

– PREFACE –

When talking about different visits to Chwaka Bay in Zanzibar, Tanzania, it is common to hear remarks about the striking beauty of the scenery. The tidal movement's amazing features, leaving the Bay almost empty at low tide and the vision of a huge recipient of dark blue green water at high tide, the numerous channels where sail boats and fishers are silhouetted, women working in the sea, the refreshing breeze filling the afternoon air together with the soft voices and laughter of the children playing on the beach. All of us that have lived in Chwaka Bay have special memories, stories, jokes, photographs, the taste of mikundaji, the taste of tasi. All of us that have been there have friends and invaluable enriching experiences. We think that poetry would do justice to the Bay depicting its full colors. We recognize this, but we are scientists, and as such we make an effort in this volume to portray the Bay in the language that we know best.

So, this is a scientific book about Chwaka Bay, with all its limitations and all its potential. It is about the biology, ecology, physical and geological features as well as natural resources and management. It also deals with how people living in the surrounding villages interact with their environment on a daily basis to make their living. It highlights current challenges facing the Bay and its people, threats and research gaps. The contents of this volume are divided into the major themes of natural systems, including biology and ecology, interlinkages, human-related activities, and wider social issues relevant for management.

From time immemorial, people living around Chwaka Bay have depended almost entirely upon the resources generated within the Bay for subsistence and income. Visitors from all over the world have come to Chwaka Bay and have interacted differently with the environment and used its resources, thereby contributing to shape the natural and social environment of the area. Many scientists from different parts of the world have visited Chwaka Bay for various scientific explorations, particularly from the late 1980s when collaboration between the University of Dar es Salaam and Sida/SAREC, Sweden, was established. This has resulted in numerous publications in different scientific media. However, no thorough compilation of the scientific information in the area has been published in book format.

This book is an attempt to bring together into a single volume the scientific information produced over the years. The compilation work begins by analyzing the pioneer report on ecology and socio-economics of the Bay, compiled by Mohammed and Jiddawi (1999), followed by a comprehensive bibliographic search to identify the widest possible range of publications in scientific journals, scientific and technical reports and scientific theses that relate to Chwaka Bay. In addition, interviews with locals and in some cases personal observations have been considered. The chapters were written by experts in the specific topics. All chapters were subjected to rigorous reviews; first internally in an author's workshop and thereafter each chapter was sent to external peer review. The literature review attempted to be as

extensive as possible, however we do not claim to have covered all available work and the literature presented here extends only to June 2012. We know that there is quite an amount of on-going research that could be the part of a new volume in, let's say, ten years from now. We believe that several people, such as scientists, students, managers, tourists, the public in general and coastal populations will find this book useful as it provides a larger picture of the social and economic context, the natural environment and management issues that shape all life in Chwaka Bay.

We particularly hope that this contribution will be of value to the people living in the villages surrounding Chwaka Bay in their efforts towards sustainability. We hope that the language of science provides, if not the beauty of poetry, at least some profound insights.

A note about reading the book: All chapters of the book were written by knowledgeable scientists who have been working in Chwaka Bay. The authors were given a lot of freedom to frame their own chapters and decide on the final language style and references included. The book gathers most of the research done in Chwaka Bay and highlights important gaps and challenges. It also provides valuable points for management. Each chapter can be read independently. Cross references are given to help the reader, but each reader will find his/her own interests and own linkages.

Throughout the book the terms “Zanzibar” and “Unguja” are used. While Zanzibar archipelago is part of the United Republic of Tanzania (URT) and includes the two large islands of Unguja and Pemba; in the book, the colloquial terms of “Zanzibar” and “Tanzania” are sometimes use to refer to Unguja Island only and URT respectively. We would also like to make a comment on salinity and its units. The units ppt and ‰ (parts per thousand), as well as PSU (practical salinity units) are widely used in the literature; however, with the consideration of the Practical Salinity Scale (PSS) as a conductivity ratio, salinity was redefined as a dimensionless quantity. In the book, we provide the original units given by the authors since the measurement and analysis methods may vary as well as the scales used. The reader is invited to check on the original references for more information about methods.

Stockholm, 17 November, 2012.

Maricela de la Torre-Castro and Thomas J. Lyimo, editors.