

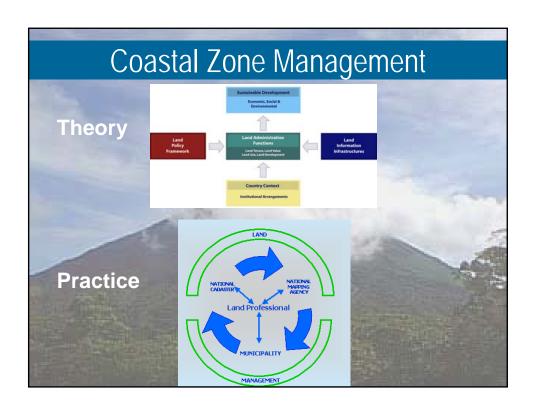


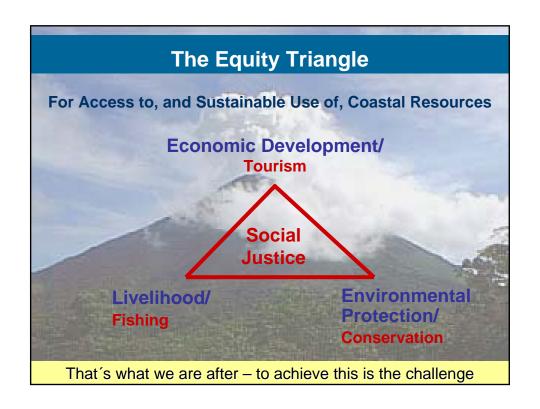
# Coastal Zone Management

- 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, between rich and poor and
  - It's a real issue in Costa Rica and in many other parts of the world

## Coastal Zone Management

- 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/livelyhoods
    - Land and hydrographic rights and restrictions
- The result is most often an imbalance and leads to conflict





# Coastal Zone Management

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

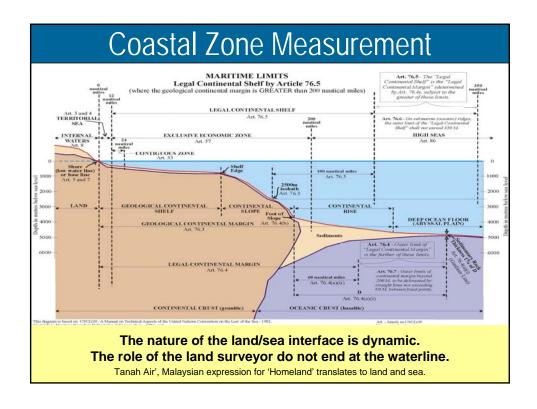
No Activity should take place in the Coastal Zone without the footprint of a Surveyor being involved

Surveyors should not be seen as only technical people

- Surveyors need to engage with .....
  - -Other professionals and professional bodies
  - -National and International bodies
  - -Politicians at all levels

#### Coastal Zone Measurement

- Surveyors need to use there technical skills to collect and collate data:
  - Geodetic
  - Hydrographic,
  - Cadastral
  - Spatial Data Infrastructures
- Collection of data is now easier, but the assessment, interpretation and management requires skilled professionals



### Coastal Zone 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.

"Good Coordination begins with Good Coordinates"

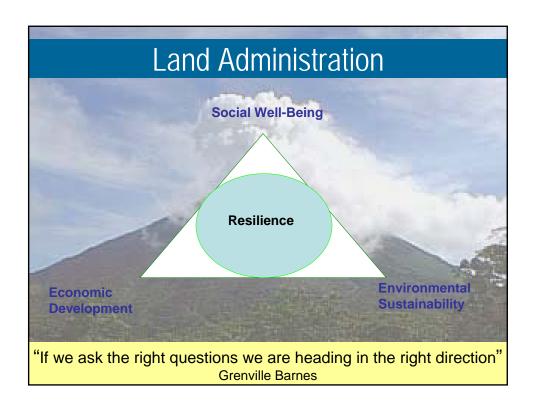
David Doyle

### **Land Administration**

- A modern Cadastre integrates the Cadastre and Land Registry. It must provide:
  - Sustainability and affordability
  - Access to all users (including rural outreach: e.g. access via web and cell phones)
  - Low cost, transparent, and potentially autonomous.
- Reform of the institutions requires good information systems, good governance and political will

#### **Land Administration**

- Working towards Integrated Spatial Development
  - Do not over complicate systems keep them simple and focused
  - Focus on Monitoring and Evaluation and get the baseline
  - Need for partnership and linkages across sectors
  - Link roles, rights, restrictions and responsibilities



### **Land Administration**

- 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 land administration system takes to return to pre-disaster status e.g hurricanes, flooding, etc

A focus on change would mean a prioritisation of parcels that are being transacted and changed in the Land Market (Grenville Barnes)



## Capacity Building

- Surveying education must change from being seen very much as an engineering discipline
- Surveying education must be research based and interact with professional practice.
- Surveying education must be interdisciplinary to include Measurement Science, Land Management and Spatial Information Management
- Learning for life must be replaced by life long learning.
- Professional organizations play a key role in providing professional development and regulating behavior through professional code of ethics

"Academia and professional practice should walk together hand in hand"



