

127. There are many uncertainties about climate change and [particularly] sea level rise. Small changes in sea level rise have the potential of causing significant changes to small island States. Response strategies should be based on sound information [data]. A long-term co-operative research commitment [based on differentiated responsibilities of countries] is needed to reduce this great uncertainty. Meanwhile, precautionary measures should be initiated to diminish the risks and effects, particularly on small islands, low-lying States and coastal zones of the world.(70)

Objectives

128. States acting individually and through appropriate regional and international fora agree:

- (a) To conduct scientific research on, systematic observation and monitoring of the marine environment, within and beyond the limits of national jurisdiction.
- [(b) To provide full and open sharing of data and information resulting from scientific research and monitoring.]
- (c) To develop standard intercalibrated procedures, measuring techniques, and data storage capabilities for scientific research on and systematic observation and monitoring of the marine environment.
- (d) To provide improved forecasts of marine conditions for safety and efficiency of maritime operations, and inhabitants of coastal areas.

Activities

Management-related activities

129. Sections 1, 2, 3, and 5 of this paper address management priorities for specific resources. In conjunction with those, coastal States should adopt special measures to cope with potential climate change and sea level rise. Of utmost priority is the need to develop globally accepted methodologies for coastal vulnerability assessment, modelling and response strategies particularly for priority areas, such as small island, low-lying States and critical coastal areas.

130. Coastal countries with the cooperation of relevant United Nations Agencies could establish research priorities to address critical uncertainties for ocean and coastal area management. They could identify on-going and planned programs of systematic observation of the marine environment, with a view to integrating activities and establishing priorities. Research priorities include:

- (a) Living resources potential, optimal fishing regimes and acceptable levels of exploitation including the species life cycle and migration to identify critical areas and life stages.
- (b) Fate and effect of all forms of chemical pollution, toxic phytoplankton blooms in coastal ecosystems.
- (c) Human health related to consumption of fishery products from marine and coastal ecosystems.