

## Sea Level Rise and Coastlines

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## Integrated Coastal Zone Management (ICZM)

- Oversee all policy issues relating to human interaction with coastal areas
- Promote preservation of the coastal environment along with sustainable development of the coastlines
- Administer increased research, mapping, and data analysis of the coastal zones
- Coastal elevation should be measured and recorded at a standard level of detail
- Produce more accurate models of the areas that would be affected by a rise in sea level

## International Guidelines for New Development

- Implement buffer zone between coast and new construction sites
  - Designed to protect the coastal environment and prevent risky development
- National governments should curb accelerated growth in vulnerable coastal zones by increasing property taxes in risky areas
- Encourage relocation of existing at-risk developments by offering tax credits to companies who volunteer to move their facilities to safe regions

## Adaptive Response

- Adaptation is required to minimize the potential damages of rising waters
- Retreat – total relocation from the area
- Accommodation – modified land use adjusting to new circumstances
- Protection – construction of barriers to the water's advance
- Each adaptation will have to be unique to the area because no two situations are alike
- Cost, population and local ecology will have to be taken into consideration for response

## International Funding

- Adaptive plans can be costly to the country implementing them
- This is especially true for
  - Developing countries
  - Countries with vast coastlines
- The uneven burden will have to be offset internationally
- We propose a fund with contributions based 50% on a nation's GNP and 50% on national CO2 emissions
- We will allow for a ten year grace period to begin collecting money for the fund
  - This will allow sufficient time to prepare their budget

## International Fund Allocation

- Initially used to fund preparation of nations most at risk
- A portion of the budget will be allowed for research and development of adaptive technology
- Eventual use to compensate most affected nations with preference to
  - Developing countries
  - Small island states
- Funds will be allocated by a board designated by the UN

## Analysis of Needs

- We will need a staff of:
  - Financial advisors to plan the allotment of funds
  - scientists to monitor the progress towards these goals
  - diplomatic liaisons will be needed to interact with each nation
- Participation of the World Bank to manage the funds

## Sources

- Insurance against climate change?  
The AOSIS proposal
- <http://unfccc.int/resource/ccsites/senegal/fact/fs238.htm>
- Environment and development in coastal regions and in small islands
- <http://www.unesco.org/csi/pub/info/info4.htm>