sidat, Bambu Laut, Paus, Kima, Lola, Kuda Laut, teripang, mola-mola, pari manta, Hiu appendix CITES, pari gergaji

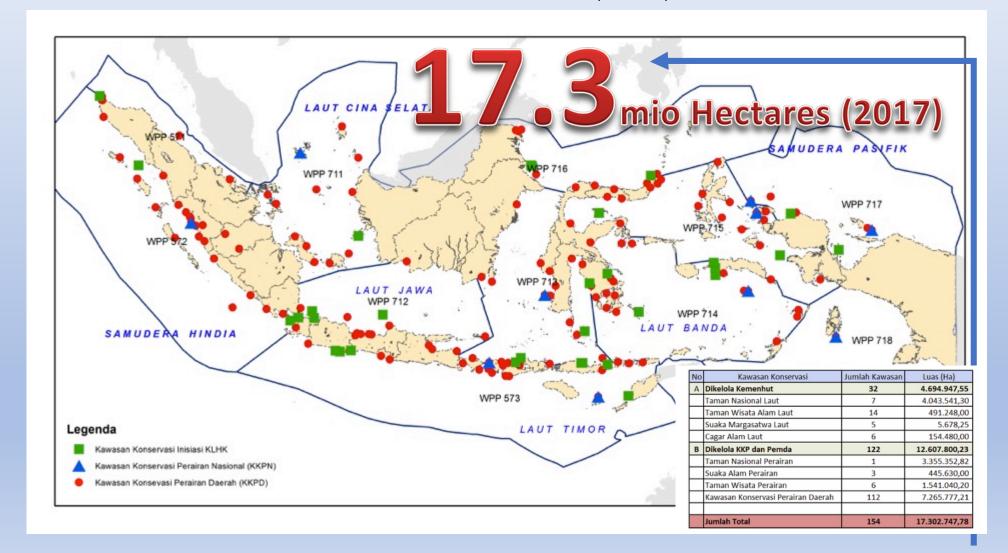




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MPAs DISTRIBUTION IN 11 FISHERIES MANAGEMENT AREA (WPP) OF INDONESIA









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2. Improve MPA management effectiveness

- 1. Function and Management of MPA
- 2. 35 MPA Priority sites
- 3. Management Effectiveness Indicator





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Function and Management of MPA

Sustainability



Function of MPA

Provide a healthy ecosystem



- Protecting the food chain system for important species (high economically, endangered, endemic,)
- Guaranteed access area for traditional community use



- Reducing habitat degradation rate and extinction of marine species
- Providing social benefits, economic community



Effective Management

Main Program

- 1 Providing Data Series of Biodiversity and Fish Resource
- 2 Provision of Infrastructure adequate for full operational
- 3 Surveillance of MPA
- 4 institutional strengthening
- Ecosystem Rehabilitation
- 6 Increased community participation

Supporting Program

- 1 Conservation Center (Research and Development)
- 2 Sustainable financing
- 3 Government Assistance
- 4 Promotion and Investment
- 5 Provision of other supporting infrastructure
- 6 Research and Development





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35 MPA Priority Location







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TARGET INDICATORS EFFECTIVE MANAGEMENT OF MPA

- 1) Habitat Condition (Coral, Seagrass, Mangrove)
- 2) Fish Biomass
- 3) Protected Species
- 4) Ecosystem Rehabilitation
- 5) Carrying Capacity (fishery, cultivation, diving, swimming, snorkeling)

B. SOCIAL ECONOMIC ASPECT

- 1) Number of Villages
- Number of Groups (Pokwasmas, Production)
- 3) Partnerships (Indigenous Peoples, Civil Society)
- 4) Socialization / Publication

C. Aspects of Governance

- 1. Regulation
 - legal decree of MPA Gazzetted by province/district
 - legal decree of MPA manager
 - legal decree of zoning and management plan
 - legal decree of MPA Gazzetted by MMAF
- Management Agency
- 3. Human Resources
 - Amount (PNS, Kontrak, ABK)
 - Planning Competencies
 - Competence of Biophysical Monitoring
 - Competence of Socioeconomic Monitoring
 - Administrative Competencies
- Infrastructure
 - Office
 - Transportation (Ship, car, Motorcycle)
 - Monitoring
 - guardhouse for surveilence
 - Information Centre
 - Media Information (Website, Billboard)

- Border area arrangement (MPA Boundary setup)
 - MPA exist in world marine map
 - Marine Buoys
 - BA Tata Batas
 - SK Penataan Batas
- 6. NSPK
 - SOP Services
 - SOP Monitoring
 - SOP Administration
- 7. Funding
 - Source of Fund
 - regulation of retribution
 - PNBP (non-tax revenue)
- 8. Handling case
 - Violation of Zoning
 - Marine mammals stranded





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Management Effectiveness of those MPAs??

"...degree to which management of a MPA has had a positive impact on the area's biophysical resources and on the socio-economic and cultural aspects of the local community, which contribute to improving management performance" ______ ...to meet management objectives





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National standard for evaluating the performance management of a MPA



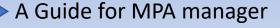
Guideline of E-KKP3K

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Supplement of E-KKP3K

http://kkji.kp3k.kkp.go.id/index
.php/suplemen-ekkp3k









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MPA Management Effectiveness Concept E-KKP3K



- Capacity Building;
- Organization Development
- Infrastructures Development;
- Management Regulation;
- Community involvement;

MANAGEMENT/ GOVERNANCE

- Partnership development;
- MPA Networks:
- Sustainable Financing; and/or
- Monitoring and evaluation

Adaptive Managements

Function

RESOURCES/ BIO-PHYSICAL

- Habitat protection;
- Population rehabilitation;
- Research:
- Fish resources utilization:
- Eco-tourism; development
- Surveillance and controlling; and/or
- Monitoring and evaluation

Function

SOCIO-ECONOMIC-CULTURE

- Socio-economics development;
- Community empowerment;
- Cultural activities: and/or
- Monitoring and evaluation





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EVALUATION EFFECTIVENESS OF MARINE PROTECTED AREA MANAGEMENT IN INDONESIA

KEP.44/KP3K/2012 → **E-KKP3K**

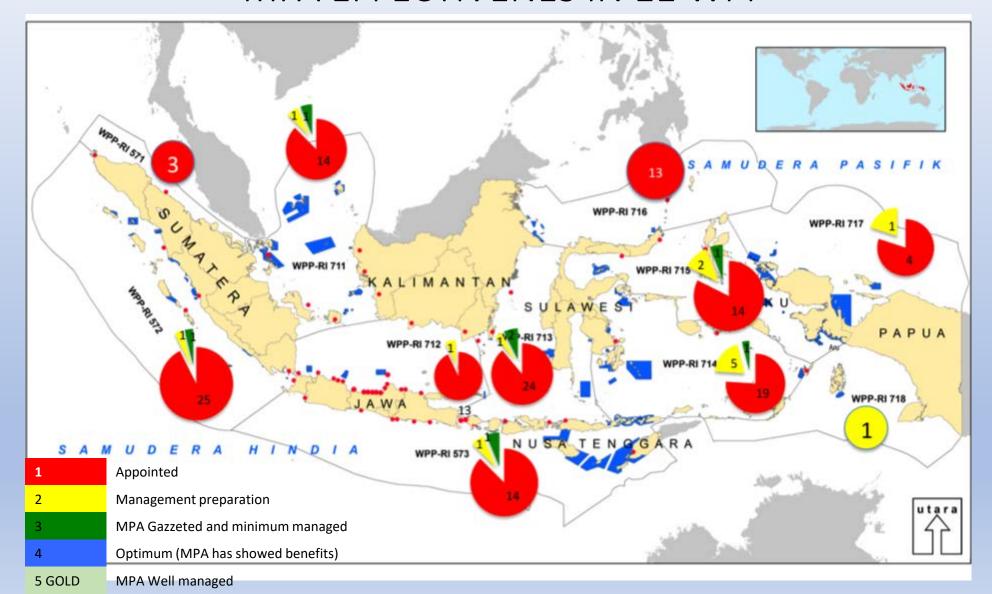




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MPA EFFECTIVENES IN 11 WPP







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Constraints on the Management of MPAs

- Weak institutional (due to Law No 23/2014 on Regional Governance)
 - due to Law No 23/2014 on Regional Governance, Marine areas (including MPAs) under province as marine management authority. the process transfer of the authority of marine management from districts and provinces leads to the transfer of all MPA assets, administration, and coordination so as to influence the efforts of MPA management
- Weak Surveillance and controlling
 large areas and lack of personnel lead to weak supervision
- No sustainable funding

 Limited budget, conservation have not been a priority in some provinces
- Poor of human resources
 poor technical/planning capacity of MPA staff
- MPA is not an integral part of management of WPP (fisheries management areas)

 MPAs is currently only +/- 5% of the WPP area where ideally 30%





