



上海交通大学

SHANGHAI JIAO TONG UNIVERSITY



Sustainable Fisheries: Opportunities and Challenges under the Blue Economy Approach

XUE Guifang (Julia)

Chair Professor, KoGuan Law School
Director

Center for Rule of Ocean Law Studies
Center for Polar and Deep Ocean Development
Shanghai Jiao Tong University



Outlines

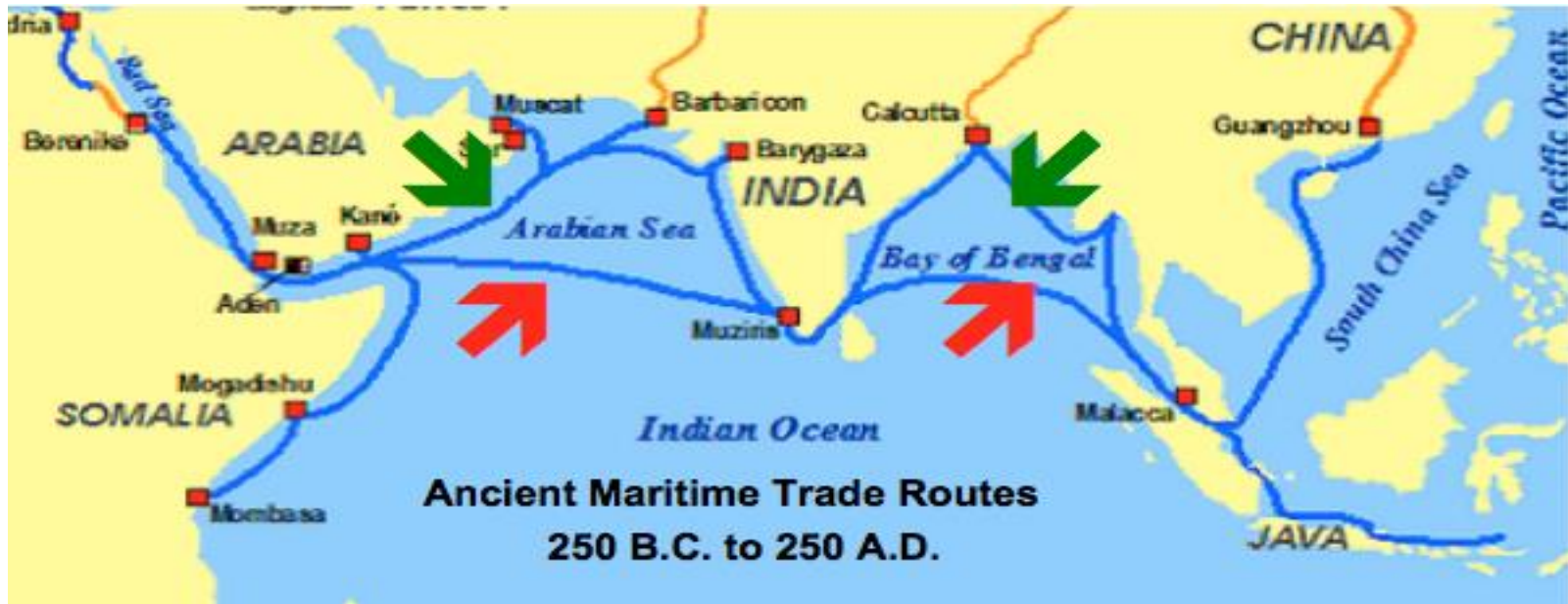
1. A glance at the status of fisheries resources and management effort
2. Blue Economy: principles and practice
3. Blue Economy sectors selected: opportunities and potential impact
4. Questions to ask





1. Oceans and Fisheries

- 72% of the Earth's surface is covered with ocean waters
- Oceans have been vital for humans- trade and food and human inspiration





Demands on the Ocean Space and Resources

- **Wild fish stocks** under great pressure –over-exploited, depleted or fully exploited.
 - EEZs: 30% of ocean space (under sovereign rights and state jurisdiction) ; 90% of world fish catch
 - High Seas: 10% of world fish catch
- **Container traffic:** growing volumes: tripling by 2030.
- Increasingly affluent **populations** make coastal and ocean **travel locations** ever more attractive (coastal resorts, cruise liners etc. are on the rise.



Effort in Managing Fisheries

- Prior to the 4 Geneva Conventions: Freedom of the sea (**free access** to fishing)
- 1958-1982 UNCLOS: creeping jurisdiction to **restrict fishing activities**
- Post UNCLOS era: expanded legislation over fishing related matters to close up the legal loop holes
- 21st Ocean Century: fill in the gaps with a variety of instruments, institutional arrangements and processes related to **fisheries management and biodiversity conservations**



Environmental Instruments

- The Stockholm Declaration on the Human Environment made at the Stockholm Conference in 1972
 -the need for a common outlook and for common principles to inspire and guide the peoples of the world in the preservation and enhancement of the human environment: **7 common outlooks + 26 principles.**





Effort in Addressing Environmental Issues

- ① “Earth Summit” and the “Rio Declaration” 1992
- ② “Rio+10” 2002 for 10th anniversary of Rio Conference (World Summit on Sustainable Development: WSSD)
- ③ Rio+20 (WSSD)



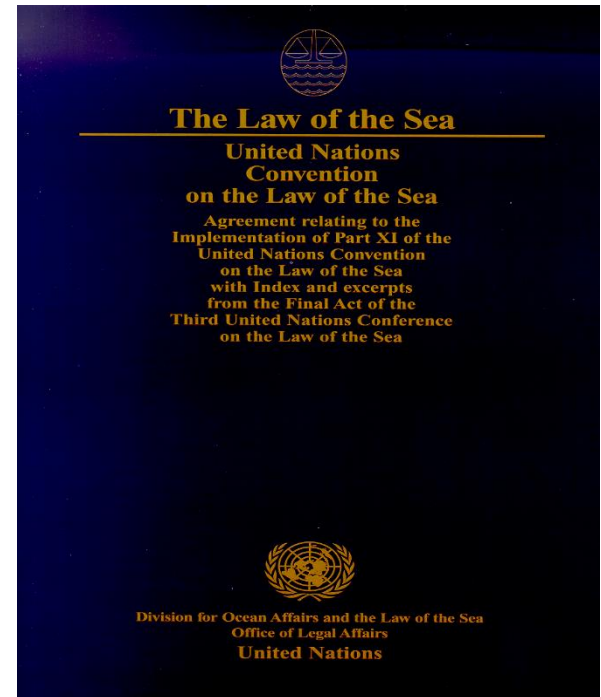
RIO+20
United Nations
Conference on
Sustainable
Development





United Nations Convention on the Law of the Sea (UNCLOS 1982)

- ① A Constitution for the Ocean
- ① Regime on the usage of ocean space and resource
- ① Extension limits of maritime zones
 - Exclusive Economic Zone
 - Continental shelf
 - Archipelagic waters.
- ① **Progressive development by subsequent instruments.....**





2. Blue Economy

FAO Director Graziano da Silva

“There can be no truly ‘green economy’ without a ‘blue economy’, one that makes the sustainable development of oceans and fishery resources a priority.” (2013)





The Blue Economy Approach

- Approach to **ocean-based economy** designed to:
 - 1) **protect coasts and oceans**
 - 2) **improve human well-being**
 - 3) **reduce environmental risks and ecological scarcities**
- Achieve goals through investments in **green infrastructure, technology and practices, (low carbon/ low waste/ biodiversity protective)**





Blue Economy Principles (WWF)

Blue Economy Activities must:

- 1) Provide **social and economic benefits** for current and future generation
- 2) Restore, protect and maintain the “**natural capital**” of the oceans
- 3) Use **clean technologies**





Blue Economy Principles (WWF)

Public and private governance must be

- 1) Inclusive
- 2) Well-informed
- 3) Precautionary
- 4) Adaptive
- 5) Accountable
- 6) Transparent
- 7) Holistic
- 8) Cross-sectoral
- 9) Long-term
- 10) Innovative
- 11) Proactive





High-level governance of blue economy

- Abu Dhabi 2016 **Blue Economy Declaration**
 - Meeting organized by UNESCO-IOC, Governments of Seychelles and United Arab Emirates.
- Heads of State and Government and high- level representatives
 - “Urge States, international agencies and donors to take **concerted action** and **facilitate the application of the Blue Economy** in the realisation of the **Sustainable Development Goals**



Sustainable Development Goal 14

Conserve and sustainably use the oceans, seas and marine resources

- By 2020, effectively **regulate harvesting and end overfishing, IUU fishing and destructive fishing practices** and implement science-based management plans, in order to **restore fish stocks in the shortest time feasible**, at least to levels that can produce **maximum sustainable yield** as determined by their biological characteristics
- By 2020, conserve at least **10 per cent of coastal and marine areas**, consistent with national and international law and based on the best available scientific information



SDG 14

- ⦿ By 2020, prohibit certain forms of **fisheries subsidies** which contribute to **overcapacity and overfishing**, eliminate subsidies that **contribute to IUU fishing** and **refrain from introducing new such subsidies**
- ⦿ **By 2030, increase the economic benefits from the sustainable use of marine resources, including fisheries**
- ⦿ Enhance the conservation and **sustainable use of oceans and their resources** by implementing international law as reflected in UNCLOS for the conservation and sustainable use of oceans and their resources, as recalled in paragraph 158 of **The Future We Want**



Blue economy strategy- promotion

- ④ UN Conference to Support the Implementation of **SDG 14: Conserve and Sustainably Use the Oceans, Seas and Marine Resources for Sustainable Development**
 - 5 Jun 2017 - 9 Jun 2017 , Fiji
 - Sponsored by Fiji and Sweden
- ④ Italy hosted a series of conferences to promote the concept
- ④ Palau announced the establishment of MPAs over national jurisdictional waters, of which **80 percent** reserved as **no-take zones**



China's 2018 priorities for fisheries policy development

- ① to accelerate structural reform from supply end and continuously promote **green, safe, inclusive, open and standardized development of Chinese fisheries:**
 - 1) **Green development** of aquaculture;
 - 2) **Integrated fishery industry development;**
 - 3) Ecological restoration of fishing areas;
 - 4) Development and renovation of fishing ports;
 - 5) Safety supervision of fishing industry;
 - 6) “Going-out”- **international development** of Chinese fisheries;
 - 7) Fishery law enforcement and legal system construction;
 - 8) Fisheries reformation and innovation



3. Blue Economy Sectors

- 1) Marine Commercial Fishing**
- 2) Aquaculture**
- 3) Marine Genetic Resources/ Biotechnology**
- 4) Seabed Mining**
- 5) Shipping**
- 6) Ocean Energy**
- 7) Coastal Development and Tourism**
- 8) Carbon Capture and Sequestration/ Blue Carbon**
- 9)**



Legal frameworks for blue economy sector: fishing

- Are there sufficient legal frameworks to support the blue economy sector of marine fishing in achieving blue economy objectives?
 - 1) Is the legal response to ending IUU fishing sufficient?
Do we need new **governance interventions**?
 - Surveillance and privacy law?
 - 2) Is the legal response to fair labour sufficient? Do we need new governance interventions?
 - 3) Is the legal response to **ecosystem based management** sufficient?



Legal frameworks for blue economy sector: aquaculture

- ④ Are there sufficient legal frameworks to support the blue economy sector of aquaculture in achieving blue economy objectives?
 1. Are there **adequate planning resources to avoid conflicts between ocean users?**
 2. Is there **adequate monitoring** to ensure that aquaculture does not have **unnecessary ecological effects** on the marine environment?
 3. Is there effort to ensure that aquaculture doesn't **impact food security by using fishery resources for fish food?**



Ocean Currents

- Environmental impacts
 - **Marine mammal** impacts or **fishery** impacts
 - The **transport of sediments** along the shorelines
- Navigational impacts for **boats and submarines**
 - Protect **existing sea lanes**
 - May need to add **new IMO routes**
- Private owners need **a lease to use ocean space?**
 - **indemnity for decommissioning**



Increased ocean and coastal tourism

Tourism and related economic activities generate 11% of Global Domestic Product

- ① Cruise liners
- ① Resort developments
- ① More remote locations
 - Antarctica
 - Remote islands
 - Deep Sea Bed





Increasing ocean tourism

- ① Too many people problem
 - a) Additional pollution- **Ocean plastics** or **untreated waste** from resorts/cruise liners
 - b) Additional damage- Damage from **boat anchors/swim fins** to coral reefs or disruption of **turtle breeding areas** by tourists
- ① Too much development
- ① Too much infrastructure
 - **Tourism centers** build up infrastructure that can damage the oceans such as golf courses (fertilizers create eutrophication) or **beach-side resorts** (removal of mangroves)



4. Questions to ask

- ④ Do we have the law that we need to achieve a blue economy for marine sectors?
 - Internationally and domestically
- ④ Does the existing law reflect the values of the “blue economy”?
 - International and domestic
- ④ What sorts of legal changes might support blue economy objectives in marine sectors?
- ④ **Fisheries:**
 - **Enforcement, Monitoring, Minimal standards for responsible fishing, Restoring stocks**



Blue Economy

Power of Definitions:

- ❁ Is “blue economy” just a synonym for ocean economy or marine economy?
- ❁ Or does it reflect a change in values?
- ❁ **Will “blue economy approach” make any difference?**



meliorism

(n.) the belief that the world gets better; the belief that humans can improve the world



Blue Economy Approach and Sustainable Fisheries

- ⊙ Decades of collective effort in promoting the sustainable fisheries, but **have we done enough or are we not yet making enough effort?**
- ⊙ Blue Economy approach:
 - Is it **a concept upgrade or business as usual?**
 - Is it **a rescue to environmental and biodiversity damage?**
 - Is it **a banner** to combat challenges of implementation of conservation measures?
 - Is it **a push to improve** global commitment and national action?
 - Is it **a stimulator** to increase the demands on the ocean space and resources?



Thank you for your attention!

