



FIG WORKING WEEK 2019

Hanoi, Vietnam 22 - 26 April 2019

Geospatial information for a smarter life and environmental resilience



International
Federation of
Surveyors



Vietnam Association
of Geodesy, Cartography
and Photogrammetry (VAGC)



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April 22-26, 2019 in Hanoi, Vietnam*

OVERVIEW OF MARINE PLASTIC DEBRIS IN VIETNAM IN RELATION TO INTERNATIONAL CONTEXT

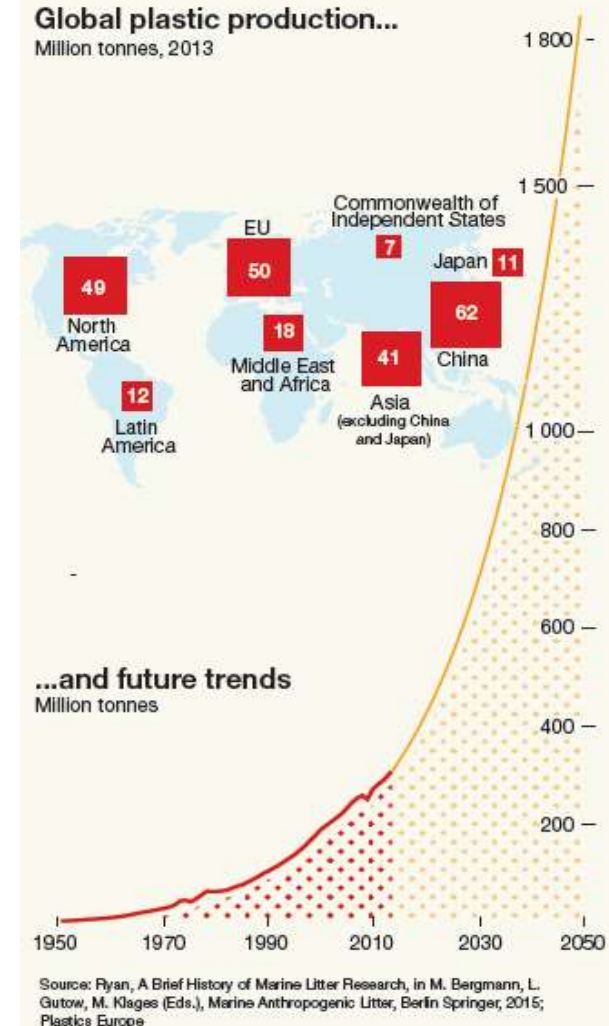
Mr. Le Dai THANG

Viet Nam Administration of Seas and Islands

Email: ldthang@monre.gov.vn **Cellphone:** +84 936166226

Marine plastic debris - A **Global** **Transboundary Concern**

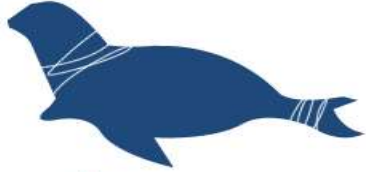
- Plastic used in **all sectors**: majority in packaging (40%), construction (20%), automotive (9%), electrical & electronic (6%) and agriculture (3%)
- Plastic **increase** from 1.5 to >380 million tonnes produced/year since 1950s.
- Global 2010: ~ 2.5 billion tonnes of SW produced; ~ 275 million tonnes mismanaged plastic waste generated from coastal countries; 4.8 to 12.7 million tonnes of this 275 million tonnes entered the oceans.
- **Poorly managed** globally: ~9% recycled, ~12% incinerated, and remaining 79% landfilled or littered
- Plastic items are consistently the most **abundant type** of marine debris identified around the globe, and can amount to more than 80 percent of reported debris.
- **80% of the floating debris** was composed of plastics items



Marine plastic debris - A **Global** **Transboundary Concern**



Dead to marine creatures by **digestion**



Stuck in the floating fishing gear



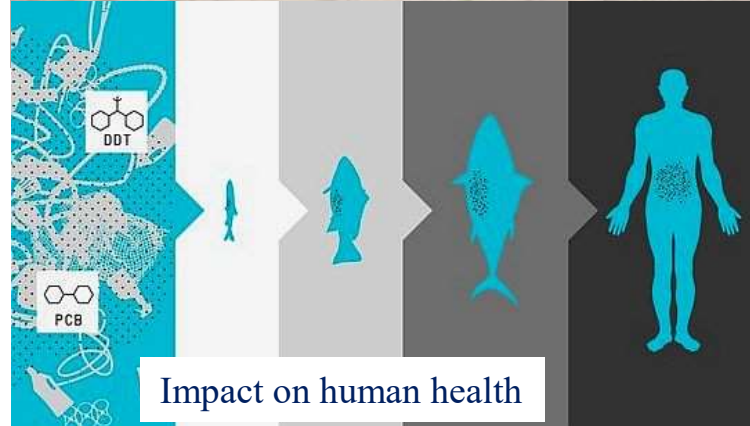
Destruction of **habitat**



Import of **alien** species



Impact on tourism



Impact on human health

Impact on ecosystems, the environment, health, and marine economic activities.

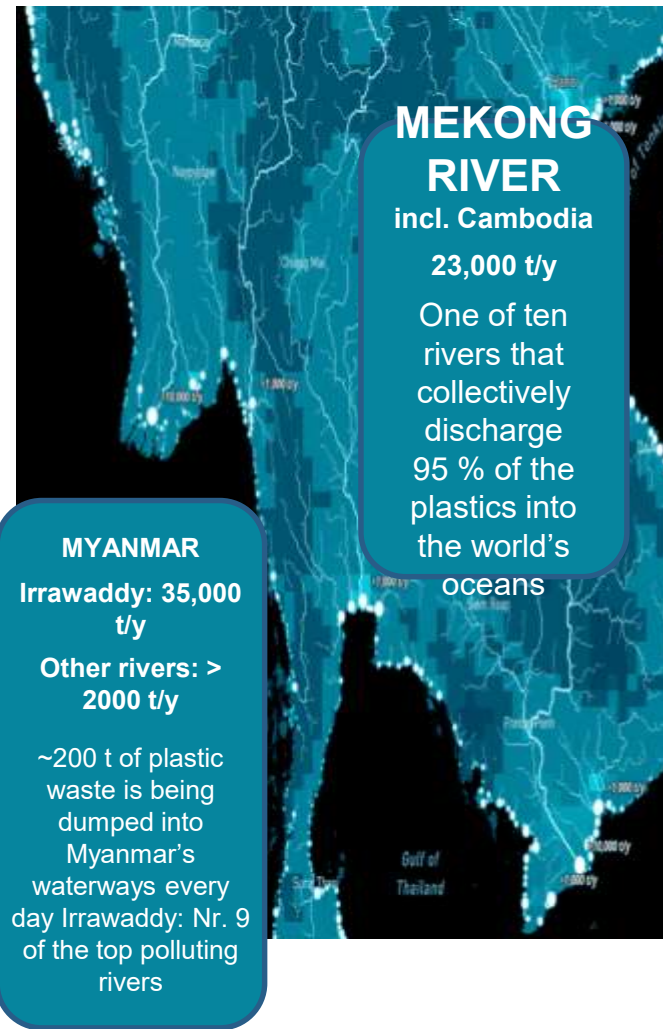
Difficulties & Problems FACING

- ❑ **Not all** plastics are recyclable or recycled
- ❑ Plastic waste may **escape** waste streams, **enter** the environment leads to environmental **contamination** on land, in freshwater and in **marine environments**
- ❑ **Inadequate management** of plastic waste has led to increased contamination of freshwater, estuarine and marine environments
- ❑ Mainly developing countries, experiencing rapid economic growth, but not yet having efficient **waste-management infrastructures**

80% of ocean plastics are originating as land-based leakage, therefore much of the solutions lies in the integrated solid waste management

Difficulties & Problems FACING

- ❑ VN among the **top 5 countries** - with the estimated amount of plastic waste **discharged** into the sea
- ❑ Plastic debris forms a thick layer on **bottom** mud, covering **roots** and **branches**, causing great harm to the ecosystem.
- ❑ Highest **collection rate** of solid waste is 84% to 85%
- ❑ Solid waste is mainly treated by **open dumping** or incineration
- ❑ amount of plastic waste and plastic bags accounts for about **8 - 12% of domestic solid waste**
- ❑ Types of plastic bags: PE, PP or PVC ... that are **difficult to decompose**
- ❑ The **widespread use** of plastic products and plastic bags in social activities.



REAL IMAGES



Waste at Ly Son **fishing port**, Quang Ngai



Waste in the **fishing village** on Ha Long Bay



Waste covers the **coastal zone** of Ninh Thuan



Plastic Waste on **mangrove** in Hau Loc, Thanh Hoa

Difficulties & Problems FACING

- **Limited Understanding:** generating, dispersing & transforming, impacts on the environment, ecosystems and marine resources.
- Lack of practical **experience** in assessing the status of controlling and managing plastic waste at sea
- Investigation/survey and **statistics** activities are still limited, leading to incomplete **information** and data to serve management

Responses & Achievements

- Current management: **OPEN DUMPS; Landfill**, incineration, waste to energy, recycling
- Strategies/policies/regulations **Issued**.
- Decision No. 582/QD-TTg dated 11/4/2013: 2020 will reduce 65% of volume difficult-to-decompose plastic bags at supermarkets and commercial centers compared to 2010”
- 2017: non-biodegradable plastic bags in supermarkets **decreased by 50%** compared to 2010
- 90% of supermarkets and commercial centers used **E-friendly** plastic bags to replace difficult-to-decompose plastic bags.
- Preferential policies**: No environmental protection tax ON E-friendly plastic bags.

Research Content	International	Viet Nam
Current Status	Have evaluated	Evaluating
Impact	Have evaluated	Evaluating
National Action Plan	Some countries (Indonesia...)	Developing

Responses & Achievements

- Enterprises' aim: **produce** E-friendly plastic bags.
- Enterprises/companies printed labels and **product codes** so that consumers can identify the types of E-friendly plastic bags (thickness > 30 micrometers) or biodegradable plastic bags.
- The country has **43** plastic-bag **products** of **38** recognized enterprises that are E-friendly



Decree 38/2015/NĐ-CP

Circular 36/2015/TT-BTNMT



The way **AHEAD**

More information needed to understand the **types, quantities** and **locations** where plastics are entering the waterways and what can be effective **policies** and **investments** to reduce.....

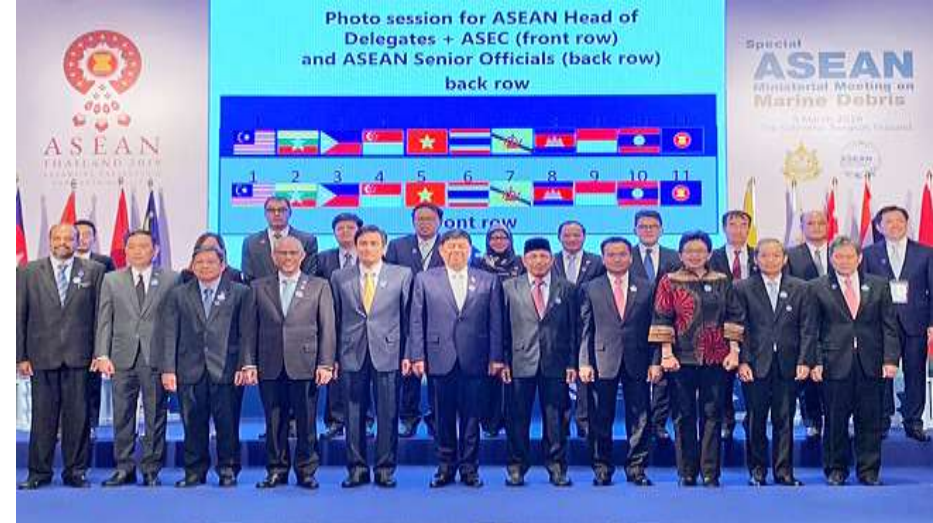
- Appropriate** waste management **strategies**
- Limit** and proceed to **terminate** the import, production and supply of difficult-to-biodegradable plastic bags from 2026 at commercial centers and supermarkets for domestic purpose (No. 491/QD-TTg dated May 7, 2018)
- Using **100% E-friendly plastic bags** at commercial centers, supermarkets for living purposes to replace difficult-to-biodegradable plastic bags

Research need to be done:

- Current **status** of plastic and micro-plastic waste in coastal zone of VN.
- **Impact** of plastic and micro-plastic waste to environment.
- **Policy** developing in preventing marine plastic waste from the source.

The way **AHEAD**

- National Plan** for the management of ocean plastic waste by 2030 with a vision to 2045
- Mechanism** for reducing plastic waste that the PM stated at the G7 Summit (Canada 2018)
- Regional partnerships** in the EAS on ocean plastic waste management (GEF 6 Da Nang)
- Increasing the tax rate** for non-biodegradable plastic bags
- Cooperation and support** of countries and financial institutions



The way **AHEAD**: VN' INITIATIVES



VN PM Nguyễn Xuân Phúc suggested the G7 (Jun 2018) countries develop a **global cooperative mechanism** to reduce plastic waste.

MONRE Minister: proposed a regional project to “**Establish a regional partnership** for EAS on marine plastic waste management” GEF 6 ASSEMBLY (June 2018)



The way **AHEAD** - VN' **INITIATIVES**



P.M Nguyen Xuan Phuc and WEF Founder Professor Klaus Schwab witness the signing of a letter of intent on developing **initiatives for plastic** waste treatment **WEF 2019**



MONRE Minister Tran Hong Ha proposed GPAP (**The Global Plastics Action Partnership**) to support Vietnam's initiative on establishment of **International Research Center on marine plastics**. (**WEF on ASEAN 2018**)



CIRCULAR ECONOMY

Circular economy can help us transition to more **sustainable future**, without plastic waste

THANK YOU FOR YOUR ATTENTION!