

Eastern Africa

Atlas of Coastal Resources

A project of the United Nations Environment Programme
with the support of the Government of Belgium

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Eastern Africa

Atlas of Coastal Resources

1 : KENYA



UNITED NATIONS ENVIRONMENT PROGRAMME



BELGIAN ADMINISTRATION FOR DEVELOPMENT COOPERATION

The Government of Belgium, through its Administration for Development Cooperation, is pleased to be associated with this worthwhile project under the auspices of the Water Branch of the United Nations Environment Programme. We have always had a special interest in the Eastern African Action Plan activities and we see this project as providing a sound information management basis for the sustainable management of the coastal and marine resources of this region.

Dr. R. Moreels

Minister of State for Development Cooperation

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FOREWORD

Kenya has over 600 kilometres of coastline and this is one of the most important components of our nation's rich heritage. The highly productive ecosystems found in our coastal areas play a crucial role in the economic and social development of our country.

As in many other coastal nations, the earliest permanent settlements in Kenya sprang up along the coastal fringe. Maritime trade and ease of communication were among the most important driving forces in the establishment of coastal settlements which flourished around the natural ports and sheltered waters of the Kenya coast.

Until recently, the Kenya coast retained its predominantly trade-oriented focus. But in the last three decades there has been a distinct shift to service-oriented activities focused on the tourism and visitor industry. This transformation has in turn led to economic growth, a rapid increase in population and the establishment of other industrial enterprises. Unfortunately, population pressures and industrial and tourism developments place heavy demands on coastal habitats and ecological resources, and often result in natural resource depletion, environmental degradation and conflicts over the use of these valuable but vulnerable resources. This has direct consequences for those who live in the coastal region as well as for the nation as a whole and cannot be left to resolve itself. The process of development must be managed and environmental information is an essential ingredient for sound decision-making and sustainable resource use.

Kenyan decision-makers, administrators, planners, resource managers and their scientific advisers, need access to comprehensive environmental information in order to help bridge the gap between scientific understanding of Kenya's coastal processes and sound management of the environment. Lack of accessible data can seriously impair the capacity to make informed decisions affecting the management of the environment and the course of national development.

An Atlas such as this, designed specifically to our needs, was long overdue. We are indebted to the Water Branch and GRID-Nairobi of the United Nations Environment Programme (UNEP) and to the Belgian Government for making such a project possible and to the various Kenyan institutions that provided the raw material to make it happen. I am particularly pleased to note the key role that local institutions have played in this project.

I believe that all Kenyans will find the Atlas valuable. Our need for readily available information will grow as we move from simple exploitation of coastal resources to an approach embodying a pre-emptive and predictive planning process, comprehensive and sound management strategies and the critical integration and coordination of planning with implementation as endorsed by Agenda 21 of the UNCED Conference in Rio de Janeiro in June 1992. I therefore welcome this atlas as a major contribution to the sustainable development of coastal resources in Kenya and Eastern Africa.

Minister for Environment and Natural Resources

Nairobi, October 1997

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Overall responsibility for EAF/14 project management and administration was based within UNEP Water Branch in Nairobi. The overall Project Coordinator was Dr. Dirk Van Speybroeck who also provided information on coastal botany and who was assisted by Mr. Mwangi Theuri in management of the bibliographic database. In July 1997 the Flemish Association for Development Cooperation and Technical Assistance (VVOB) seconded to the project Mr. Lieven Bydekerke as a GIS expert. The last phase of the project was coordinated by Mr. Dixon Waruinge.

Dr. Philip Tortell acted as Principal Consultant and overall Editor.

The development of the coastal resources database and the Geographic system (GIS) framework, were undertaken by the UNEP Global Resources Information Database (GRID) in Nairobi under Mr. M Hernandez, GRID Nairobi Facility Manager and Mr. J Akiwumi. Mr. F Stolle and Ms. L Foley were responsible for satellite imagery interpretation and land cover classification. Data entry and map digitizing were done by Mr. M Mwangi and Ms. R Semakula.

The data was located, accessed and collated by the Kenya Working Group chaired by Dr. E Okemwa, Director of the Kenya Marine and Fisheries Research Institute, who acted as the In-Country Coordinator.

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National Museums of Kenya - information on archaeological sites and monuments.

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Overall design of the publication was by Chris Warring of Wellington, New Zealand, who was also responsible for layout and typesetting as well editing of graphics. Fransisco Vasquez from Reproduction and Distribution Section, United Nations Office at Nairobi was responsible for Pre-press and printing.



Figure 1 : The Eastern African Region