



THE EAST ASIAN SEAS CONGRESS 2015

Global Targets **Local Benefits**

Setting the Sustainable Development Agenda
for the Seas of East Asia beyond 2015

16-21 November 2015 • Danang, Vietnam

OCEAN IN THE NATIONAL INCOME ACCOUNTS: Philippines

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Global Targets Local Benefits

Setting the Sustainable Development Agenda for the Seas of East Asia beyond 2015

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OUTLINE OF PRESENTATION

- I. Scope and coverage of Philippine maritime sector**
- II. Economic Aggregates in Maritime**
(based on available information)
- III. Ocean health**
- IV. Challenges and Areas of Future Concerns**



I. Scope and Coverage

Philippine maritime sector as articulated in the Philippine Standard Industrial Classification (PSIC) 2009

Industry	Industry Description
FISHING	<ul style="list-style-type: none">▪ Ocean fishing▪ Fish corral fishing▪ Catching fish, crabs and crustaceans, shells, clams in inland waters▪ Other freshwater fishing activities, n.e.c.▪ Prawn culture in brackish water▪ Operation of freshwater fishpond▪ Operation of freshwater fish pens and fish cage▪ Operation of freshwater fish breeding farms and nurseries▪ Culture of freshwater crustaceans▪ Culture of oysters, other bivalves and other mollusks in sea water▪ Pearl culture and pearl shell gathering▪ Other fishing activities, n.e.c

Workshop 3.3: Blue Economy Development: Where are we now? Where are we headed?



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I. Scope and Coverage

Philippine maritime sector...

Industry	Industry Description
MINING AND QUARRYING	<ul style="list-style-type: none">▪ Extraction of crude petroleum▪ Extraction of natural gas▪ Extraction of salt
MANUFACTURING	<ul style="list-style-type: none">▪ Canning/packing of fish and other marine products▪ Other types of processing of fish and other marine products▪ Manufacture of engines and turbines for marine propulsion▪ Manufacture of marine capstans, pulley tackle and hoists, etc.▪ Building and repairing of ships and boats
ELECTRICITY	<ul style="list-style-type: none">▪ Generation of Electricity from Natural Gas (<i>not explicitly stated in PSIC</i>)
CONSTRUCTION	<ul style="list-style-type: none">▪ Construction of piers, wharves, dredging, beach reconstruction (<i>not explicitly stated in PSIC</i>)

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I. Scope and Coverage

Philippine maritime sector...

Industry	Industry Description
TRADE	<ul style="list-style-type: none">▪ Trading at sea (not explicitly stated in PSIC)
TRANSPORT AND STORAGE	<ul style="list-style-type: none">▪ Ocean passenger transport▪ Ocean freight transport▪ Interisland water passenger transport▪ Interisland water freight transport▪ Inland freight water transport▪ Renting of ship with operator▪ Towing and pushing services on coastal and transoceanic waters▪ Service activities incidental to water transportation (cargo handling, storage of freight, harbor operations and other activities such as docking, pilotage, lighterage and vessel salvage operations)▪ Customs brokerage (pertains to shipping)
FINANCIAL INTERMEDIATION	<ul style="list-style-type: none">▪ Passenger travel insurance (part of Life Insurance)▪ Vehicle (ship) insurance (part of Non-life insurance)

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I. Scope and Coverage

Philippine maritime sector...

Industry	Industry Description
BUSINESS ACTIVITIES	<ul style="list-style-type: none">▪ Renting of water transport equipment▪ Renting and leasing of recreational and sports goods (specifically equipment which are specific for ocean/sea use)▪ Research and experimental development in natural sciences (particularly on maritime research and development)▪ Labor recruitment and provision of personnel (only those recruitment agencies for sea based workers)▪ Underwater photography
PUBLIC ADMINISTRATION	<ul style="list-style-type: none">▪ Defense activities, public order, and safety activities (refer to services of <u>coast guard</u> and <u>navy</u>, such as rescue operations in the sea)
EDUCATION	<ul style="list-style-type: none">▪ Maritime education and trainings (<i>not explicitly stated in PSIC</i>)
RECREATIONAL SERVICES	<ul style="list-style-type: none">▪ Recreational fishing (not explicitly stated in PSIC)▪ Tourism activities involving sea/ocean (<i>not explicitly stated in PSIC</i>)



I. Scope and Coverage

Statistically speaking, what do we have?

- ✓ **National accounts – a framework for economic accounting covering ALL industries (*implicitly covering Maritime*)**
 - Industries **explicitly** highlighted/available:
 - ❖ **Fishing**
 - ❖ **Water Transport**
- ✓ **Other supporting data/indicators to highlight specific maritime industry**
 - Census of Philippine Business and Industry (CPBI)
 - ❖ **Manufacturing** (processing of fish and other marine products, manufacture of engines & turbines for marine propulsion, marine capstans, pulleys, tackles, etc, building and repairing of ships and boats)



I. Scope and Coverage

Statistically speaking, what do we have?

- ✓ **Other supporting data/indicators to highlight specific maritime industry**
 - Census of Philippine Business and Industry
 - ❖ **Mining and Quarrying** (Extraction and production of crude petroleum and natural gas)
 - ❖ **Transportation & Storage** (Water transport, Service activities incidental to water transportation)
- ✓ **Other data**
 - Fishing volume/value of production
 - Annual Financial Report from Commission on Audit (COA) – for Public Administration related to maritime i.e., Philippine Navy, Philippine Coast Guard



I. Scope and Coverage

Statistically speaking, what do we have?

✓ Other data

- Generation of Natural Gas-fired power plants from Department of Energy
- Enrolment in Maritime Courses (as indicators for Maritime education) – from Commission on Higher Education)
- Labor Force Survey – for employment
- 2006 Input Output Table – for parameters

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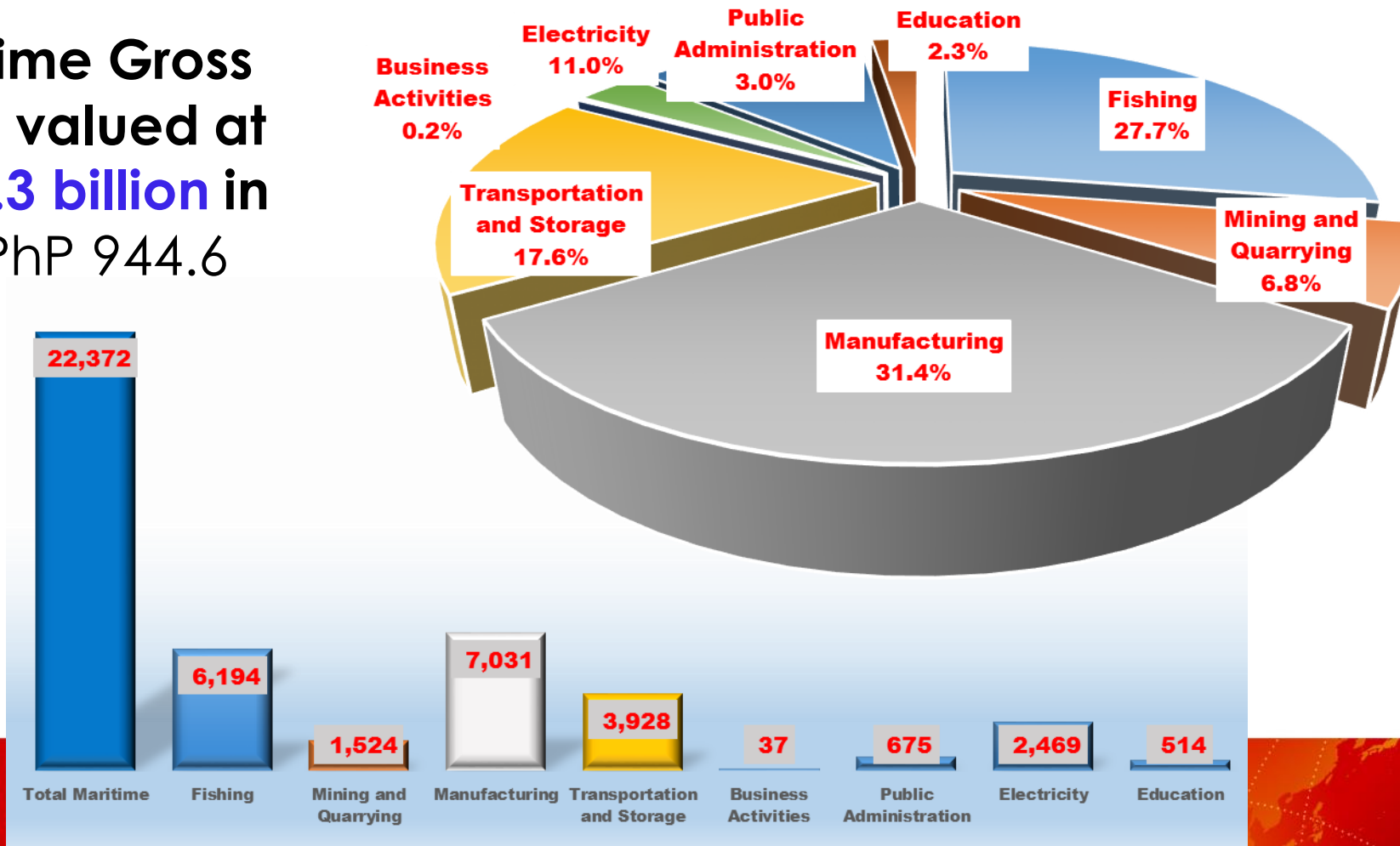
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II. Economic Aggregates

Estimated Gross Outputs (in US\$)

■ Maritime Gross Output valued at **US\$ 22.3 billion** in **2012** (PhP 944.6 billion)





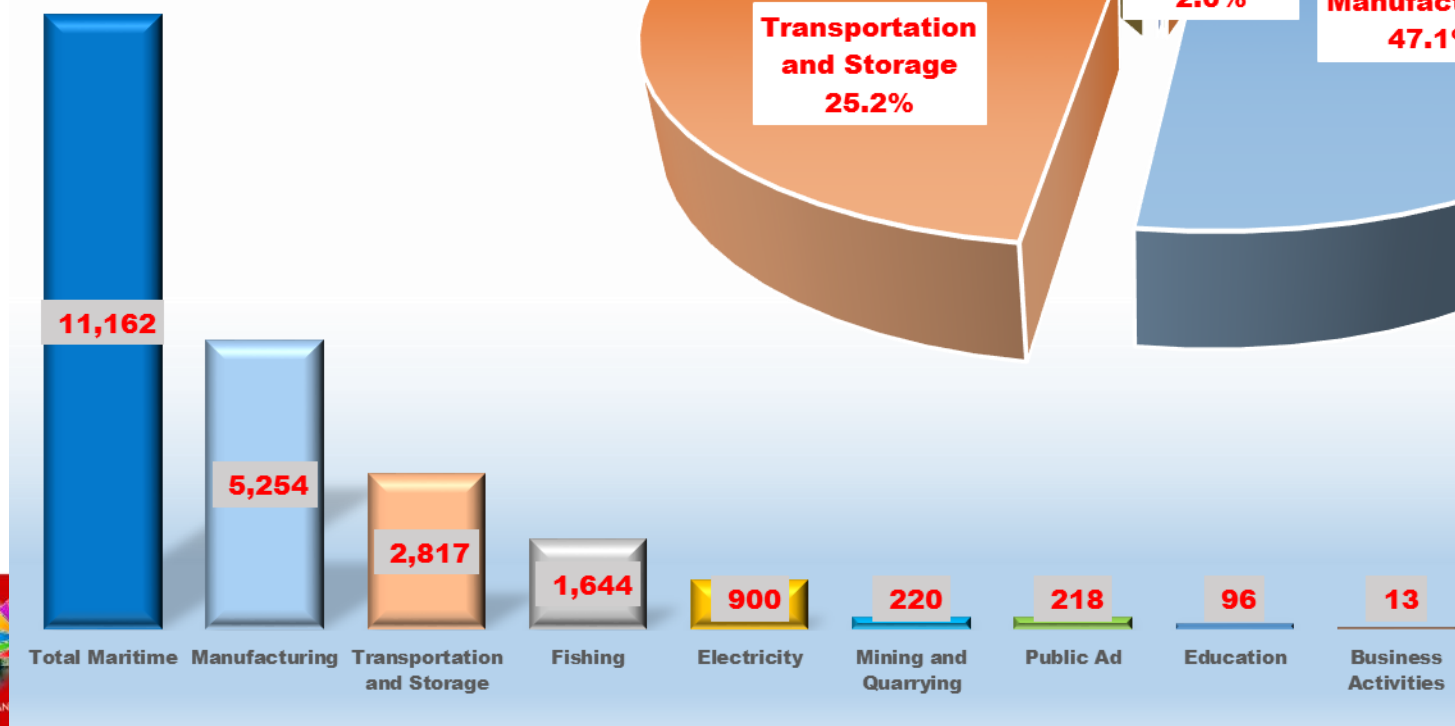
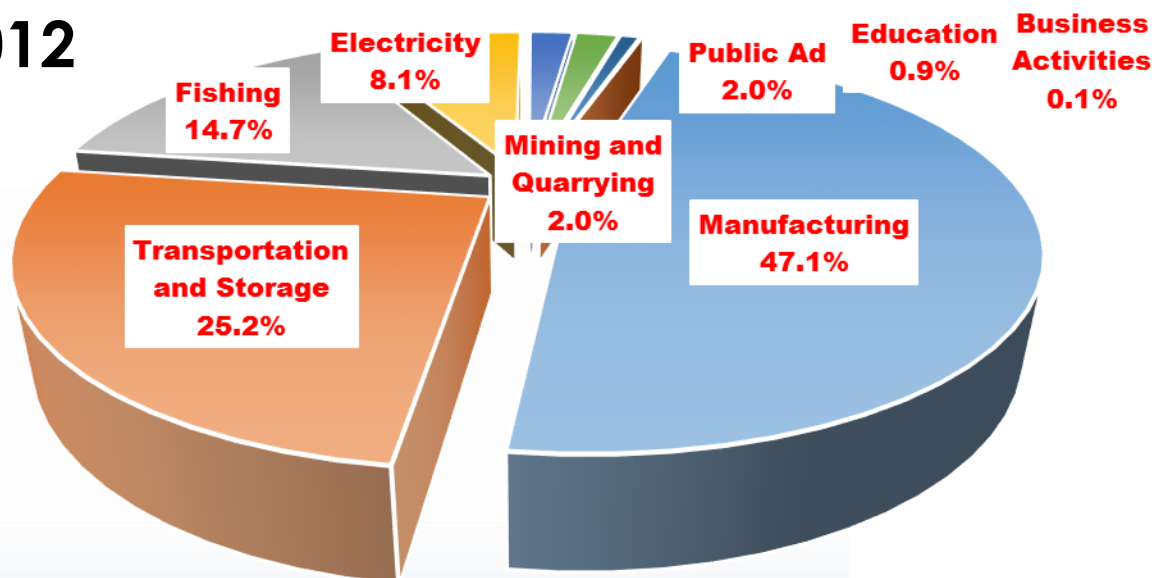
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II. Economic Aggregates

Estimated Intermediate Consumption (in US\$)

- IC of maritime is valued at **US\$ 11.2 billion** in 2012 (PhP 471.3 billion)



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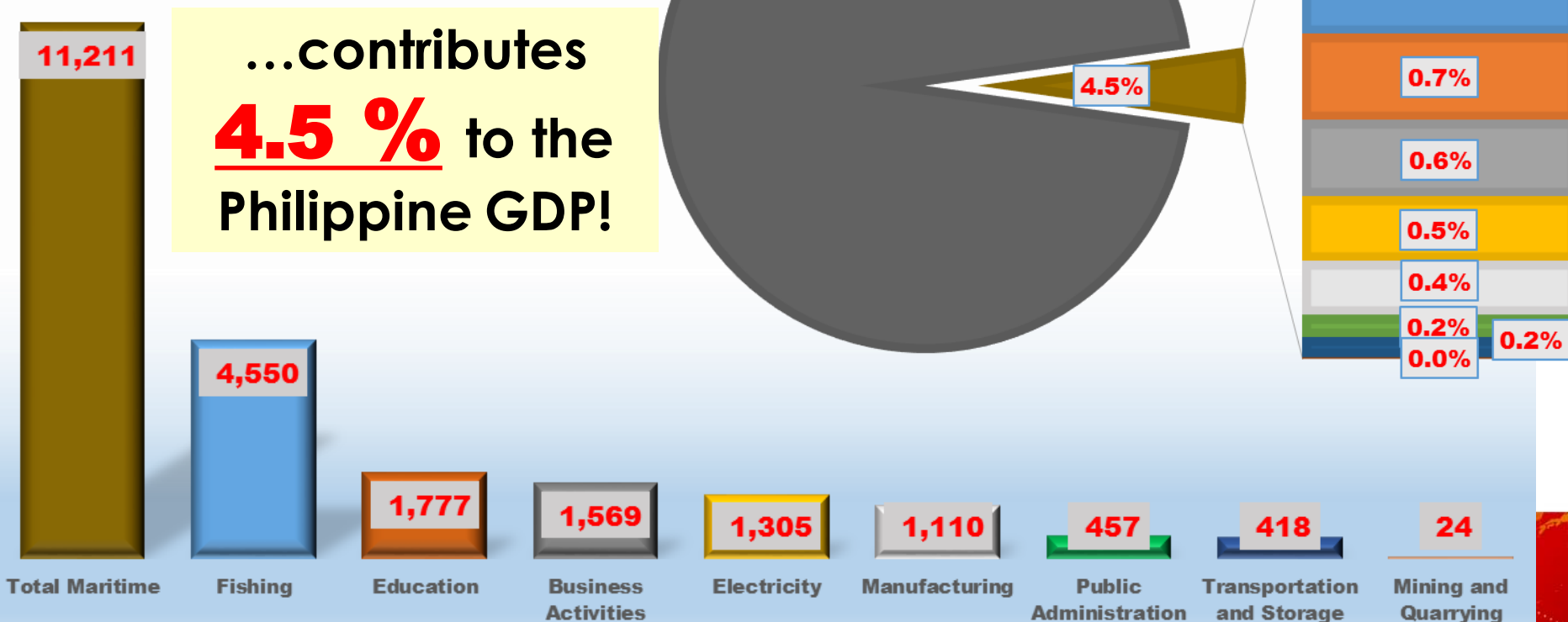
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II. Economic Aggregates

Estimated Gross Value Added (in US\$)

- Maritime GVA valued at **US\$ 11.2 billion** in 2012 (PhP 473.4 billion)

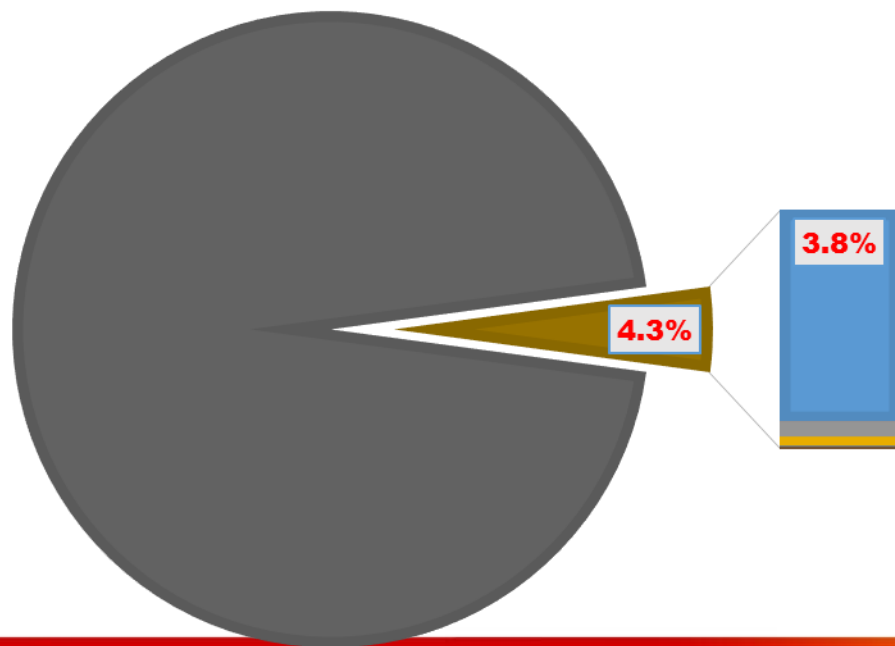




II. Economic Aggregates

Estimated Employment (2012)

- Maritime employment estimated at **1.6 million** in 2012



		Share (%)
Total Employment	37,600,000	
Maritime	1,604,647	4.27
Fishing	1,428,000	3.80
Manufacturing	100,815	0.27
Transportation and Storage	62,513	0.17
Public Administration	5,019	0.01
Education	3,823	0.01
Business Activities	3,034	0.01
Electricity	892	0.00
Mining and Quarrying	551	0.00

- ...represents **4.3 %** to total employment in the Philippines
- ...**3.8%** came from Fishing

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III. Ocean health

Ocean data, 2012

Total fisheries (‘000 mT)	4,869
Capture fisheries growth (avg. annual %, 1990-2012)	1.1
Aquaculture growth (avg. annual %, 1990-2012)	6.2
Marine protected areas (% of territorial waters)	52.8
Coral reef area (km²)	25,060
Mangrove area (km²)	2,565

Source: The World Bank. The Green Data Book. 2014.

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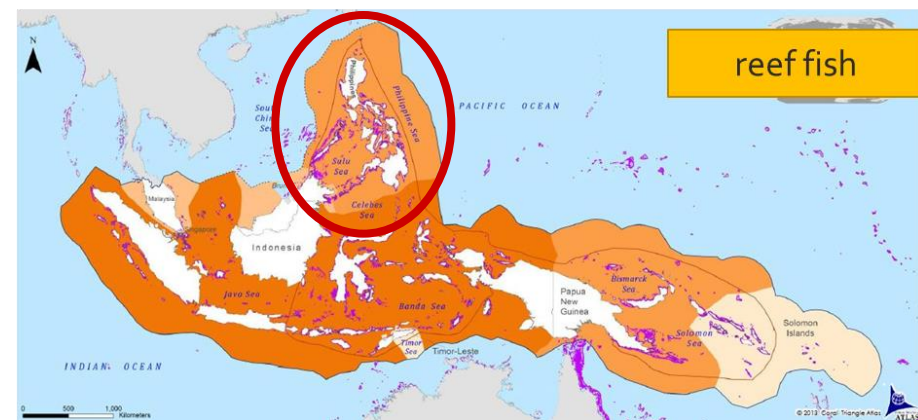
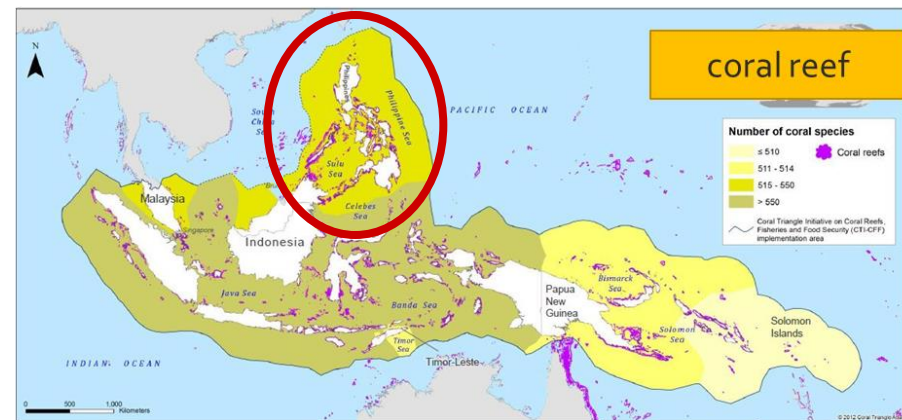


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III. Ocean health

Coastal and Marine Ecosystems



Source: Coral Triangle Initiative

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Net Benefits, PhP million

PHILIPPINES: NET BENEFITS	Coastal				Oceanic	Total	
	Mangrove	Seagrass	Coral Reef	Other Coastal		Amount	%
Provisioning							
Fisheries	143.1	56.7	997.6	5,912.4	3,176.9	10,286.70	42.7
Timber	595.2					595.2	2.5
Sub-total	738.3	56.7	997.6	5,912.4	3,176.9	10,881.9	45.2
Cultural							
Recreation	26.5		94.7	125.6		246.8	1
Education/research	7.5	8.3	10.1	4.7		30.6	0.1
Existence			199.3	16.8	1.4	217.5	0.9
Sub-total	34.1	8.3	304.1	147.1	1.4	494.9	2.1
Regulating							
Carbon Sequestration	172.2					172.2	0.7
Shoreline protection	854.1		2,018.4			2,872.5	11.9
Waste Assimilation	53.8	25.2	695.1	6,091.9		6,866.0	28.5
Sub-total	1,080.1	25.2	2,713.5	6,091.9	-	9,910.7	41.2
Supporting							
Mariculture				2,775.1		2,775.1	11.5
TOTAL	1,852.6	90.1	4,015.2	14,926.5	3,178.3	24,062.6	100
Percent	7.7	0.4	16.7	62	13.2	100	



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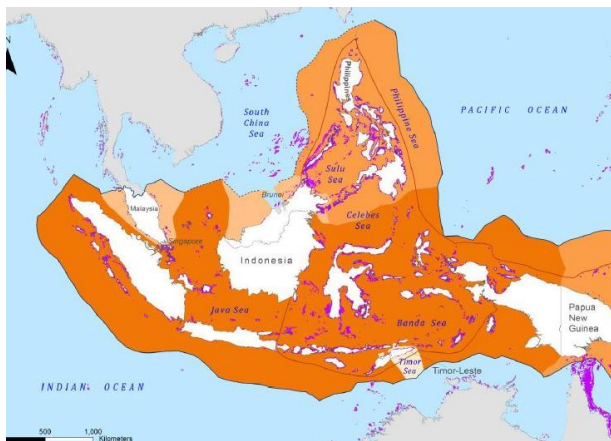


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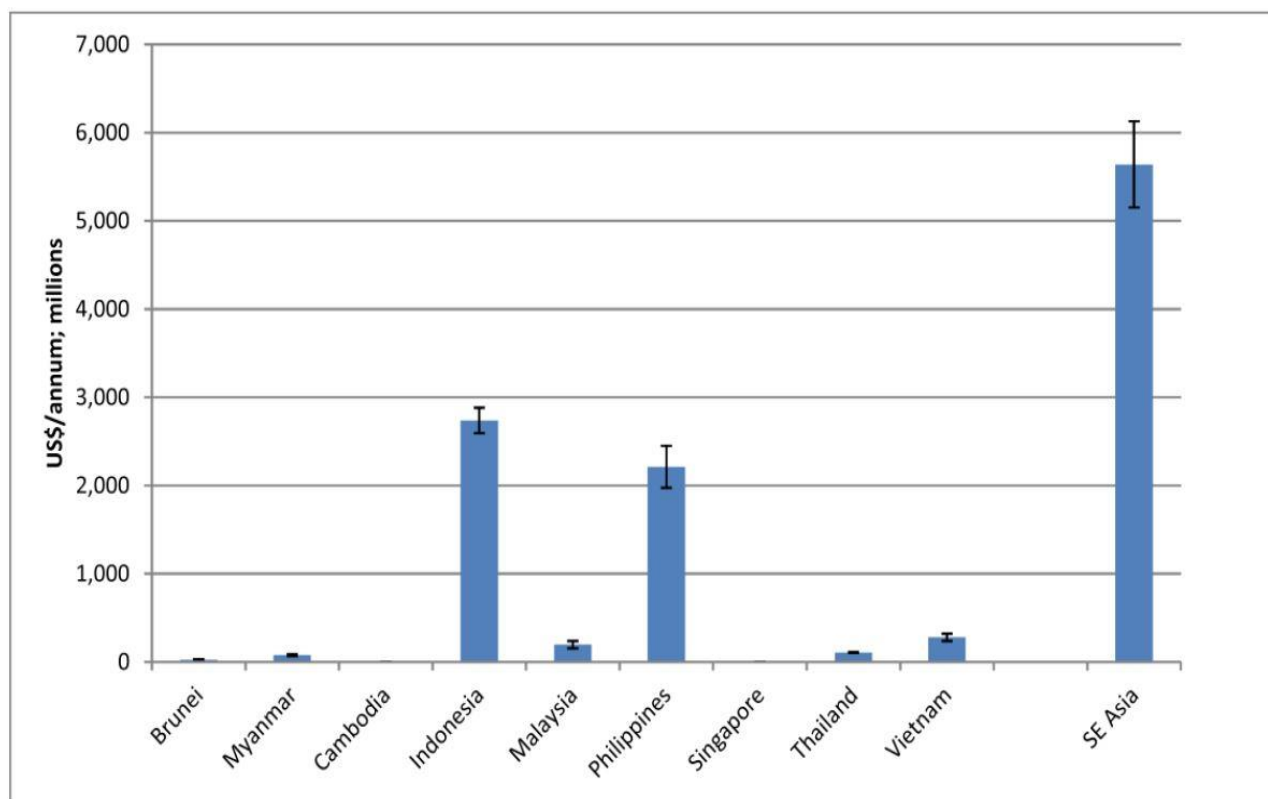
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III. Ocean health

Lost value in reef-related fisheries



Annual loss in value of reef-related fisheries (2000-2050): **US\$ 2.2B/yr**



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III. Ocean health

Environmental Cost (million PhP)

Source/Impact	Ecosystem				Total	%
	Mangrove	Seagrass	Coral Reef	Other Coastal		
Unsustainable Fishing, etc.	207.97	n.e.	1,036.33	1,335.01	2,579.31	45.40
Fisheries impacts; coastal development, pollution and climate change	169.56	-	0.28	0.28	170.12	3.00
Fisheries impacts from overfishing (depletion)	38.41	n.e.	1,036.06	1,074.46	2,409.19	42.40
Coastal development	1,890.61		451.41	0.01	2,342.03	41.20
Conversion to fishponds	1,886.19				1,886.19	33.20
Reclamation	4.42		451.41	0.01	455.83	8.00
Pollution	108.15	5.0	115.62	529.3	759.0	13.40
Human Morbidity/mortality				401.00	401.00	7.10
Oil spill (Guimaras)	108.15	5.70	115.62	122.80	352.27	6.20
Harmful algal blooms				3.47	3.47	0.10
Fish kills				2.01	2.01	<0.1
Climate change			2.35		2.35	<0.1
Coral bleaching			2.35		2.35	<0.1
Total	2,206.73		1,605.71	1,864.05	5,683.08	100.00
%	38.83		28.25	32.82		
Per unit area (Php/ha)	10,553.00		594.71	78.98		



IV. Challenges and Areas of Future Concern

□ Institutional arrangement

- participation in capacity building programs on satellite accounting, specifically focused on ocean economy
- establish data for maritime industry and ocean economy through linkage with data producing agencies
- create a platform for interagency discussions on ocean economic-environment accounts and statistics (i.e., IAC/TF on Maritime Statistics and Accounts
- identify results matrix and policy uses of ocean statistics and accounts



IV. Challenges and Areas of Future Concern

□ Improving the conceptual and statistical framework

- establish conceptual framework of ocean economy as satellite account in the System of National Accounts (SNA)
- develop Philippine statistical framework on ocean economy and environment accounts
- harmonize terms and concepts in the ocean economy(global, regional, local)
- synchronize concepts in ocean economy with the System of National Accounting

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Tourism and Seafarers

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Thank you

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