THE CURRENT CLIMATE FOR A SUSTAINABLE BLUE ECONOMY

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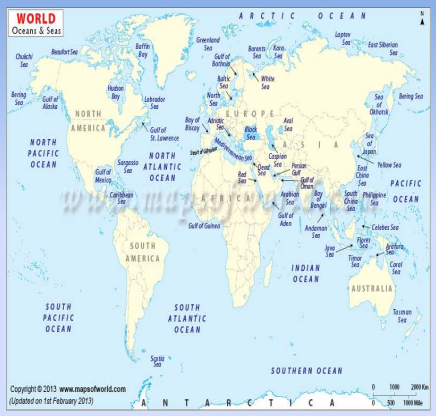
FIG

BLUE ECONOMY

The term "blue economy" means… the sum of all economic activity associated with the oceans, seas, harbours, ports, and coastal zones.

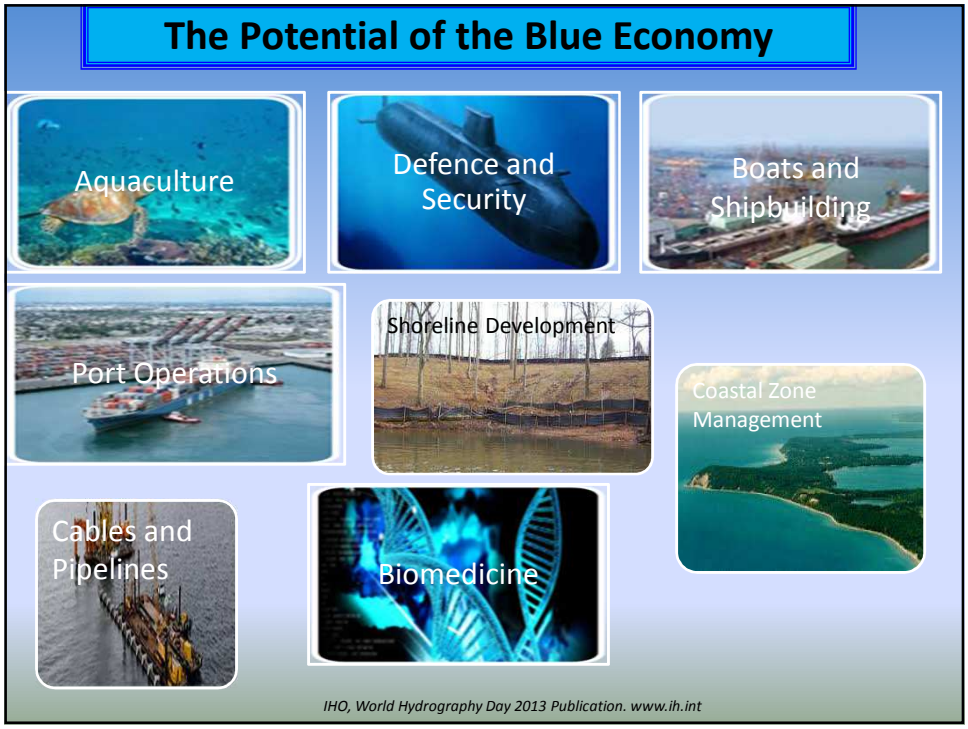


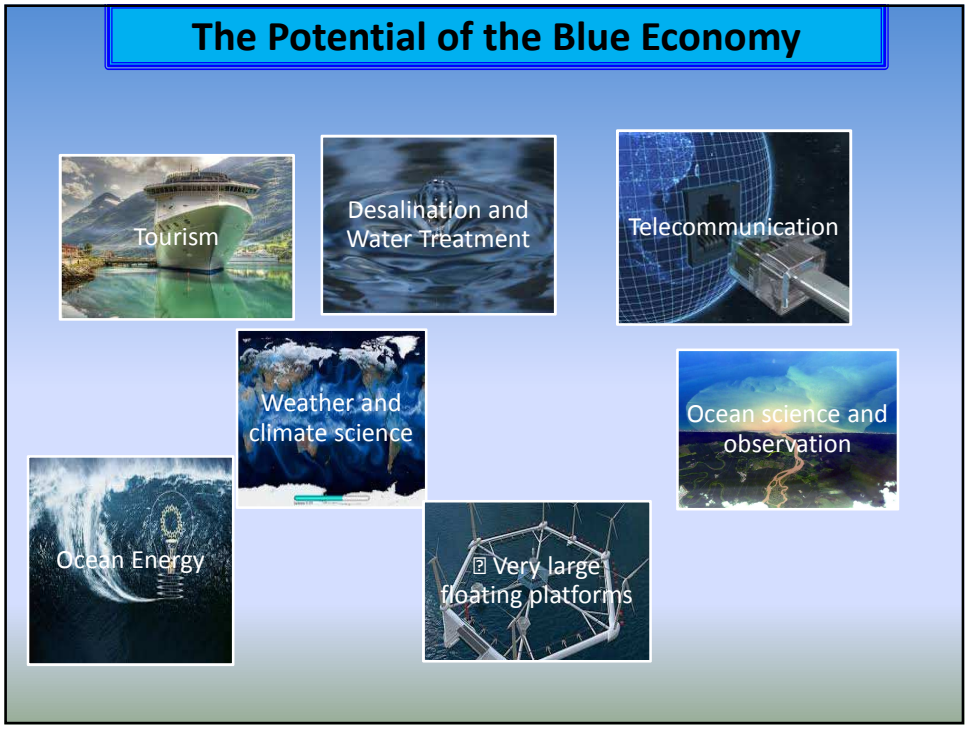
The seas and oceans are major contributors to the world economy.

The seas and oceans occupy 71% of the world's surface area and over 90% of the world's trade travels by sea.

To buttress the importance of the 'blue economy', the theme for the 'World Hydrography Day' 21 June 2013 was 'Underpinning the blue economy' which the International Hydrographic Organisation (IHO) summarizes by saying that 'The Blue Economy is more than the traditional core activities of fishing, maritime trade and passenger ships.

As defined by *The Maritime Alliance www.themaritimealliance.org, based on The National Report: State of the US. Ocean and Coastal Economies, 2009*


The Potential of the Blue Economy
Aquaculture
Defence and Security
Boats and Shipbuilding
Port Operations
Shoreline Development
Coastal Zone Management
Cables and Pipelines
Biomedicine
IHO, World Hydrography Day 2013 Publication. www.ih.int


The Potential of the Blue Economy
Tourism
Desalination and Water Treatment
Telecommunication
Weather and climate science
Ocean science and observation
Ocean Energy
Very large floating platforms

HYDROGRAPHY

- **IF MARITIME VESSELS DO NOT GET TO THEIR DESTINATIONS**
- **OR**
- **DO NOT SUPPORT ENVIRONMENTAL DATA GATHERING???**

Images from Dr. Michael Sutherland- Hydrography for National Development

HYDROGRAPHY

- Hydrography Support:
  - Nautical charting (navigation)
    - *Safety in navigation and avoiding wrecks*
    - *Safe transportation of hazardous materials*
    - *Safe transportation of officers enforcing coastal zone and marine policies*
  - Port and harbour maintenance (dredging)
    - *Safe berthing of vessels*
    - *Safe transportation of hazardous materials*
  - Coastal engineering (engineering and modeling)
    - *Protection of the land-sea interface*
    - *Shoreline protection and stabilization*
    - *Beach profiles*

HYDROGRAPHY

Hydrography Support:

– Coastal Zone Management (coastal and marine governance)

- *Tidal datum definition of CZM boundaries*
- *Governance of behaviours in the coastal zone*

– Offshore resource management, development and exploitation (economic activities)

- *Safety in resource exploitation*
- *Protection of the environment*

– UNCLOS (sovereign, jurisdictional and administrative boundaries)

- *National marine monitoring and enforcement*

– Climate change research

- *Environmental monitoring and protection*
- *Disaster management and mitigation*
- *Storm surge and sea level rise modeling*

– Optimal cable and pipeline routes etc. (infrastructure)

- *Prevention of environmental damage*
- *Habitat protection*

SOME CHALLENGES AND OPPORTUNITIES IN THE BLUE ECONOMY SECTORS

- Opportunities do exist for Countries across these different blue economy sectors, as do the challenges of implementing them.
- Fisheries are bound to be affected by climate change. Changes in sea surface temperature, salinity, ocean acidification and thermal stress will affect fisheries distribution, migration and production. Climate change thus will provide a significant challenge on top of other challenges the fisheries are already facing such as overexploitation and pollution.
- Aquaculture development hold great potential as it is still growing, but a proper legal framework for aquaculture development will need to be put in place, while conflicts over the use of natural resources such as land, use of poor aquaculture practices, poor infrastructure, costs of transport, pollution as a result of aquaculture and other environmental impacts as well as climate change impacts can all affect the potential of aquaculture in Nations.

SOME CHALLENGES AND OPPORTUNITIES IN THE BLUE ECONOMY SECTORS

- Ports are critical infrastructure assets that serve as catalysts of economic growth and development. As trade to countries nearly exclusively takes place via maritime transport, improving ports is crucial to stimulate economic growth. Port development projects are however very costly and require extensive infrastructure improvement as services of the ports are unable to facilitate economic growth under current conditions.
- Climate change impacts such as increased frequency and intensity of storms could impact ports and needs to be incorporated in future projects.
- The tourism sector is a great challenge to some countries. Tourism should be enhanced by attracting cruise ship tourism, developing maritime archaeological tourism and creating a value chain whereby benefits are more equally shared. Tourism development plans however need to take careful considerations of increased pollution, energy use and coastal pressure.

THE ROLE OF FIG

- One of our priorities will be that of raising awareness to the fact that sustainable development is everybody's business - that in today's interdependent world, each and every one of us is responsible and ultimately benefits from the state of the environmental that we work and live in.
- Developing and promoting the need to manage our oceans and seas in a sustainable manner based upon good data, good environmental principles and good management practices.
- The achievement of sustainable development will depend a lot on how much global leaders are prepared to commit. And here I refer not only to political leaders, but equally so to entrepreneurs, policy makers, NGOs, and a number of other stakeholders including citizens.
- In other to achieve this, FIG shall seek to promote and engage with IGO's and other NGO's to increase the understanding and awareness of the importance of the marine and ocean areas.
- High on the agenda will be to engage with UN-FAO and World Bank to determine how these organisations perceive the importance and benefits of managing the marine and ocean areas.

CONCLUSION

The world is covered with seas and oceans and hydrography has being a profession to a few.

– In order to develop the potential of the blue economy there is need to put in place policies and local solutions that effectively address blue growth priorities.

– The Gaps in knowledge and data about the state of our oceans, seabed resources, marine life and risks to habitats and ecosystems should be addressed.

– Research should be carried in the marine and maritime sectors for new innovations of the blue economy for sustainable development.

– Growth in the blue economy will require an appropriately skilled workforce, able to apply the latest technologies in engineering and a range of other disciplines. There is currently a skills gap that must be tackled.

– Creating Awareness: There is need to continue to create more awareness of the importance of blue economy for sustainable development to nations especially African Countries where the awareness is very low.

The livelihood and the quality of life of future generations depend entirely on our present success in achieving our goals

THANK YOU FOR LISTENING