

# Global Terrestrial Observing System INFORMATION NOTE

*Recent developments from the Global Terrestrial Observing System, 20 June 2001*

## **Development of a Coastal module for TEMS**

GTOS develops and maintains the Terrestrial Ecosystem Monitoring Sites (TEMS) database, an internet-based "yellow pages" of sites that regularly collect environmental data. We are now developing a Coastal module that will intensify data coverage for selected environmental issues in coastal areas. In its starting phase, the module will concentrate on two issues:

- nutrient and sediment transport from up-stream point and diffuse sources into coastal areas, which are crucial for the successful implementation of the clearing-house mechanism of the GPA;
- coastal wetland and other habitat quantity and quality monitoring and assessment in the context of socio-economical forcing in coastal regions.

### **1) The module's benefits**

The development of a Coastal Module will have a number of benefits:

#### **Data access**

A central registry of monitoring sites, networks, and global and regional databases will provide easier access to terrestrial coastal data.

#### **Identification of data gaps**

The registration of monitoring sites and networks will reveal a better understanding of where the greatest gaps of data coverage lie and what has to be undertaken to close these gaps.

#### **Global networking of monitoring sites and networks**

Monitoring sites and networks will not only become easier accessible for the data user, but GTOS will also use information generated by Tems to create closer links between the respective groups of the data producer community.

#### **Data harmonisation and data requirements development**

By establishing closer connections among sites and networks, it will become easier to harmonise sampling methodologies and data storage formats, which will enable data users to process, analyse and interpret data more easily and reliably.

## **2) Contents of the module**

The Coastal Module will build on experience that has already been gathered during the development of TEMS, including its existing structure and tools. The module will have the following components:

### **Variables**

The Coastal module will offer a core set of variables suited for terrestrial ecosystem monitoring in coastal zones. They will complement the variables for marine coastal monitoring that were proposed by the Coastal Ocean Observing Panel.

### **Sites and networks registry**

The module will provide metadata on a list of sites and networks that fall into a user-defined corridor along the coasts of the world.

### **Maps**

Different thematic maps of the world will give an easy and quick display of the sites registered in the module by highlighting a user-defined corridor along the coast. By selecting parts of the map, one can browse geographical, ecological or climatological regions in detail.

### **Complementary data**

The site and network registry will be complemented with links to socio-economic data and statistics sources (tourism, fisheries, industrial growth rate, population growth, fertilizer use, harvest, etc.). In addition to that, different datasets will be registered, that have been produced or compiled by timely limited programmes or projects dealing with environmental coastal monitoring.

### **Other resources**

The module will include a glossary and extensive link section. Online registration forms will enable managers of sites, networks or databases to register and update their metadata online.

### **Feedback**

Having problems reading this e-mail? Ask for plain text at [gotos@fao.org](mailto:gotos@fao.org). We would also be grateful for your comments on the new TEMS database.