Current Status and Challenges for Monitoring Marine Debris in ASEAN



Online Workshop on Strengthening Capacity for Marine Debris Reduction and Waste Management in ASEAN Region through
Knowledge Sharing on Marine Litter

24-25 February 2021



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Where is all the plastic?

Plastic waste input from land to ocean: Asia_hot spot

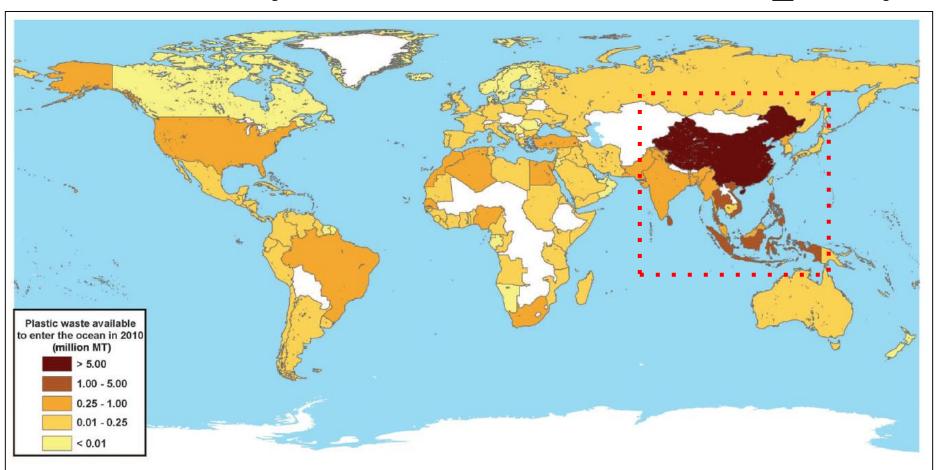
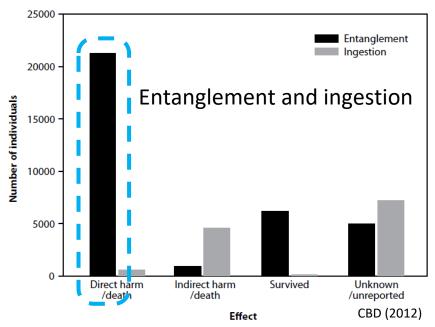
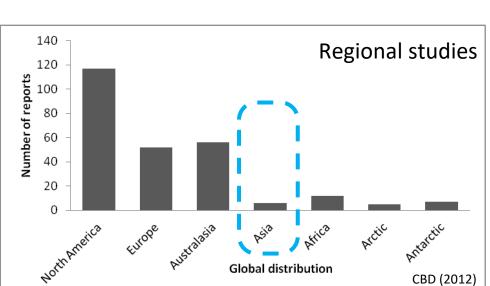


Fig. 1. Global map with each country shaded according to the estimated mass of mismanaged plastic waste [millions of metric tons (MT)] generated in 2010 by populations living within 50 km of the coast. We considered 192 countries. Countries not included in the study are shaded white.

Plastic research in study region





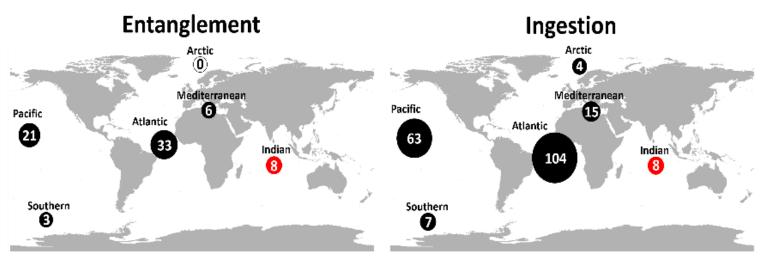


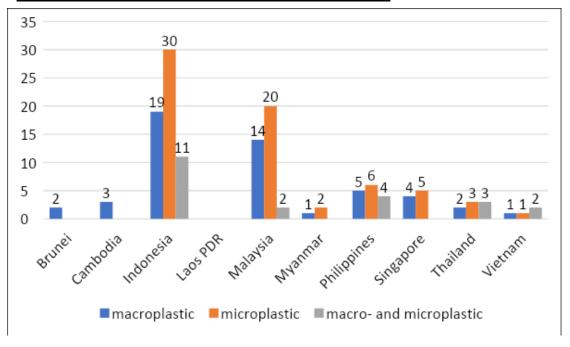
Fig. 5 Global distribution of peer-reviewed studies (until end 2018) investigating interactions of **a**) entanglement with or **b**) ingestion of plastic pollution and marine vertebrates. Note low number of studies in study region



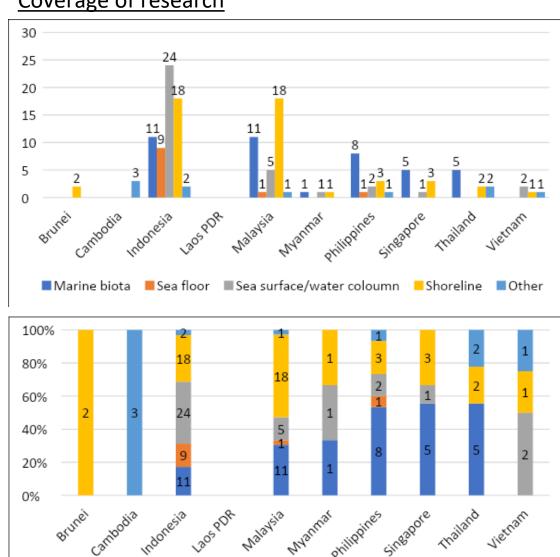
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Lesson Learn: Monitoring marine litter in ASEAN

<u>Distribution of marine plastic research</u>



Coverage of research



■ Marine biota ■ Sea floor ■ Sea surface/water coloumn ■ Shoreline ■ Other

Lesson Learn: limitation and challange, research gaps

Challenge and limitation:

- Limits to staff capacity and expertise are the main challenges to monitoring
- Terminology, guidelines, and reporting tools make monitoring even more challenging
- Different method used
- Harmonization method and data will help ASEAN country to monitor marine litter pollution 'apple to apple' globally

Research gaps between ASEAN - Global:

- Distribution and abundance of plastic debris to understanding sources and pathways
- Physical and physiological impacts of marine debris in biota and marine habitats
- Interaction of plastic associated contaminants (organic and inorganic)
- Plastic debris socio-economic impacts

Terima kasih



Thank you どうもありがとうございまし Cảm ơn nhiều ขอบคุณมาก អរគុណច្រើន **Gracias Danke** Grazie

شكرا لك