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Historical Context and Evolution of Marine Resource Use

Module 1: Foundation of the Blue Economy

Duration: 1 Hour

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APEX

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Content

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Learning Objectives

- **CLO1 (Knowledge & Understanding):** Describe major historical developments in marine resource use and management, showing knowledge of how past events have led to present-day ocean governance and sustainability issues.
- **CLO2 (Critical Thinking & Problem-Solving):** Analyse the causes and consequences of key historical events related to overuse or conservation (such as fishery collapses or the establishment of marine protections), and evaluate the problems that emerged and how they were addressed.
- **CLO3 (Communication Skills):** Engage in group discussions or presentations about historical case studies, demonstrating the ability to communicate key lessons from history and work together to analyse past trends.

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Why History Matters in Marine Resource Use

- Oceans have been central to human survival, trade, and cultural exchange for millennia.
- Historical trends reveal how industrialization and globalization increased marine exploitation.
- Conservation and policy frameworks emerged as a **response to overuse and ecological decline.**
- Understanding history helps shape **sustainable strategies** for the future.

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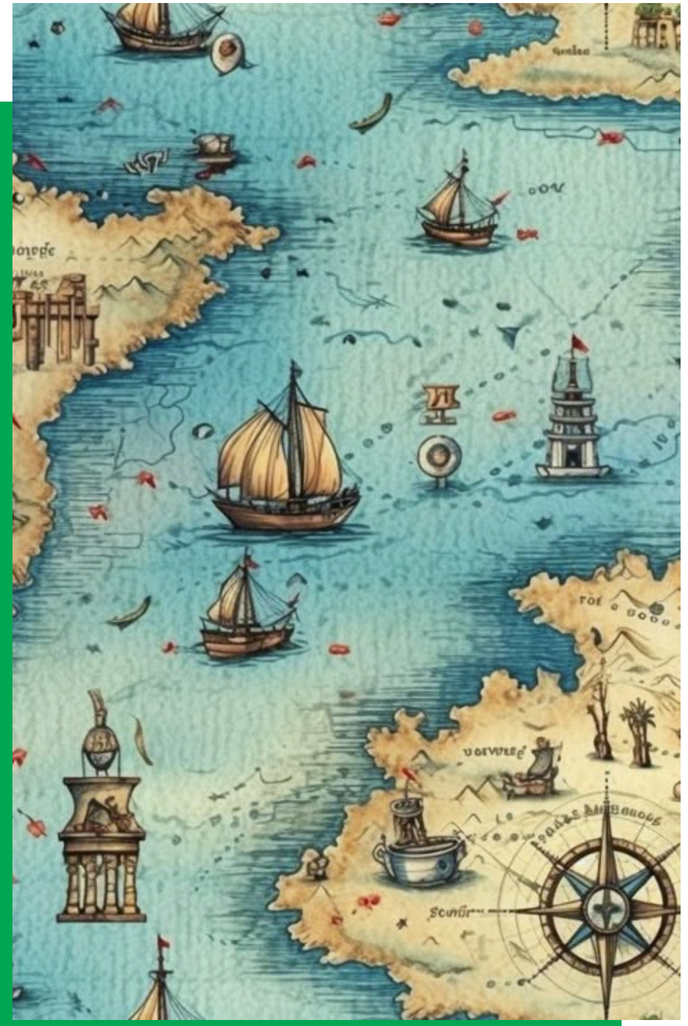
Ancient and Traditional Ocean Use

- Coastal and island communities depended on fishing and shellfish gathering.
- **Ancient trade networks** (e.g., Phoenicians, Malay Archipelago maritime trade).
- Marine resources used for food, salt production, and early navigation.
- Knowledge of tides, currents, and species passed through oral traditions.



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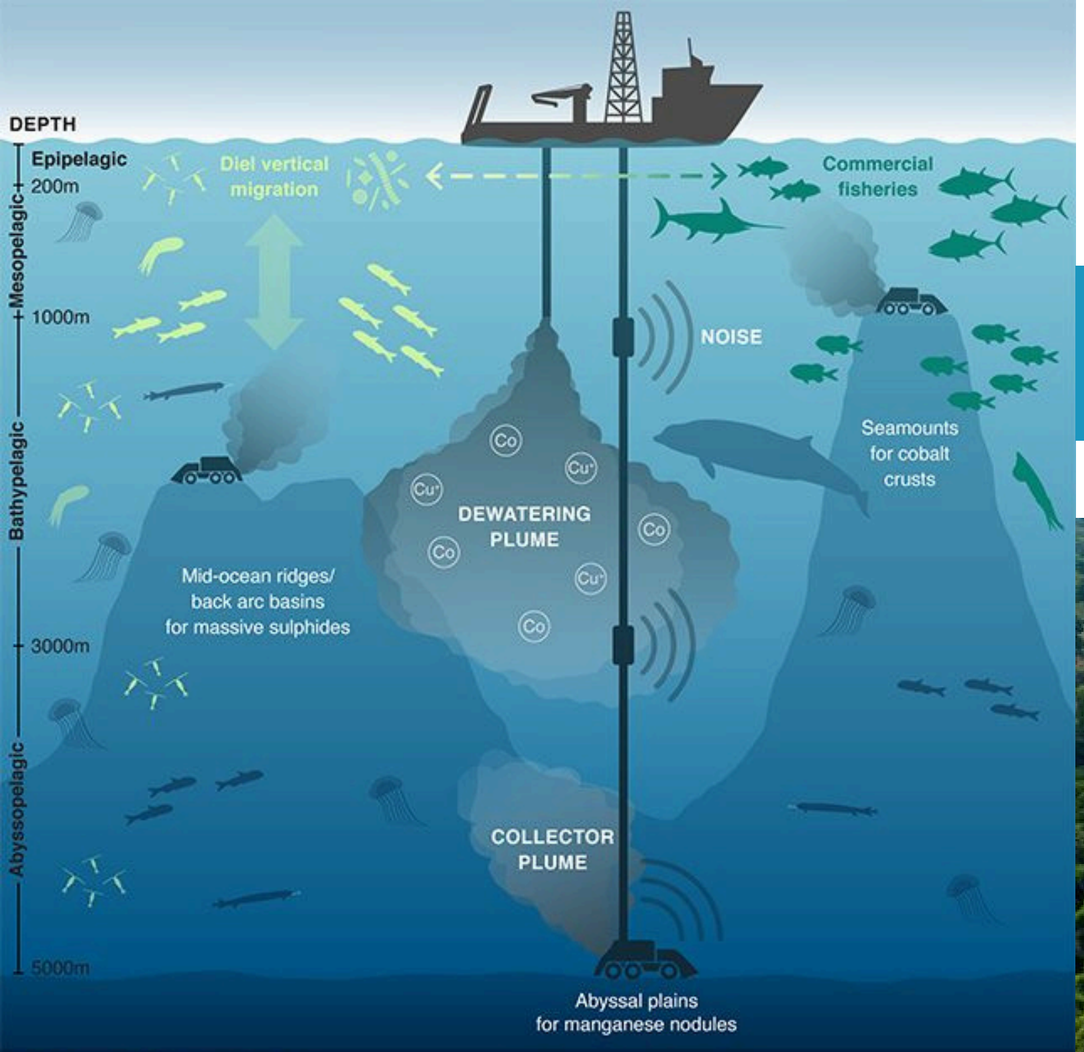
Industrial Era Changes



Expansion of:

- Commercial shipping
- Industrial-scale fishing
- Seabed mining and oil extraction

Increased ocean resource extraction led to:

- Overfishing
- Habitat destruction
- Pollution

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Industrial Revolution & Marine Exploitation

- 18th–19th century: Mechanization revolutionized fishing and shipping.

- Industrialization led to:
  i. Large-scale commercial whaling and trawling.
  ii. Offshore oil and gas exploration.
  iii. Pollution from industrial runoff.

- Consequence: Resource depletion and biodiversity loss.

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Rise of Conservation

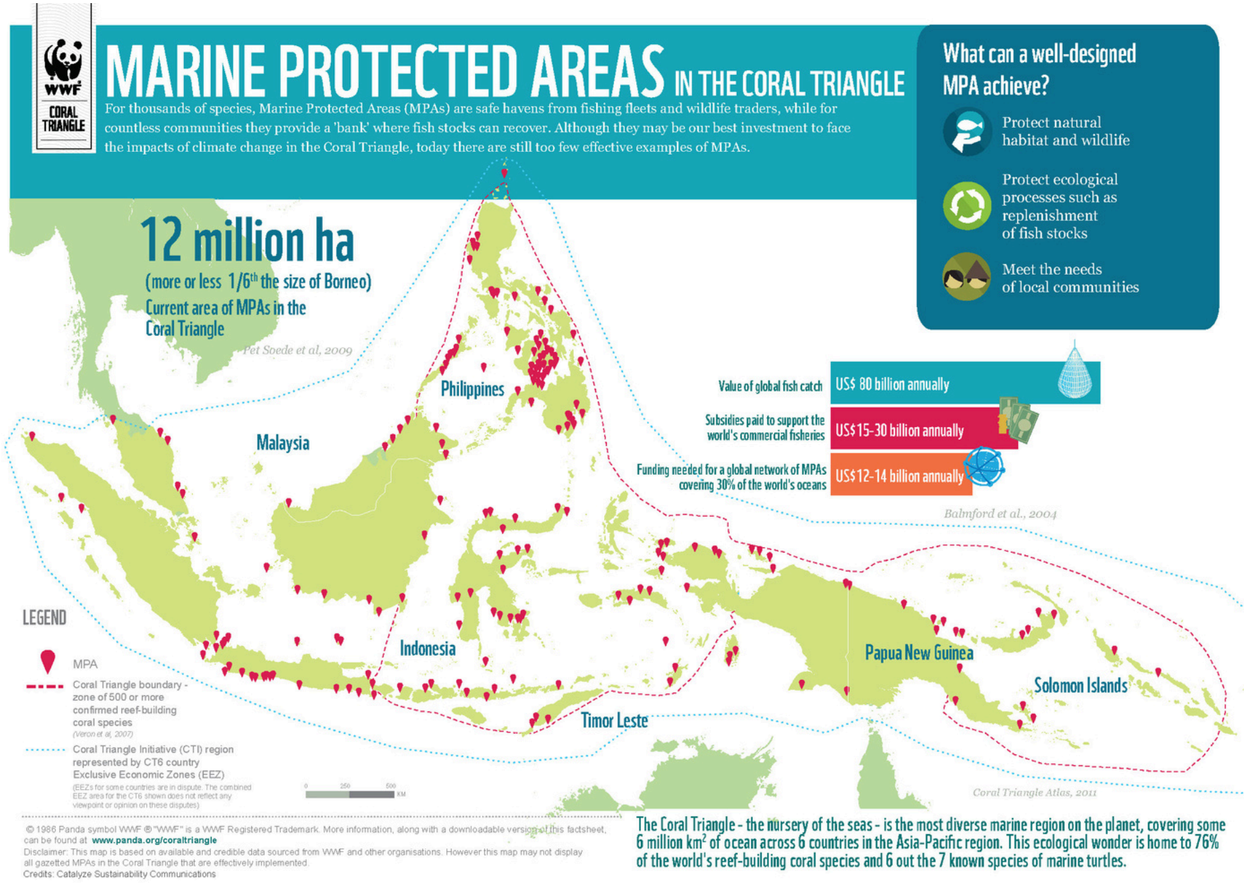
20th century → Growing awareness of:

- Marine biodiversity loss
- Climate change impacts
- Pollution threats

Key frameworks and events:

- UN Convention on the Law of the Sea (UNCLOS)
- SDG 14 – Life Below Water
- **UNCLOS (1982):** Ocean governance framework.
- **Marine Protected Areas (MPAs)** introduced globally.
- IPCC (1988): Linking climate change and ocean health.

Shift from exploitation toward sustainable management.



Infographic: MPAs in the Coral Triangle | WWF

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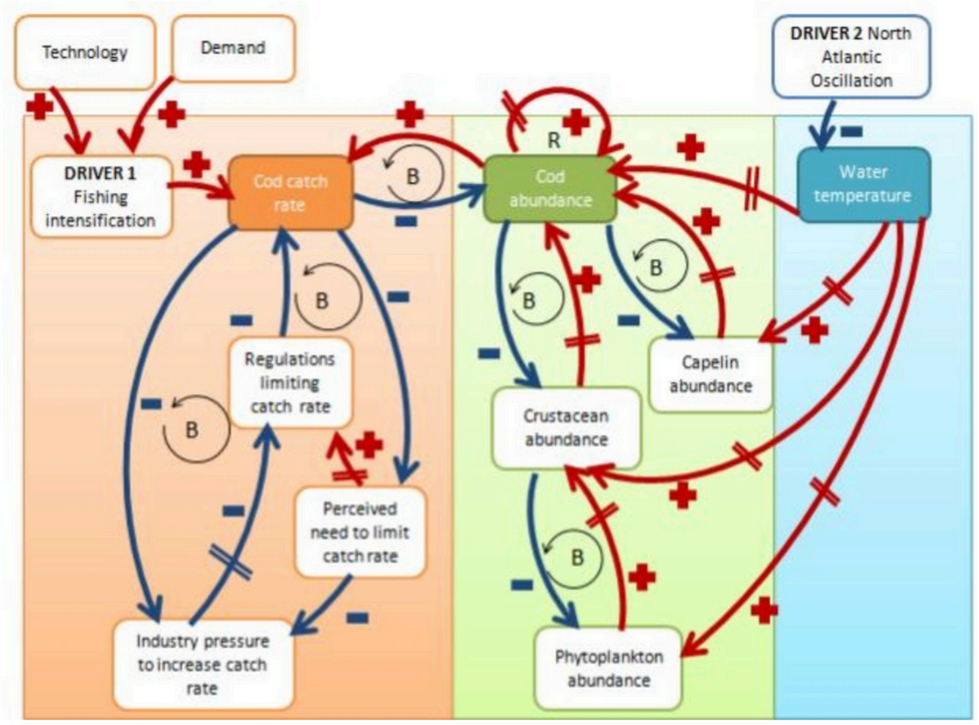
Case Example – Collapse of Atlantic Cod Fishery

- In 1992, Canada's **Northern cod fishery collapsed** due to overfishing.
- Entire fishing communities lost livelihoods overnight.
- Became a symbol of **overexploitation risks** and poor fisheries management.
- Led to stronger global emphasis on **science-based quotas and MPAs.**



Newfoundland Cod Fishery socio-ecological system (shaded background) and external drivers. The system includes social (orange), ecological (green) and climatic (blue) components; positive and negative interactions (red and blue); delays (represented by two lines across an arrow); and balancing or reinforcing feedbacks (R1 and B1 - B6). Shaded blocks (cod catch rate, cod abundance and water temperature) are key variables within the system

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Activity: Timeline Building

- Create a timeline of major events in ocean resource use.
- Include milestones: first trawlers, EEZs, MPA establishment.
- Discuss: Which events changed ocean policy the most?

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Summary

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- Humans have used ocean resources for thousands of years—for food, trade, and cultural connections.
- The industrial era greatly expanded marine resource use but caused significant environmental impacts like overfishing and pollution.
- Growing awareness of ocean health issues led to global agreements and sustainable ocean management practices.
- Understanding history helps guide better future practices in marine conservation and sustainable development.

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- FAO. (2020). The State of World Fisheries and Aquaculture 2020. FAO. https://www.fao.org/3/ca9229en/CA9229EN.pdf
- Pauly, D. (1995). Anecdotes and the shifting baseline syndrome of fisheries. Trends in Ecology & Evolution, 10(10), 430. https://doi.org/10.1016/S0169-5347(00)89171-5

Evaluation Answer Key: 1) True, 2) B, 3) False, 4) D

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THANK YOU

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