

# DR LEO BREWSTER



# RIGHT OF CENTRE

Dr Leo Brewster is director of the Coastal Zone Management Unit in the Ministry of Energy and the Environment.

## Millions spent on beach projects



THE BEACHES OF BARBADOS drive the economy. The Coastal Zone Management Unit (CZMU) recognises that they are the be-all and end-all of tourism, and without the beaches there is no tourism.

Since our inception in 1983, the various Governments have consistently provided their political and financial commitment to the conservation of the beaches and coastal resources of the island. To date the CZMU has worked on four major projects, and is in the process of implementing a fifth.

Between 1983/4 and 2002 the Government spent close to \$26 million on projects specifically designed to:

- 1) diagnose what were the causes of beach erosion;
- 2) apply greater scientific research into the causes of erosion;
- 3) construct test structures that could be applied to different locations for beach creation, stabilisation and enhancement;
- 4) examine the legislative and institutional requirements necessary to prepare the CZMU for its expanded role in managing coastal resources;
- 5) develop the Integrated Coastal Zone Management Plan.

As part of the current Coastal Infrastructure Programme (CIP), we are spending close to \$24 million focusing on infrastructure projects to protect the shoreline and also to enhance and stabilise the west and south coast shorelines - a long slow process with no quick-fix solutions.

As part of our work, we prioritise areas of concern and then develop the option best suited for shoreline stabilisation and enhancement. While property protection is paramount, it is becoming clear that there is greater need for emphasis on structure designs that can not only protect property but, more importantly, can stabilise and enhance an area.

Beach erosion is rightfully receiving such attention now is because we have two world-class events coming off soon and as a marketing selling point, there is concern about the perception of

Barbados' beaches. Since Hurricane Ivan two years ago, a lot of damage was done to the south coast beaches and a few west coast sites. Since then we have gone through two very bad winter seasons where we have had higher than normal winter swell waves occurring between September and April. The winter (December to April) is our main tourism season, and unfortunately it coincides with the period when the beaches are at their narrowest.

In addition, the island has experienced some periods of "out-of-season" swell waves which occurred during the normal beach recovery period (April to August). This sort of wave activity has reduced the amount of time for natural beach recovery, therefore they are very narrow, even in the current summer months when they should be at their widest.

Since the inception of the office in 1983 there has been a systematic approach to coastal management for the island, and it has been driven by placing emphasis on having a "non-hardened coast".

We have been able to provide assessment recommendations to the Town Planning Department on the design and placement of new coastal structures to ensure that they minimise destabilisation of the shoreline.

It has to be recognised also that you cannot respond in a "knee-jerk" way to issues that face property owners and cause coastal erosion, principally because you will end up with a "hardened coastline" with no beach. Examples of this can be found along several areas of the west coast with limited lateral access.

In Hometown, a project is focused on improved flood mitigation at the Hometown Lagoon. The Crane, St Philip project will link Crane Beach North and South through an offshore submerged breakwater, and shoreline protection. In Tent Bay, St John, we will install a slipway for the fishermen to haul up their boats.

CZMU is ensuring that wherever beaches are, they remain; where they don't exist, we will be looking to create them.

As part of the Coastal Infrastructure Programme, we are spending close to \$24 million on infrastructure projects to protect the shoreline.