



Implementing the Strategic Action Programme for the South China Sea and Gulf of Thailand (SCS SAP Project)

Second Meeting of the Regional Working Group on Land-Based Pollution

11-12 November 2024, Shenzhen, China

Details and Requirements in the Development and Updating of the Transboundary Diagnosis Analysis and Strategic Action Programme

Part 1



Updating the Transboundary Diagnostic Analysis (TDA) and
Strategic Action Plan (SAP) for the South China Sea

Process and content:
For discussion

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2nd Meeting of the Regional Scientific and Technical Committee, July 23-25, 2024, Bangkok, Thailand

Outline

1. What is a **transboundary** environmental problem?
2. What is a **TDA-SAP process**?
3. What is our **history** in using a TDA-SAP for the South China Sea?
4. Why do we need to **update** the TDA and SAP now?
5. What are our **options** for a **process** of updating?
6. What **data and information** are needed?
7. What **possible next steps** to make?

1. What is a **transboundary** environmental problem? Spatial scale = **2 or more countries; global**

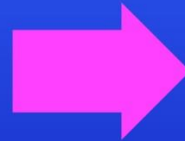
- A. **Migratory species** (e.g. turtles, marine mammals, fish stocks)
- B. **Areas where important species or resources** are found, i.e. straddles 2 or more countries (including aquifers, lakes & rivers)
- C. **Areas whose environmental status** will have transboundary consequences, even if found wholly in a single country's jurisdiction
- D. **Risks or threats** that may cross national boundaries
- E. **Global significance** – planetary boundaries for species, ecosystems and **nutrients** that need to be maintained for the provisioning of regional or global ecological goods and services
- F. **Aggregated common national concerns that are of a magnitude that would take regional or global significance**

2. What is a TDA-SAP process?

TDA

*Transboundary
=spatial scale
Objective
Inclusive*

- Identify & prioritise transboundary environmental problems (2 or more countries)
- Examine environmental impacts & socioeconomic consequences
- Analyse immediate, underlying and root causes of each TB problem



SAP

*Negotiated policy
document
Endorsed by
governments*

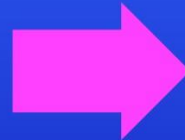
- Distinguishes actions addressing transboundary problems and which can potentially yield global benefits; from actions with purely national benefits
- Establishes clear priority for actions, especially those that can address root causes

3. History: Pioneer Projects

TDA

*Transboundary
=spatial scale
Objective
Inclusive*

- **1997-1999**
- Country Reports by 7 National Committees of
- National Coordinators weighted environmental issues
- Major Issues: (1)Habitat loss & degradation; (2) Fisheries overexploitation in GOT; (3) Land-based pollution

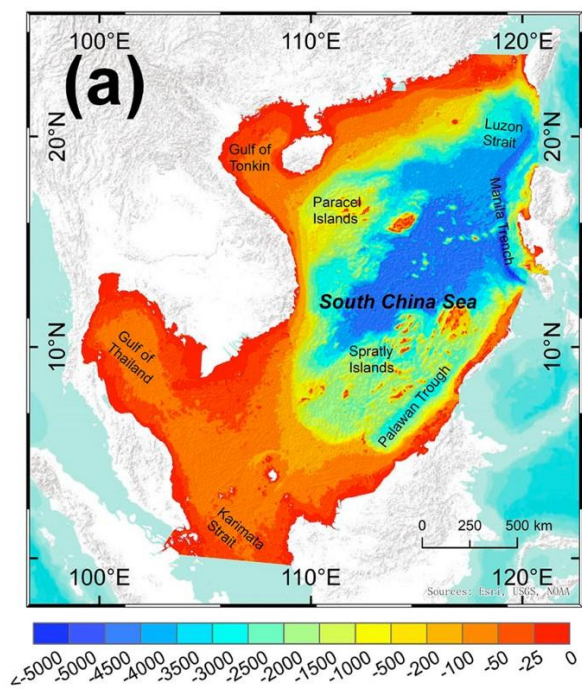


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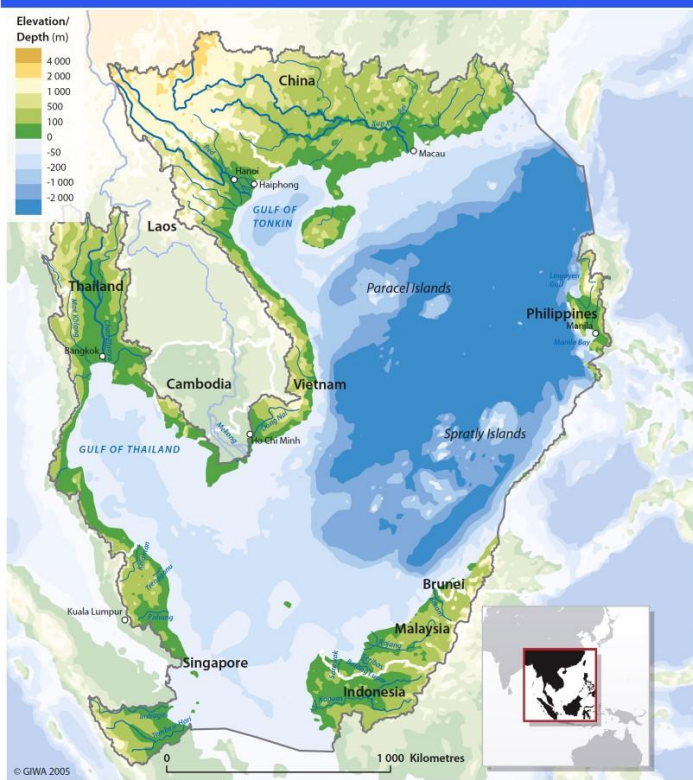
- **1998-2000** for SAP formulation
- Basis for GEF South China Project “Reversing Environmental Degradation Trends in the South China Sea and the Gulf of Thailand”
- **Implemented 2002-2009, addressed 3 major issues identified by the TDA**
- **SAP Projects 2013, 2016**

3. History: GEF relevant projects in the SCS-GOT (16 GEF projects = national, regional, global) [IWLearn Database]



Regional Activity/ Project	Inclusive dates	GEF Agency
1. Prevention and Management of Marine Pollution in the East Asian Seas	1993-1999	UNDP/ IMO
2. GEF Preparatory Activity: TDA-SAP	1997-2000	UNEP Regional
3. Building Partnerships for the Environmental Protection and Management of the East Asian Seas	1999-2016	UNDP PEMSEA
4. Reversing Environmental Degradation Trends in the SCS and GOT (SAP)	2002-2009	UNEP Regional
5. East Asian Seas Region: Development and Implementation of Public Private Partnerships in Environmental Investments	2004-2009	UNDP PEMSEA
6. Implementation of Sustainable Development Strategy for the Seas of East Asia	2007-2012	UNDP PEMSEA
7. Implementing the Strategic Action Programme for the South China Sea	2013 -	UNEP
8. Establishment and Operation of a Regional System of Fisheries Refugia in the South China Sea and Gulf of Thailand	2016 -	UNEP/ SEAFDEC

3. History (con't)



Global GEF Projects	Inclusive dates	GEF Agency
9. Global International Waters Assessment	1999-2006	UNEP Global
10. Role of the Coastal Ocean in the Disturbed and Undisturbed Nutrient and Carbon Cycles	1999 - 2002	UNEP Global
11. Removal of Barriers to the Effective Implementation of Ballast Water Control and Management Measures in Developing Countries	2000-2005	UNDP Global
12. Targeted Research for Improving Understanding of the Global Nitrogen Cycle towards the Establishment of an International Nitrogen Management System INMS	2014 -	UNEP

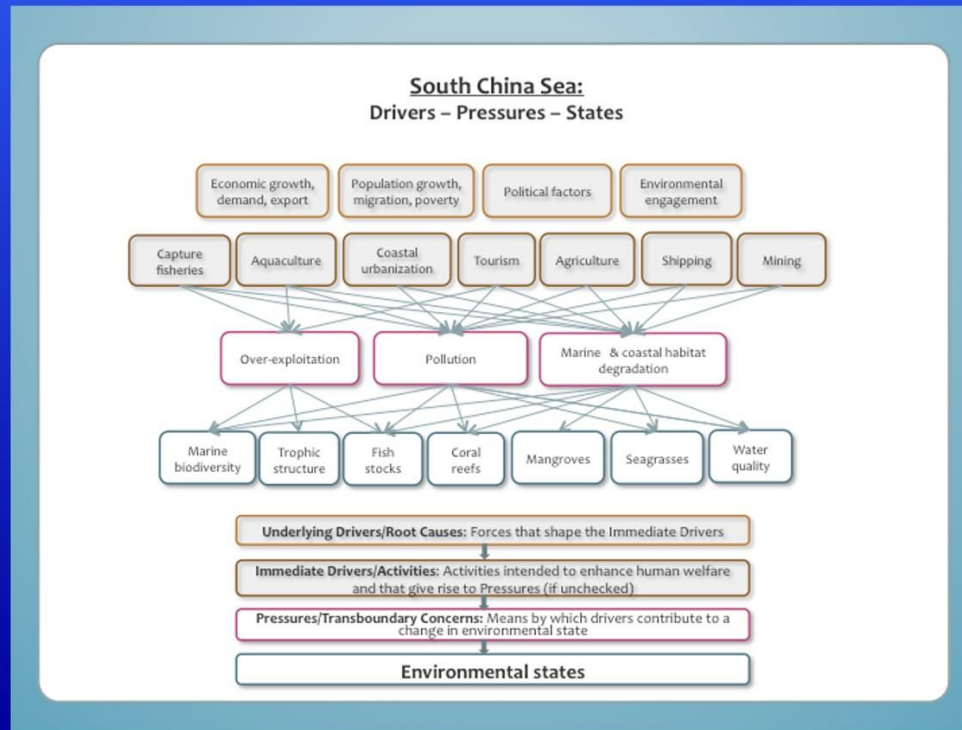
4. Why do we need to update the TDA and SAP now?

TDA	Regional/ Global Commitments	Organizing Concepts	Quality of data; spatial information
1997 - 2000	<ul style="list-style-type: none"> • RAMSAR Convention, 1971 • MARPOL 73/78 Convention • Rio Declaration on Environment and Development, 1992 • Convention on Biological Diversity (CBD), 1992 • UN Convention on the Law of the Sea (UNCLOS), 1994 • Global Programme of Action for the Protection of the Marine Environment from Land-based Activities (GPA), 1995 • UN Agreement on Straddling Fish Stocks and Highly Migratory Fish Stocks, 1995 	<ul style="list-style-type: none"> • Watershed scale (subnational); ridge to reef • Participatory approach of engagement at national and regional scales 	
		<ul style="list-style-type: none"> • Transboundary Issues <ul style="list-style-type: none"> ▪ Habitat modification & degradation ▪ Overexploitation of fishery resources ▪ Pollution 	Generally FAIR

4. Need for updated TDA-SAP (con't)

TDA	Regional/ Global Commitments	Organizing Concepts	Quality/ Public access for determination
2024 –	<ul style="list-style-type: none"> • Sustainable Development Goals Development Agenda, 2015 to 2030 • UN Framework Convention on Climate Change, 1994; Paris Agreement, 2016; Global Stocktake, 2023 • Kunming-Montreal Global Biodiversity Framework, 2022 • Global Plastics Treaty, exp Nov. 2024 • Nutrient Agreements: Colombo Declaration on Sustainable Nitrogen Management, 2019 • UNEA 4.14/ 5 Resolutions on Sustainable Nitrogen Management, 2019, 2022 • Treaty of the High Seas (Biodiversity Beyond National Jurisdiction = BBNJ), 2024 • COBSEA Strategic Action Programme Directions, 2023-2027 	<ul style="list-style-type: none"> • Watershed scale (subnational); ridge to reef • Knowledge Co-Production approach • Planetary boundaries • Indicator-based assessments of RISKS to ecosystems, people and blue economy-based livelihoods • Development-based Scenarios of Risk Mitigation 	<ul style="list-style-type: none"> • Empirical case studies – site scale • Development plans – subnational, national • National commitments to Regional/ Global commitments • National statistical databases • Regional databases • Global databases • Global modeled data
2000-2024	<ul style="list-style-type: none"> ➤ Drivers of environmental change have been modified over 25-year period; ranking changes? 		

5. Data and information needs GEF Guidance (2006)



5. Data and information needs

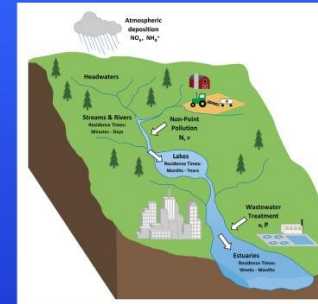
[Every data point can be located in space and time on a map!]

- What do we wish to assess
- Scale/s and methods of assessment
- Methods and data support go hand in hand
- Numerical data: Indicators of increasing risk
- Non-numerical data: Provides context of numerical data
- How development scenarios can change risk patterns

Globalized trade



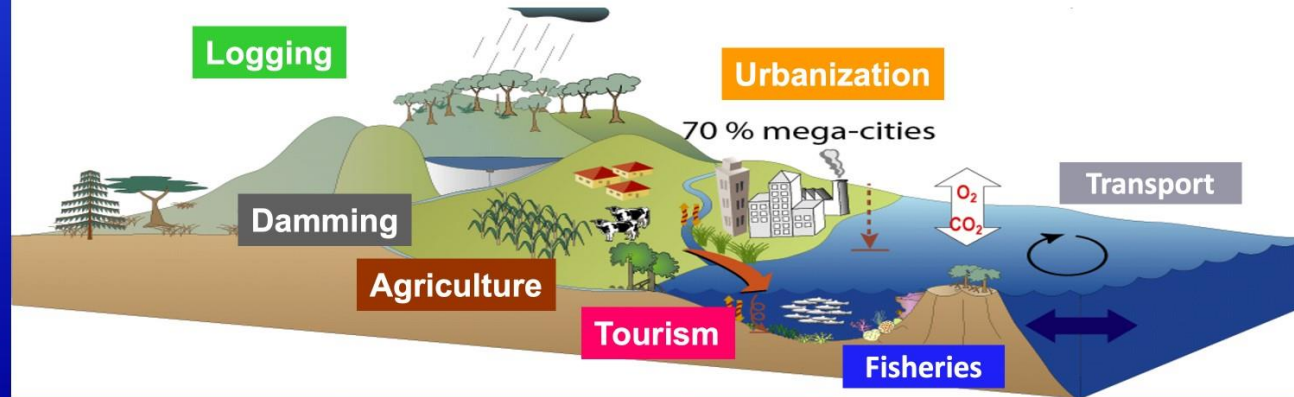
A Watershed Unit



Climate Change

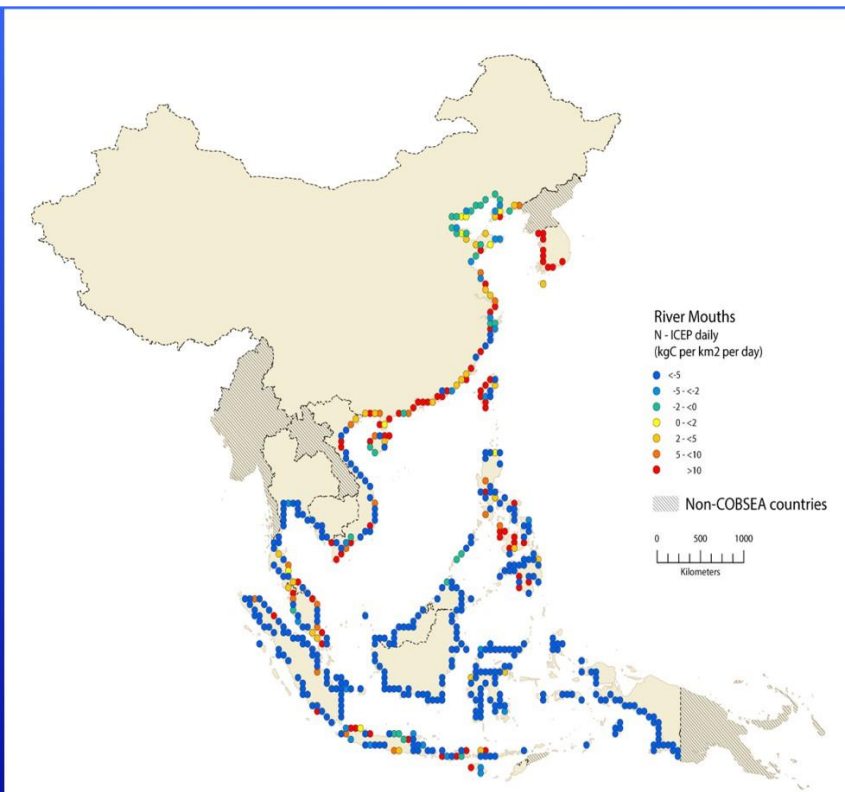
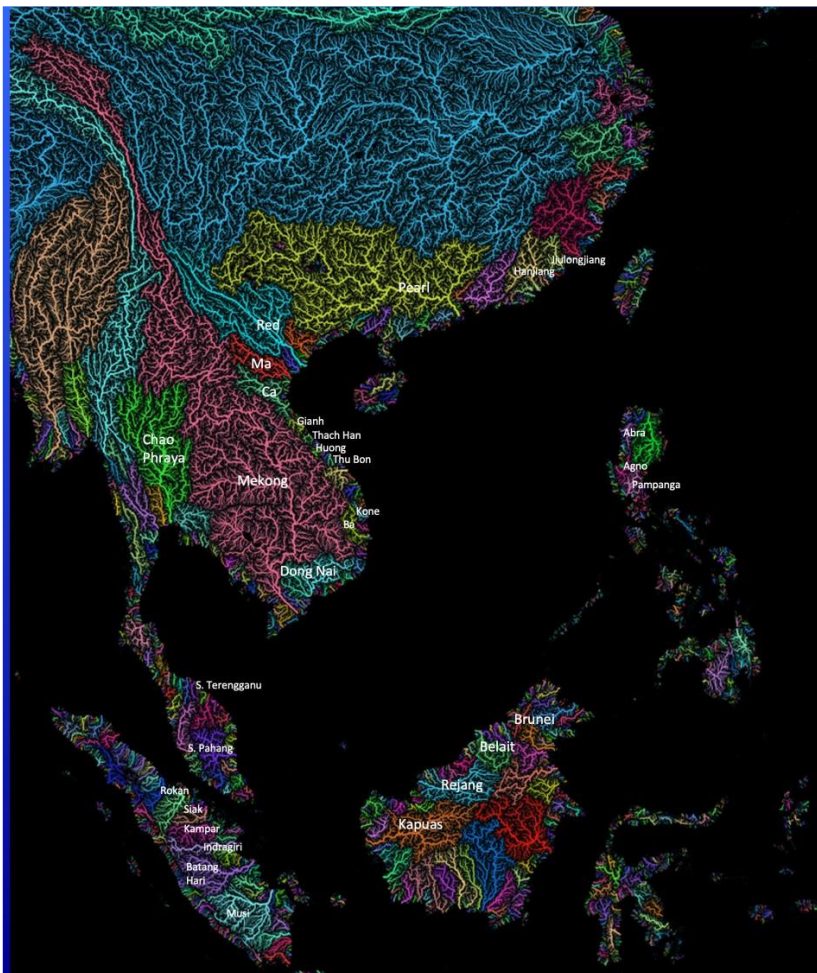
Anthropogenic changes

Natural Variability



Source to sea (Watershed) approach

Blue Economy Sectors



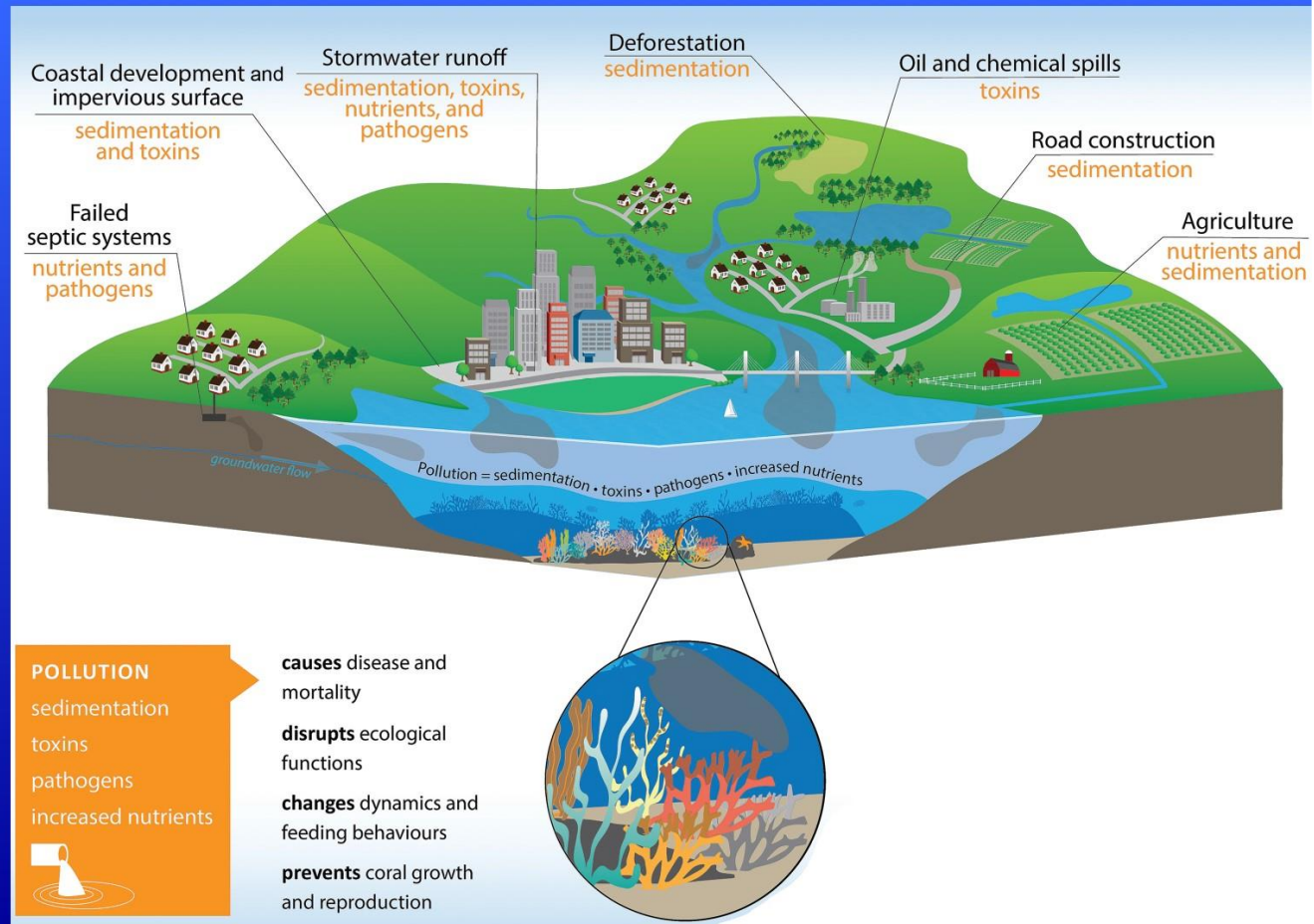
River mouths in the COBSEA region with **Indices of Coastal Eutrophication Potential** using modeled data for year 2000 (UNEP/ McManus et al. 2022)
 Data source: Mayorga et al. 2010, potential to obtain 2020 update

TDA 2000:

- Habitat modification & degradation
- Overexploitation of fishery resources
- Pollution

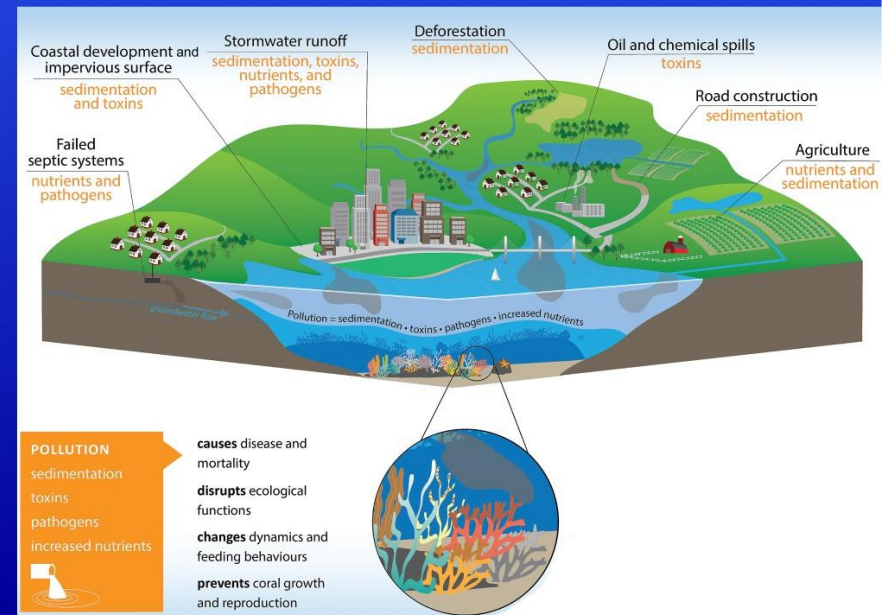
SAP 2000, 2008, 2013

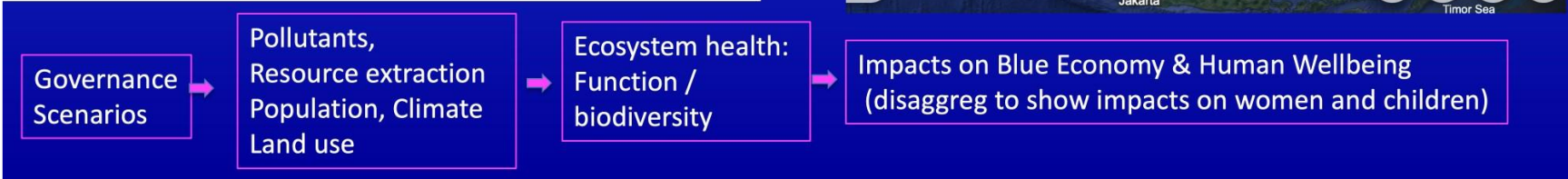
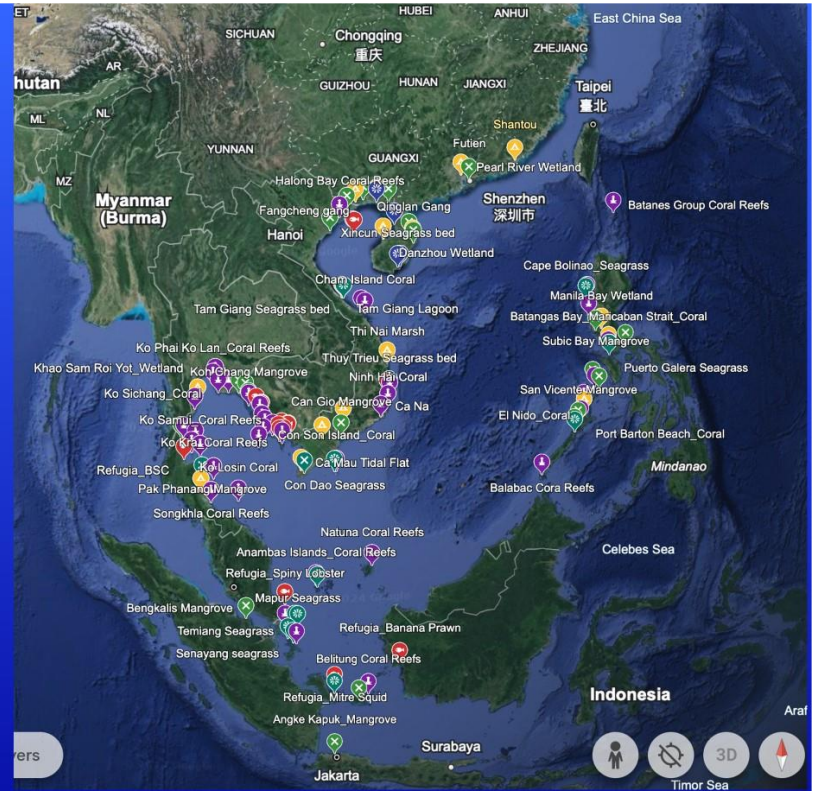
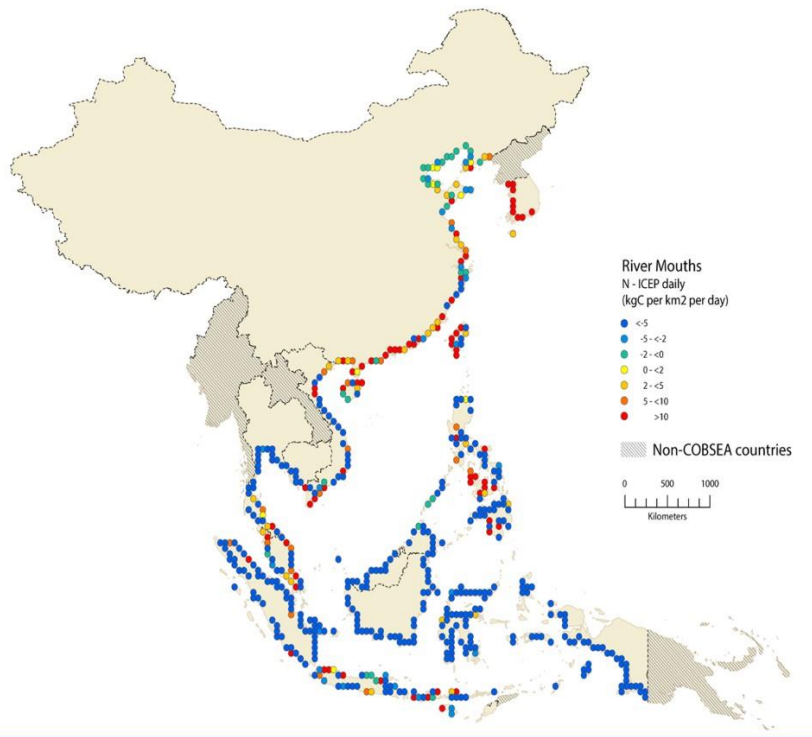
- Habitat areas
- Fish refugia
- Ecosystem valuation



We can identify **watersheds and ASSOCIATED habitats, with decent data**, and assess current environmental states in an **INTEGRATED** manner:

- How does pollution (nutrients, plastics, pathogens, sediments), overexploitation, and modification, change coastal ecosystems?
 - If we change immediate drivers (reduce pollution, reduce exploitation), can we improve ecosystem health and protect biodiversity?
 - If we **DO NOT** change any of the drivers, what do we stand to lose? Livelihoods of the blue economy? Impacts on human wellbeing, including women and children?
-
- **Can we incorporate available data, empirical and modeled, in our TDA at watershed (landscape)/seascape scale, along with governance?**
 - What policies would be needed to change the root causes of the drivers to improve ecosystem health?
 - What is the likelihood to institute policy to transform and protect ecosystems?
 - **Can we include these policy gaps as targets of our SAP?**
 - **Can we include scenarios of actions in our SAP?**





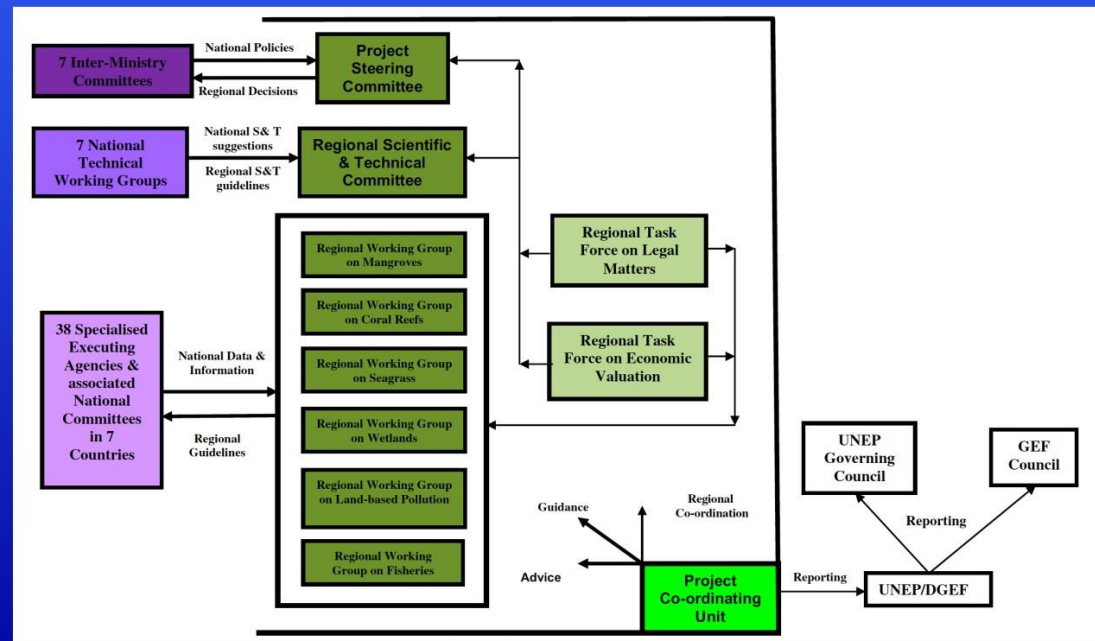
6. How do we update?

History: Legacy project management framework

“Reversing Environmental Degradation Trends in the South China Sea and the Gulf of Thailand, 2002-2009”

Objectives:

- Improved regional coordination of the management of the South China Sea marine and coastal environment
- Improved national management of marine and coastal habitats
- Improved integration of fisheries and biodiversity management in the GOT



Management Framework, GEF SCS Project, 2009 (Pernetta and Jiang, 2013)

6. Options for how: 2006 GEF Guidance

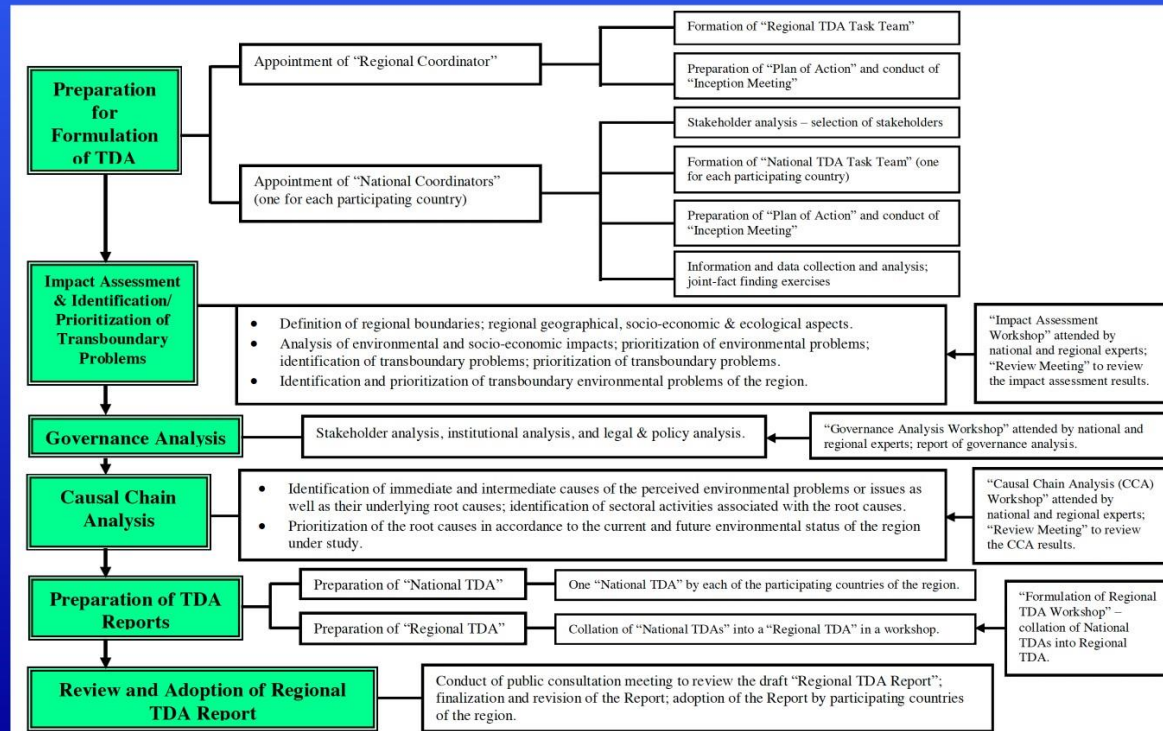


Figure 2. Process for preparation of the Transboundary Diagnostic Analysis (TDA)

6. Potential for integrated assessment or variant based on data availability

- We use existing working groups/ committees
- Knowledge-sharing workshops, using maps, lots of maps
 - ✓ Data assembly
 - ✓ Methods of integrated environmental assessments for National TDAs
 - ✓ Thematic integration: Thematic TDA using National TDAs and published studies
 - Risks from Pollution
 - Risks from Overexploitation of fishery resources
 - Risks on Blue Economy, food security
- Sharing governance/ policy scenarios that can decrease/ increase Risks
- SAP Priorities

We need a workplan to deliver an updated
TDA and SAP for the SCS-GOT
(for endorsement by 2026 IGM Meeting)

Let's discuss!

