A variety of actors utilize or have an impact (directly or indirectly) on the resources in the coastal zone, but few recognize their responsibility for management of these resources. This briefing paper makes the case for integrated and participatory management as the best way to maximize economic, socio-cultural and ecological benefits from coastal zone resources.

The importance of coastal resources for development
The coastal zone can be defined as any area in which
human activity is interlinked with both the land and
the marine environments. This has obvious implications
for determining the range of actors to be involved in the

for determining the range of actors to be involved in the management of the zone. In many small island states the coastal zone extends throughout the entire island.

Coastal resources provide a range of goods and services that are integral to the sustainable development of small island states in the Caribbean:

Coastal resources  Mangroves • Swamps • Beaches • Coral reefs • Seagrass beds • Estuaries		
Ecological	Socio-cultural	Economic
Coastal defense Wildlife habitats Regulation of: sedimentation and waste discharge	Housing Relaxation Recreation/ Sport Artistic inspiration Religious practices	Food production Construction material Transportation Fuel Industrial activities Tourism activities

Although every island is endowed with a different combination of coastal resources, which affects the developmental policies adopted, coastal resources play a vital role in both national and local development throughout the Caribbean.

The importance of managing the coastal zone to promote the sustainable use of coastal resources has all too frequently been overlooked. It is often assumed that the only resources worth protecting on the coast are beaches. For countries like Trinidad where there is little economic reliance on tourism there is then less incentive to manage the coast.

Sustainable national development can only be achieved if the coastal zone and its resources are maintained in a state of good health. The ability to translate coastal resources into optimum national and local benefits is being constantly threatened by environmental degradation, resource use conflicts and unsustainable resource use.

## A solution: integrated and participatory coastal zone management

Many upstream and downstream practices are carried out with little or no regard for the overall effect on people, the marine environment, the coastline and coastal infrastructure.



Negative impacts on coastal resources can best be identified and minimized through the participatory development and implementation of an integrated coastal zone management (ICZM) plan.

Integrated planning takes a holistic, multi-disciplinary approach and systematically brings together all perspectives and interests in the coastal zone into a unified whole.

Participatory integrated planning and management must include all social and development actors - government, civil society and private sector — who rely on and affect the coastal zone. It uses a coherent management structure, where all stakeholders have a clear idea of their own contribution, role and responsibility as well of those of the others. All contributions must be equitably assessed and recognized with an emphasis on collaborative problem-solving and decision-making.

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In summary, *ICZM* is proactive and equitable coastal zone management (CZM). It uses a participatory approach that promotes wise use of the resources for the benefit of all stakeholders.

While some policy-makers have accepted the need for this participatory approach to CZM, others continue to regard it as too complex or unnecessary. However, policy measures are being taken by many Caribbean islands, including Trinidad, that recognize that *failure to implement ICZM* could result in:

- Marine pollution caused by unregulated levels of agro chemicals and improper sewage and waste disposal
- Flooding due to excessive sedimentation and fresh water run-off
- Removal of mangroves for "development", leaving coastlines exposed to erosion and natural disasters.
- Compromised ability to trap sedimentation from in-land run-off
- Oil spill disasters that threaten all biodiversity



Continuing degradation of the coastal zone is also likely to lead to:

- Reduction in domestic tourism which contributes to increased spending in rural areas and at coastal attractions
- Unemployment
- Social discontent as economic activities are severely reduced and as coastal areas become unsafe for habitation
- Decrease in coastal zone economic investment as activities in this sector become less lucrative and therefore less attractive.



## ICZM is a win-win strategy

ICZM can be seen as a win-win strategy for all stakeholders and for natural resources because it:

- Benefits from both common and scientific knowledge, acquisition of new information and changes in perceptions which can be incorp rated into the planning and management process
- Reduces the strain on any one entity in terms of time and human and financial resources
- Reduces the expense of environmental mitigation
- Minimises the duplication of stakeholder effort
- Results in a more informed stakeholder and minimises conflict associated with the feeling of being left out or undervalued.

## What progress is Trinidad making?

Questions to consider:

- 1. Who are all the actors?
- 2. What are their roles, responsibilities, uses and impacts?
- 3. What policy and legislative framework is needed?
- 4. How can integrated, participatory management initiatives be implemented?

Policy and legislative steps towards ICZM have been made through:

- A National Environmental Policy
- A National Wetlands Policy and
- An Environmental Management Act

Are these enough? What gaps exist? What more needs to be done? How can we move towards implementation?

CANARI would like to hear your views!

## Caribbean Natural Resources Institute

The Caribbean Natural Resources Institute (CANARI) is an independent, regional, technical assistance organisation with more than 20 years of experience on issues of conservation, the environment, and sustainable development in the islands of the Caribbean.

CANARI's mission is to create avenues for the equitable participation and effective collaboration of Caribbean communities and institutions in managing the use of natural resources critical to development.

The Institute has specific interest and extensive experience in the identification and promotion of participatory approaches to natural resource management.

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