

The Blue Economy: Addressing the Triple Bottom Line in the Coastal Zone

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Context



Sustainability versus Resilience?

Achieving a balance

Africa:

- Demand for Commodities, Resources, Population
- Leads to Impact on the coastal zones

Outline:

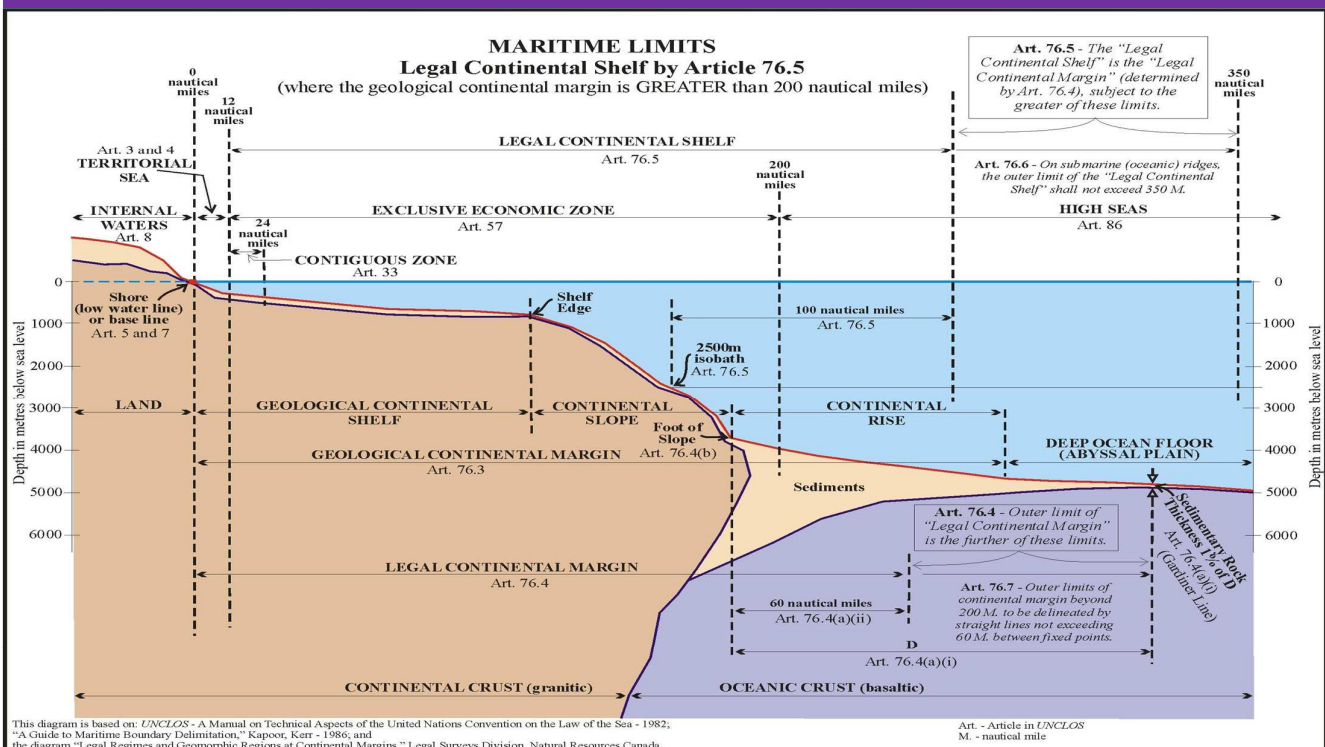
1. Introduction
2. Why
3. What is ICM
4. Where Africa overview
5. How Capacity Development

1. Integrated Coastal Management

- Sustainability = Maintaining the same
- **Resilience = Recognition of change, adaptability**
 - Maintains relationship between space and time
 - The amount of change that a system can undergo while maintaining the same controls on structure and function
- Resilience can be measured by the time the resource administration system takes to return to pre-disaster status e.g. hurricanes, flooding, etc

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Coastal Zone – Where?



The nature of the land/sea interface is dynamic.

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Calderbank, MacLeod, McDorman and Gray 2006

Interrelated disciplines

- Coastal Area Management
- Coastal Land Administration
- Marine Planning & Marine Cadaster



2. Why?

Why is the Coastal Zone so important?

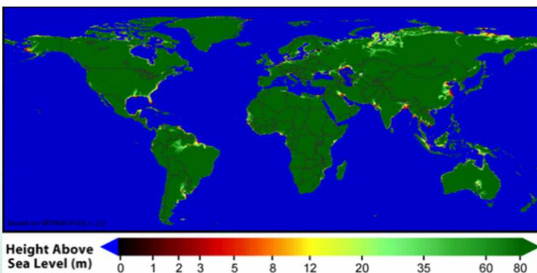
- Highly vulnerable due to:
 - Dynamic change (climate, population....)
 - Multipurpose uses (land/sea interface)
 - Tourism
 - Ecology / biodiversity
 - Traditional occupation/livelihoods
 - Land and hydrographic rights and restrictions
- The result is most often an imbalance – and leads to conflict

Demographics & Coasts

- Society across the world is moving towards the coast
- The Coastal Zone is dynamic, change is a constant
- Development without exclusion of anyone group or use
 - We need to ensure social justice – both extreme poor and very rich occupy the coastal zone
 - We need to find an equitable balance between conflicting priorities
 - It's a real issue in many parts of the world....

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Climate change....



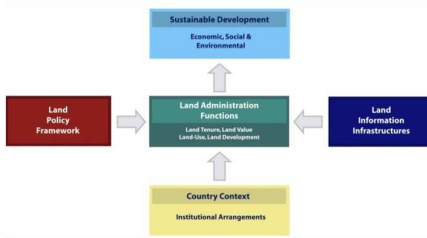
Cities are

- Major contributors to global warming: 70% of human induced green house gases
- Very high vulnerability to climate change related disasters: 40% of the worlds population within 100km of coasts
- Challenged with serious waste management and sanitation (urban slums)

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3. What - Coastal Management

It is about:



- Space
- People
- Places
- And, Change

Consequently

- 'How' we organise ourselves in society,
- the institutional frameworks use to settle on land and resources
- ***The link to Land rights and resource management cannot be ignored in the coastal zone.***

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Coastal Management – The Blue Economy

- A balance between geography of resources and economics
- Definition of Land tenure-
 - It is about the man- man- land relationship (Bohannen)
 - It is concerned with individual, collective and societal interest in land and its resources
 - It is about the relationship among individuals and their relationships between them
- Applied to Coastal Zones, Simplistically three broad areas associated with activities in:
 - **Land, Coasts and Marine - +HWM, +LWM, -LWM to EEZ**

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A lot to Ask?

ICM is a process by which multiple use of coastal and marine environment is managed so that a wide range of needs are catered using the triple bottom line

Needs to:

- Integrate...sectors: spatial, across government, science and management
- Identify with People...Symbiotic and their Livelihoods
- Initiate... originate responsive to specifics, in own world: environment, development and institutional structures
- But.....

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Strategic Reality

- But often CM programmes become a single/dual issue, resource driven
- To aspire truly to promote, achieve and gain acceptability from host communities, include their livelihood needs
- The CM process need help to move it away from being just a concept
- To deliver a holistic and social justice agenda it is suggested land administration will provide a 'road map'

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4. World Bank Review



- Africa; Environmentally Sustainability Development Division
- Aimed to present a rationale for ICM and consider a framework for future sustainable investment
- Recognising the capacity of natural systems is being exceeded by human activity pressures

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Donor activity

- Emerged because of Institutional constraints in African governance?

But

- Narrow sectoral approach in developing coastal resources, emphasising harvesting (fisheries, minerals etc) and trade (port development, shipping petro and commerce)
- Little attention to building technical and institutional capacity

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Issues in African coastal waters



West Africa in priority order:

- Deteriorating water quality and sanitation in urban areas
- Pollution in coastal waters
- Coastal erosion
- Overexploitation and degradation of marine resources

East Africa in priority order:

- Destructive fishing methods and habitat degradations
- Eutrophication and siltation
- Marine oil pollution (tanker traffic and ballast discharge)

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Futures a Scenario for 2025



- **Optimal view** = sustainable development
- Contrast with **Business as usual** that leads to increased human suffering and environmental breakdown:
 - Degradation of most coral reefs of East Africa and deforestation of mangrove in Africa
 - Coastal lagoon pollution
 - Coastal biological product decimated by the downstream impacts of poor land use and unregulated activity
 - Severe user conflicts and loss of options
 - Fisheries collapse
 - Tourism industries decline

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Toward an African ICM Action plan

- Framework to guide toward a multiple use, systems orientated mode of management
- Immediately consider investment that address the dramatic demographic trends that drive coastal urban population growth.

Action steps:

- Supporting National environmental action plans(with GEF) in
- Ghana, Cote D'Ivoire, Tanzania, Seychelles Comoros and Mauritius

Independent programs include

- Guinea Bissau and South Africa

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5. Capacity we need

Education

**Providing broadly based specialists
Coastal Professionals**



**Developing the professional
areas**

Developing the profession

**Building sound institutions
and supporting "the triple bottom line" in society**

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Activity & Management

- We have a duty of care to the citizen, to use our professional skills to benefits society as a whole.

No Activity should take place in the Coastal Zone without the footprint of a professional being involved

And should not be seen as only technical skill based

- Multi disciplinary approach, need to engage with
- Other professionals and professional bodies
- National and International bodies
- Politicians at all levels

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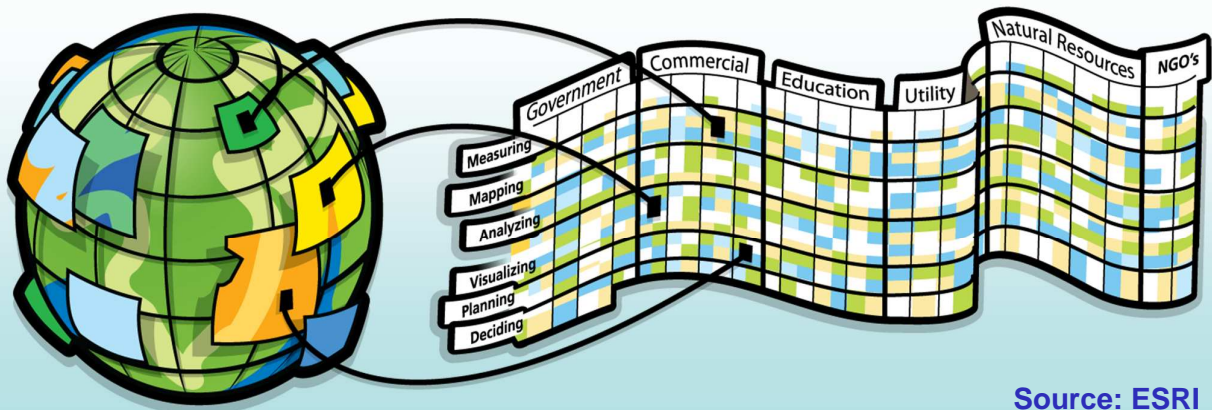
Measurement....

- Reliable spatial and hydrographic data is required for good, sound Spatial Planning, Land-Use Management and decision making
- Precise and persistent data collection provides reliable models for monitoring change and managing risk.
- This requires commitment to building and maintaining geodetic and hydrographic infrastructures.

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Geo- Information

...creates a strong foundation for sustainable action



Source: ESRI

However, geo-information is increasingly becoming available to everyone – for free, so **the future for land professionals lies in interpretation and value-adding activities**

– rather than just data provision.

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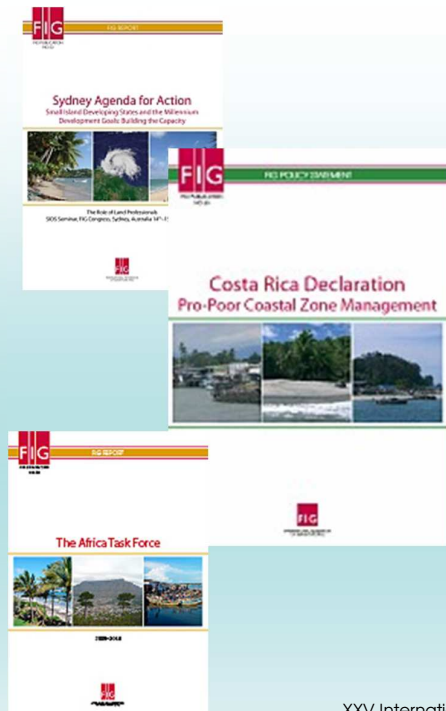
Hydrography - Provocative Thoughts.....

- Arguably the next 10- 20 years will be a time of massive transition for everyone, every where.
- Perhaps for Hydrographers, the big question is:
 - Will it be a period of dithering direction? - some progress here, some retreat there, or
 - Will it be a period where emboldened by a new mind set you will work towards a spectacular new future?

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Importantly **It is all about people!**

FIG Developing & Documenting Knowledge



Publications from FIG

- **Costa Rica Declaration: 2008**
- **Developing the concept of Integrated and Pro Poor Coastal Zone Management**
- **Identifying the problems and issues related to CR and the Central American Region**
- **Looking at recommendations and ways forward**

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Thank You

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