# Pre-Conference Marine Technical Workshop

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## Likely Responses of Tropical Marine Ecosystems to Climate Change

- Pragmatic recognition that systems are changing and will continue to change;
- Focus on minimising disturbances;
- Ecosystem based approach to management;
- Minimise CO2, preferably to lower than 450;
- GEF support for stronger representation of ocean interactions in Climate Change considerations.

### Economic Development and Alternative Livelihoods

- Recovery from coral bleaching is aided by reserves and fisheries controls;
- Conservation sometimes results in unforeseen socio-economic impacts;
- GEF consider support/strategies for alternative livelihoods when implementing conservation and management measures, particularly where measures include closures or significant reductions.

## **Solutions to Issues of Marine Management and Governance**

- Concerns regarding inundation of coastlines could lead to receding baselines;
- Concern that vulnerable communities could lose important rights to valuable marine resources;
- Noting papers by Dr Schofield and Prof. Rayfuse, increase support for vulnerable States to preserve maritime claims;
- Regional projects balance regional governance and management with national capacity to participate and implement – creative strategies required to increase in-country capacity;

## Solutions to Issues of Marine Management and Governance

- Management and governance needs flexibility and 'longview' to address existing and forthcoming climate change impacts;
- Management and governance needs to look beyond just biophysical science, better use of socioeconomic, legal, political advice;
- High seas governance key weakness;
- Flaws in international framework for oceans governance, broader engagement of global community and broader application beyond fisheries;
- Archipelagic LMEs;
- Strategies to work around insecurity (i.e piracy) and war.

## Land-Sea Interactions for Coastal Receiving Waters

- Freshwater inputs are major inputs into marine systems;
- GEF water projects could be better integrated across freshwater and marine systems;
- Challenges with linking projects and targets that are marine based with catchment targets far upstream to address impacts of farms, factories, urban-runoff etc;
- Challenges of juggling different time-scales of projects, electoral cycles, generational change;
- Challenges with implementing precautionary approach and juggling scientific advice with community acceptance.

### **Science to Management**

- Different cultures/demands/goals of science and management;
- Unrealistic expectations of each side;
- Importance of good relationships and communication between scientists & managers;
- Education and levels of understanding by managers of science can vary greatly from region to region and country to country. Some projects need to work within countries and regions where managers have very little training in science;

### **Science to Management**

- Increased understanding needed of socio-economic drivers and how to use this to meet project goals;
- Recognition that officials/politicians are not the only stakeholders – also communities, NGOs, industry, etc.
- Importance of good communication;
- Different roles of scientists, managers and science brokers;
- Benefits of icons (such as Great Barrier Reef) to support project conservation and management goals;
- Transparency is essential;
- Weak consideration in Fisheries context of nonbiophysical information and analysis (i.e socioeconomic, etc).

#### **Science to Management**

- Many projects cross multiple developing countries with diverse cultures, languages, levels of capacity and development;
- Projects consider how to build national capacity and lessen dependence on ex-pat implementors;
- Challenges of motivating scientists to undertake studies that do not support academic considerations for career/promotion.



#### The End Thank you to all presenters for volunteering their time and energy.