



# Philippines: the role of environmental protection in the training of seafarers

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# Outline

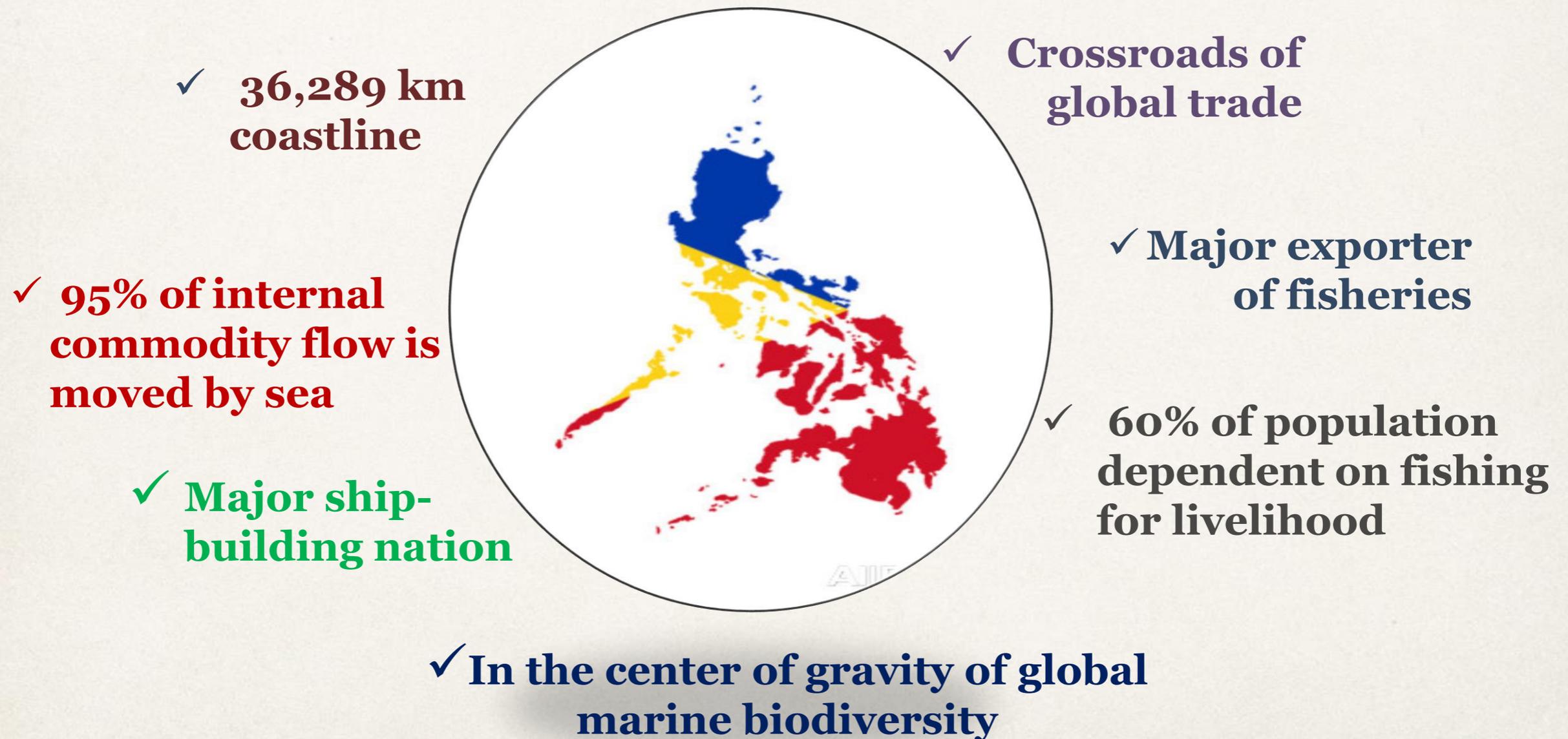
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- ❖ Introduction
- ❖ General maritime interests
- ❖ State responsibilities in the protection of the marine environment
- ❖ Current status of MET&C
- ❖ Maritime education and training of Filipino seafarers
- ❖ Conclusion



# General maritime/marine interests

## ✓ Seafaring capital of the world





# State MEP responsibilities

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- ❖ COASTAL & PORT STATE responsibilities
  - ❖ Philippine Coast Guard (PCG)
    - ❖ SAR
    - ❖ enforcement of vessel safety regulations
    - ❖ port state control
    - ❖ oil pollution response
  - ❖ Philippine Ports Authority (PPA)
    - ❖ construction of port reception facilities
    - ❖ vessel traffic management system



# State MEP responsibilities

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## MARINA

- ❖ FLAG STATE responsibilities:
  - ❖ inspection, audit, certification of PH ships;
  - ❖ also construction, alteration, modification of ships
  - ❖ merchant marine administration: MET&C under the STCW Convention



# Current status

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- ❖ Filipino seafaring
  - ❖ History as source of crew for ocean-going vessels
  - ❖ Significance (for PH, international shipping)
- ❖ Maritime Education, Training, and Certification (MET&C) system
  - ❖ 1978-2012
  - ❖ 2012-2014
  - ❖ 2015 onwards



# White list of schools

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- ❖ Recognized BSMT/BSMarE programs SY '15-'16
  - ❖ 70 BSMT
  - ❖ 63 BSMarE
  - ❖ 76 combined
- ❖ 94 in 2014; 2016-2017 for release in June
- ❖ 148,641 enrollees SY 2015-2016
  - ❖ BSMT: 87,467
  - ❖ BSMarE: 61,174
- ❖ 25,898 projected number of graduates AY 2015-2016



# MEP in PH maritime education & training

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## **STCW, 1978** (*Preamble*)

THE PARTIES TO THIS CONVENTION

DESIRING to promote safety of life and property at sea and the ***protection of the marine environment*** by establishing in common agreement international standards of training, certification and watchkeeping for seafarers,....



# MEP in PH maritime education & training

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- ❖ Senior high school
- ❖ Tertiary education
  - ❖ BSc Marine Transportation
  - ❖ BSc Marine Engineering
- ❖ STCW ancillary courses
  - ❖ Mandatory
  - ❖ Optional



# Senior High School

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- ❖ Last 2 years of high school
- ❖ Ages 15-17 at enrolment, 17-19 at graduation
- ❖ Maritime senior high school
  - ❖ Tech/voc track: direct to ratings
  - ❖ Academic track: preparatory to BSMT/MarE



# Senior High School

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An introduction to the issues

- ❖ Understanding of the concepts and underlying theories in preventing pollution of the marine environment
- ❖ Different types of marine pollution
- ❖ Impact of pollution on marine environment
- ❖ Basic environmental protection procedures



# Senior High School

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- ❖ Marine pollution as international concern
- ❖ Social responsibility of crew to the marine environment
- ❖ Impact of harmful substances on marine resources
- ❖ Sources of marine pollutants from ships
- ❖ Special Areas According to MARPOL 73/78
- ❖ Harmful substances according to MARPOL 73/78



# Senior High School

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## Basic environmental protection procedures

- ❖ Discuss compliance with legislative requirements for protection of the marine environment:
  - ❖ Ship crew found deliberately causing pollution maybe fined or imprisoned or both
  - ❖ State that for Annexes 1, 2, and 5, special areas are created where discharge of oil, noxious substances and garbage are prohibited



# Senior High School

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(...cont'd)

- ❖ Explain special areas according to MARPOL 73/78
- ❖ Discuss pollution control measures provided in the MARPOL 73/78 Convention for oil, noxious liquid substances, harmful substances in packaged form, sewage, garbage, and air pollution



# BSMT/BSMarE

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- ❖ Protection of the Marine Environment (3 cr)
  - ❖ Compliance with pollution-prevention rqmts
    - ❖ Precautions to be taken to prevent pollution of the marine environment
    - ❖ Anti-pollution procedures and all associated equipment
    - ❖ Proactive measures to protect the marine environment



# BSMT/BSMarE

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- ❖ Ship, Ship Routines and Ship Construction (4 cr)
  - ❖ Importance of following manufacturer's safety guidelines and shipboard instructions to keep a healthy and safe environment including the proper disposal of waste materials
- ❖ Deck Watch Keeping (3 cr)
  - ❖ Principles to be observed in keeping a navigational watch as set out in the STCW Code regarding protection of the marine environment



# BSMT/BSMMarE

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- ❖ Deck Watch Keeping (3 cr) (...cont'd.)
  - ❖ Keeping a Safe Deck Watch in Port When Carrying Hazardous Cargo
    - ❖ What is hazardous cargo
    - ❖ Sufficient personnel to be readily available when carrying hazardous cargo in bulk



# BSMT/BSMarE

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- ❖ Keeping a Safe Deck Watch in Port (...cont'd.)
  - ❖ Special requirements necessary for special types of ships or cargo, particularly with respect to:
    - ❖ number of crew required on board
    - ❖ readiness of fire-fighting appliances and other safety equipment
    - ❖ special port regulations
    - ❖ communications with the shore in the event of an emergency



# BSMT/BSMarE

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- ❖ Keeping a Safe Deck Watch in Port (...cont'd.)
  - ❖ special precautions to prevent pollution
  - ❖ OOW should be aware of
    - ❖ nature of the hazards and any special precautions necessary
    - ❖ the appropriate action in spillage or fire
  - ❖ procedure for entry into enclosed spaces using a 'permit to work'; monitoring of work in progress
  - ❖ rescue procedures from an enclosed space



# BSMT/BSMarE

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- ❖ Maritime Communications (3 cr)
  - ❖ ship reporting systems
- ❖ Maritime Law (4 cr)
  - ❖ relevant international instruments concerning vessel safety, security, MEP
  - ❖ legislative requirements and measures to ensure vessel safety, security, MEP



# BSMT/BSMMarE

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- ❖ Maritime Law (4 cr) (...cont'd.)
  - ❖ UNCLOS
  - ❖ SOLAS
  - ❖ MARPOL
  - ❖ LL
  - ❖ STCW
  - ❖ ISM Code
  - ❖ STP
  - ❖ PAL
  - ❖ TONNAGE
  - ❖ BWM
  - ❖ AFS
  - ❖ ISPS
  - ❖ FAL
  - ❖ MLC 2006
  - ❖ LLMC



# BSMT/BSMarE

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- ❖ Maritime Law (4 cr) (...cont'd.)
  - ❖ Guidelines on the Enhanced Programme of Inspections During Surveys of Bulk Carriers and Oil Tanker
  - ❖ Code of Safe Working Practices for Merchant Seamen
  - ❖ Classification societies
  - ❖ Marine Insurance and Liability
  - ❖ Port state control
  - ❖ National legislation for implementing international agreements and conventions



# Stand-alone STCW courses

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- ❖ 14 of 31 mandatory stand-alone courses have MEP
- ❖ Basic Training (BT)
- ❖ Management Level Course (MLC) for Marine Deck Officers
- ❖ Updating Course for Management Level Marine Deck Officers
- ❖ Management Level Course (MLC) for Marine Engineer Officers



# Stand-alone STCW courses

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- ❖ Updating Course for Management Level Marine Engineer Officers
- ❖ Ratings Forming Part of a Navigational Watch
- ❖ Ratings as Able Seafarer Deck
- ❖ Electro-Technical Officer
- ❖ Electro-Technical Ratings
- ❖ Basic Training for Oil and Chemical Tanker Cargo Operations



# Stand-alone STCW courses

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- ❖ Advanced Training for Oil Tanker Cargo Operations
- ❖ Advanced Training for Chemical Tanker Cargo Operations
- ❖ Basic Training for Liquefied Gas Tanker Cargo Operations
- ❖ Advanced Training for Liquefied Gas Tanker Cargo Operations



# Optional stand-alone courses

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- ❖ Consolidated MARPOL 73/78, Annexes I-VI
- ❖ Dangerous, Hazardous and Harmful Cargoes
- ❖ Cargo and Ballast Handling Simulator



# Keeping MEP content current

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- ❖ Panel of STCW Experts
- ❖ Technical Panel on Maritime Education
- ❖ STCW Advisory Council/MARINA Board
- ❖ MARINA Enforcement Service
- ❖ Maritime Attaché London
- ❖ PH Association of Maritime Institutions
- ❖ PH Association of Maritime Training Centers
- ❖ Phil MET Council



*Danke*  
*Mabuhay*

