WESTPAC Programme/ Project/Working Group

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Guidelines

What

To take stock of the **implementation status** and further catalyze ocean science solutions for sustainable development, this ppt template is designed to:

- Gather information on the **current development status** of the WESTPAC Programme/Project/Working Group, particularly since the Fourteenth Session of the IOC Sub-Commission for the Western Pacific (WESTPAC-XIV) in *April 2023*.
- More importantly, assess its **future development**, along with **potential action plans** for future implementation, i.e., for the period of *2025-2026 and beyond*.

Why

- The Information will facilitate considerations concerning how to harness, stimulate and empower interdisciplinary ocean research that can increase our understanding and inform policy and decision-making.
- It will also aid in improving programme efficiency and effectiveness that will serve the requirement of Member States and the Sub-Commission as a whole.

How

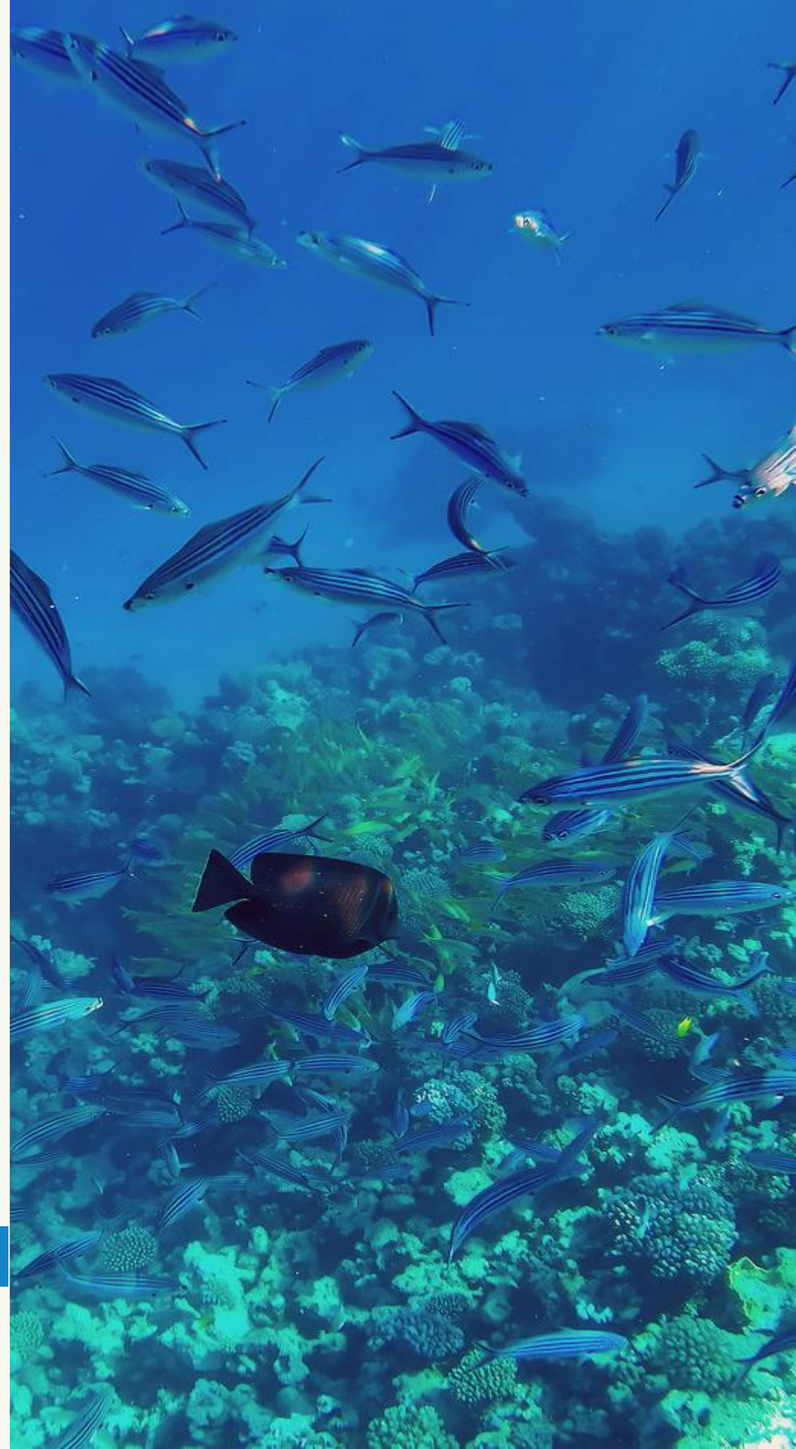
Filling out the following slides, which should not take much time, and return the completed slides to *iocwestpac@unesco.org* by **20 September 2024**. We appreciate your kind cooperation.

Note:

- *Feel free to use a different slide layout if it better suits your summary content.*
- *Failure to submit will be considered as a lack of substantive activity and may indicate difficulties in continuing the project.*

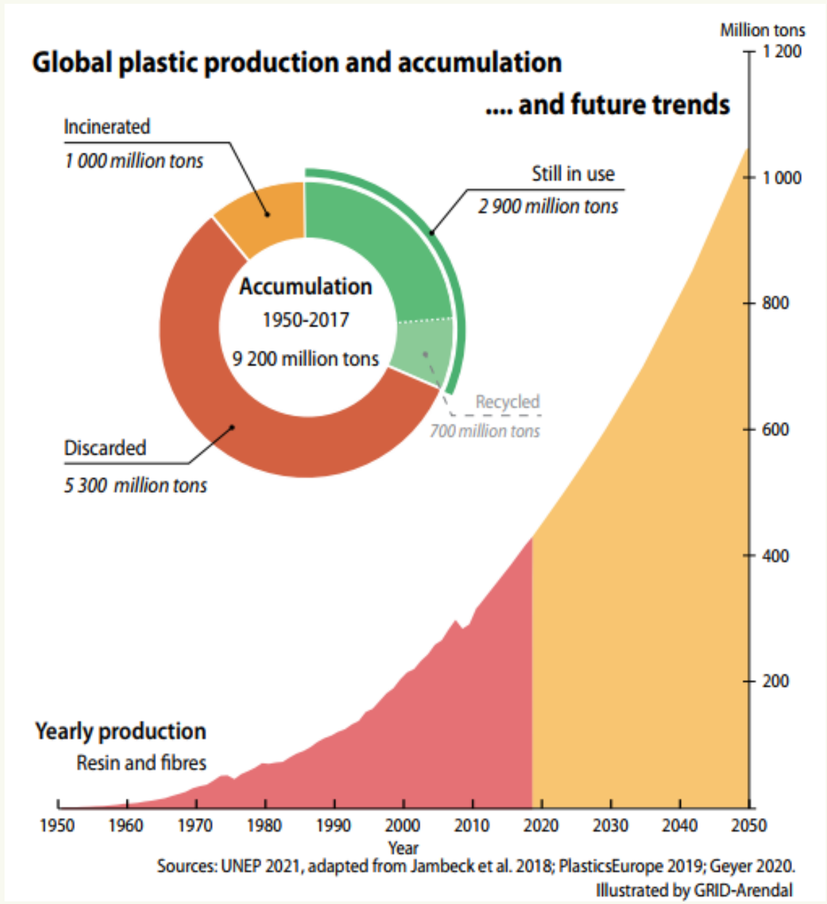
Summary Outline

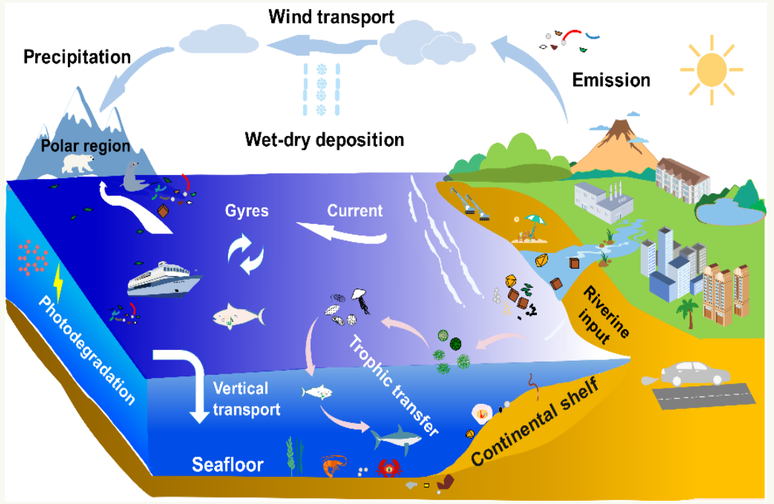
1. Justification
2. Objectives
3. Major activities, outputs & outcomes (particular those accomplished during 2023-2024)
4. Problems encountered and recommended actions
5. Strategic considerations/thoughts for future development
6. Potential action plans for 2025-2026 and beyond



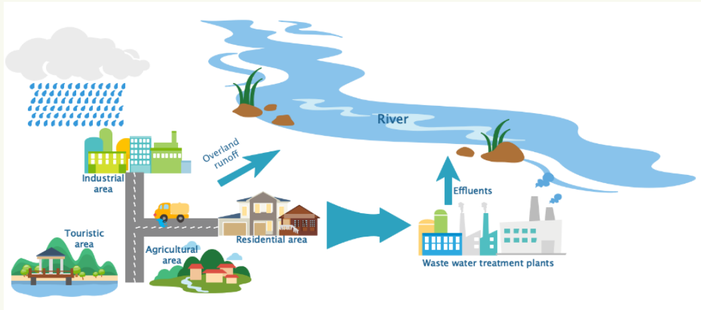
1. Justification

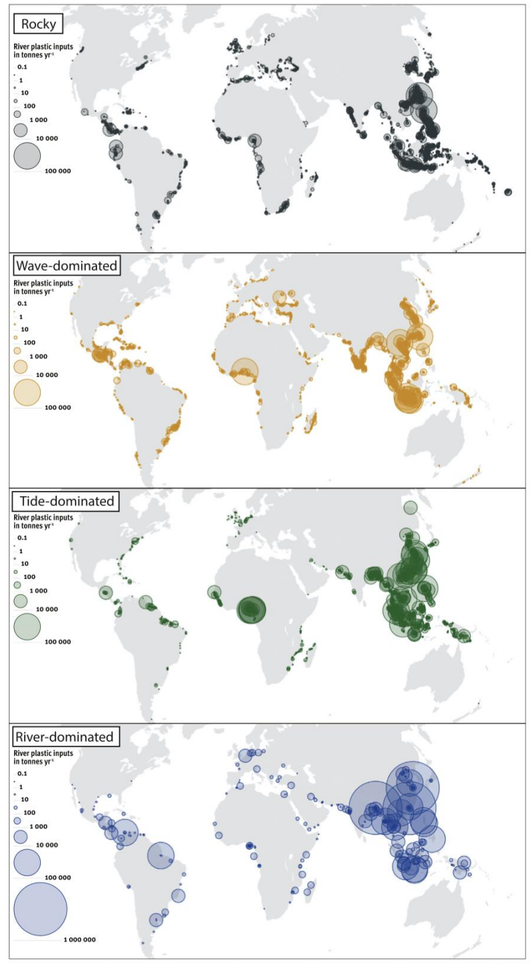
Rivers are major pathways transporting land-based plastics and microplastics to the ocean





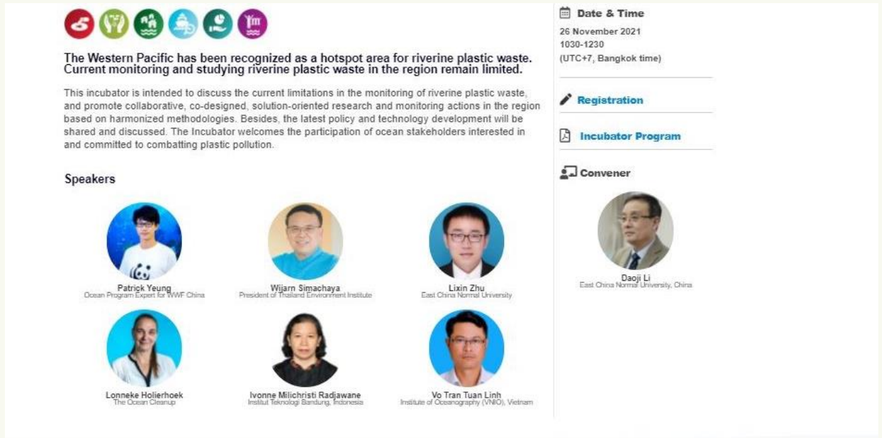
Plastic pollution and plastic cycle

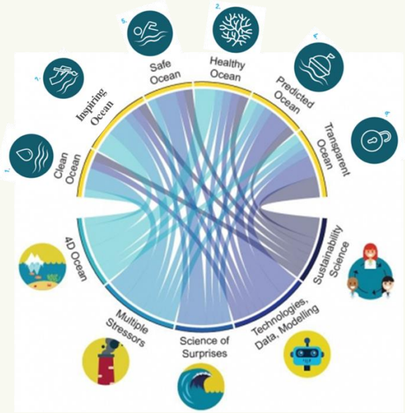




River-dominated coasts comprise only 0.87% of the global coast and yet they receive 52% of plastic pollution delivered by fluvial systems.

2. Objectives





- Develop a better understanding of the sources, pathways, fluxes, leakage and accumulation hotspots of river plastic and microplastics via co-designed field samplings, site visits, analysis, and modeling.
- Catalyze management, infrastructure, technological and behavioral solutions to reduce riverine plastic waste, via the conduct of joint research, capturing and sharing of lessons learned and best practices, technology innovation, and engagement of local authorities, NGOs, business and private sectors, and other stakeholders if relevant.
- Develop research capacity of young scientists and students in developing countries for marine plastic and microplastic research and monitoring.

3. Major activities, outputs & outcomes

Latest accomplishment, particular those during 2023 to 2024

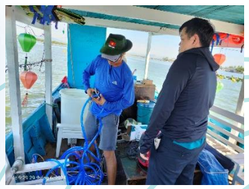
Major Activities

- On 20 May 2022, brainstorming online meeting.
- A series of virtual meetings were held between 9 August and 15 October 2022, to further detail the project and define clear objectives for each stage of the research.
- On November 20-22, 2023，WESTPAC-ECNU international workshop “Stem the tide of ASIA’s riverine plastic emission into the ocean”
- December, 2023, Collaborative Filed work in Nile River, Egypt
- April, 2023, Introduce the 14th Intergovernmental Meeting of UNESCO IOC/WESTPAC
- April 24, Decade Action workshop in the 2nd UN Ocean Decade Regional Conference & 11th WESTPAC International Marine Science Conference;
- June, 2024, Field work in the pilot river in Vietnam;
- July, 2024, Collaborative work in the pilot river in Thailand;
- August, 2024, Filed work in the pilot river in Malaysia.

Timeframe

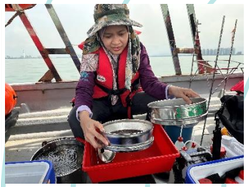
Project start year: 2022











Unveiling the Fate of Microplastics in Water and Zooplankton at Estuarine Fronts Using Intergrated Approaches: Subsidies for Imperative Understanding of its Environmental Dispe

3. Major activities, outputs & outcomes

Latest accomplishment, particular those during 2023 to 2024

Outputs & Outcomes

- 14 pilot rivers were chosen by representatives from different member states to conduct this project;
- Two working groups were built to conduct situation analysis and methodology harmonization work;
- ~50 young researchers from different member states were trained for μ-FTIR, py-GC/MS and additives extraction.
- More than 200 field samples were collected and are being analyzed.
- Catalyze two projects (1. Unveiling the Fate of Microplastics in Water and Zooplankton at Estuarine Fronts Using Intergrated Approaches: Subsidies for Imperative Understanding of its Environmental Dispersion 2. Riverine plastic fluxs in four major rivers in Hainan)
- 2 scientific papers were published.
- 5 outreach activities

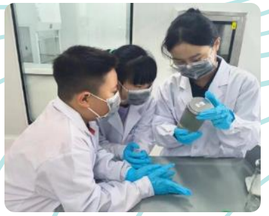
Timeframe

Project start year: 2022

WG1: Situation analysis

WG2: Methodology Harmonization

Training



4. Problems encountered & recommended actions

Problems encountered

- Financial limitation
- Sample analysis burden- too many samples!
- …

Timeframe

Project start year: 2022

Actions

- Catalyze new projects from different funding sources
- Involve more students and technicans?
- …

5. Strategic considerations/thoughts for future development

1. Better involvement of other sectors
2. Policy briefing every year
3. Potential establishment of Regional Instrument Sharing Platform.

6. Potential action plans for future implementation

for the period of 2025-2026 and beyond

(1)By Dec 2024, publish the outcomes of the two working groups

(2)October 2024, another sampling activity in the pilot river in Vietnam;

(3)November 2024, Training activities on methodology and research capacity building;

(4)May-August, Collaborative sampling in China, Malaysia, the Philippines

(5)Whole year: Sample analysis

(6)By 2025.12, at least 100 young scientists and students in Asia countries trained to do riverine plastic and microplastic related research.

Planned activities

Program	Plan				Funding Required		Remark
	Activities	Objectives	Expected outputs/outcomes	Date and place	IOC	Other sources (i.e. from national or international)	
	1. Publish the outcomes of the two working groups	Publish the outcomes of the two working groups	1. A set of standardized methodology developed for riverine plastic and microplastic monitoring and flux estimate. 2. Situation analysis reports of different member states	December 31th, 2024 Online	0	10,000 RMB From East China Normal University	
	2. Training workshops for the riverine plastic and microplastic sampling,	Based on the methodology established, train young scientists and students in the Asia-Pacific region on the using of the methodology	At least 50 young scientists and students will be trained.	May. 17-19th, 2025 Shanghai, China	0	150,000 RMB From East China Normal University	
	3. Filed sampling in pilot rivers	Collect *in situ* riverine plastic and microplastic data in pilot rivers	At least three pilot rivers will be sampled and the data will be obtained.	May 2024, August 2024, Selected pilot rivers	0	100,000 RMB From East China Normal University	
	4. Sample analysis	Baseline data	Baseline data	Whole year	0	80,000 RMB From East China Normal University	

ThankYou

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