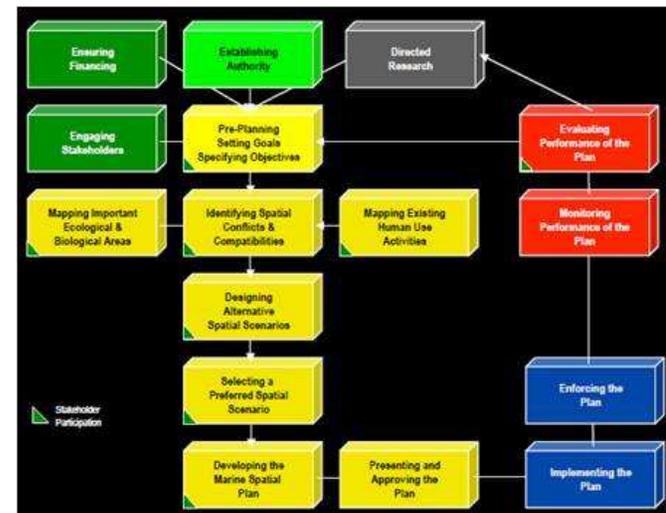


Science – Based Management

Without knowledge



With knowledge or information



Rahanna Juman, Institute of Marine Affairs,
Trinidad and Tobago



Science-Policy Interface

The effectiveness of management actions to protect the ocean cannot be assessed without scientific analysis and knowledge. Accordingly, comprehensive protection strategies should incorporate scientific principles; however, it is recognized that decision making frequently involves considerations other than scientific arguments. Close interaction among scientists and decision-makers is essential.

Successful ICAM programmes will involve:

- I. collaboration between managers and scientists at all stages of the formulation of management policy and programmes, and
- II. in the design, conduct, interpretation and application of research and monitoring.

Ref: (FAO, 1996)- GESAMP Report and Study # 61)

Knowledge

"What we know is a drop, what we don't know is an ocean." — Isaac Newton

- ❑ Decision making should be informed, and information must be based on the best available knowledge.
- ❑ ICZM challenges will require new types of information for decision-making, most of them unavailable (or not updated) in many countries
- ❑ Adaptive management requires data recording and information supporting decision making
- ❑ Lack of knowledge (both science and management) about the natural system restricts informed decisions
- ❑ Never underestimate socioeconomic information.
- ❑ Well-informed public participation facilitates and helps decision making

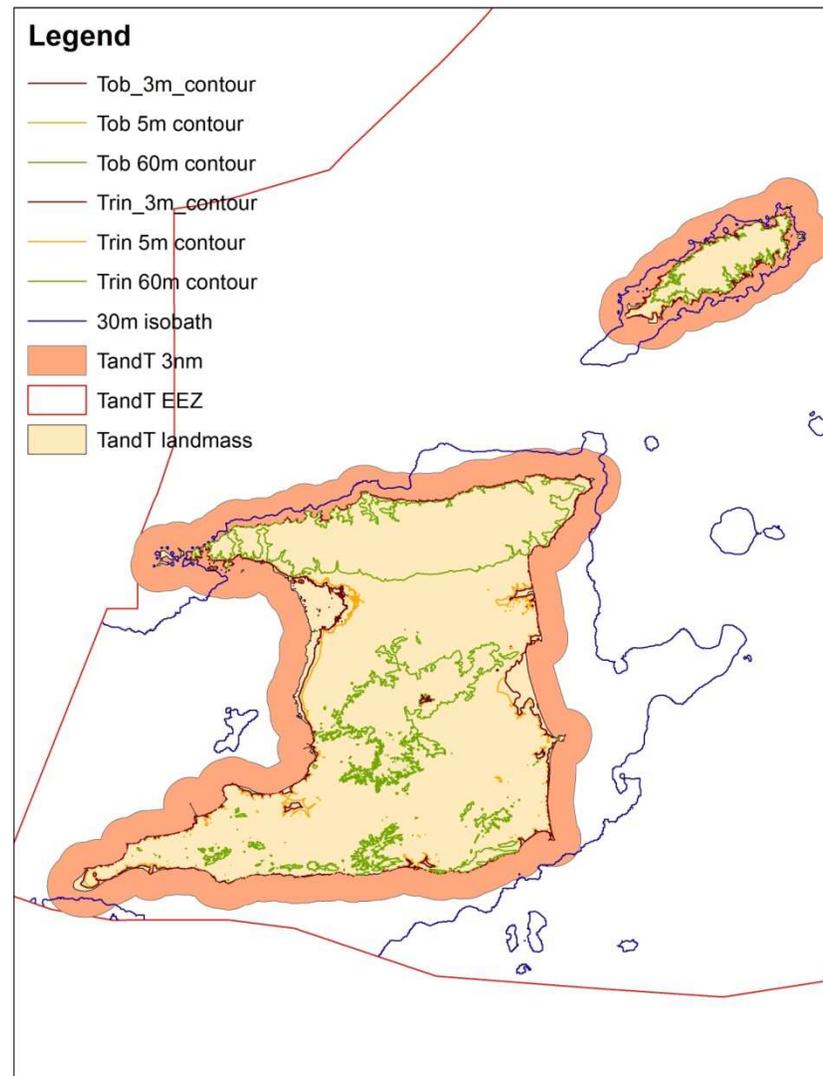
Lessons learnt: Research and data management

- ❑ Inadequate knowledge and understanding of many coastal systems, and limited capacity to acquire the information result in:
 - ✓ Poor identification of data gaps
 - ✓ Inability to make effective management decisions and interventions
 - ✓ Unattractive to stakeholders – lack of ownership and commitment to program
 - ✓ Frustration at the technical and policy- making level

- ❑ Maintaining records and databases of the activities (e.g., research/science, decision making, resources, etc.) will help continuity of programs, help resolve conflicts, and facilitate evaluations and adaptation of programs.

- ❑ Demonstrate value added to management actions

T&T Approach to ICZM: Determine the coastal zone for the ICZM Policy Framework



Specific studies:

- (i) assessment of proposed coastal and marine development plans and potential socioeconomic conflicts and synergies;
- (ii) economic analysis of the contribution of the coastal zone of both Trinidad and Tobago to the national economy and the sustainable development of potential growth poles;
- (iii) physical assessment and valuation of ecosystem services including coastal stabilization, flood protection, water quality control, recreational and provisioning services and identification of measures to build ecosystem resilience;
- (iv) establishment of priorities and an action plan for nation-wide vulnerability and risk assessment.

Thanks for your attention

