## MESSAGE

The 21<sup>st</sup> Century has brought in its wake numerous challenges, in particular that of adopting a sustainable way of life that would not threaten future generations. The proper management of freshwater, which is an essential element of life, gains all its importance in that context. Every one of us should, therefore, make it our civic duty to save every drop of water, whilst at the same time, avoid any activity that would pollute our underground waters so precious to all of us.

The growing population and increasing human needs for freshwater coupled with the phenomenon of climate change are ingredients for a water stress situation. The need of the hour is, therefore, to improve efficiency in water use and conservation not only to meet human demands but also to satisfy environmental needs for water.

Against this backdrop, water resource planning and management assume critical importance. However, water resources cannot be managed unless we have reliable information on its quality and quantity and how variable they are likely to be in the future. Hydrological data also affects a country's ability to model, predict and plan catastrophic events such as floods and droughts that impact on public health and safety as well as on the country's economy.

It is, therefore, with great pleasure that I associate myself to the publication of the 15<sup>th</sup> issue of the Hydrology Data Book (2006 – 2010) prepared by the Water Resources Unit of my Ministry. The Hydrology Data Book contains updated data and other useful information on water resources in Mauritius. It will no doubt prove to be a useful tool, not only to professionals involved in water related projects, but also to students, researchers and policy makers.

Dr the Hon A. R. Beebeejaun, GCSK, FRCP Deputy Prime Minister Minister of Energy and Public Utilities

Date:....

## Foreword

The history of water goes as far back as the history of civilization itself. The growth of population, agriculture and industry has led to an indiscriminate exploitation of this resource. As a result, the world is now in face of many water-related problems. Over one in six people worldwide –nearly 900 million don't have access to improved water sources, while 2.5 billion live without basic sanitation. These figures speak for themselves. Aiming towards improving access to safe drinking water and proper sanitation will require, to a great extent, a pragmatic approach in the management of water resources.

At national level, the increasing stress on the available water resources in search for improved socio-economic well-being highlights the central role of hydrology in various aspects of water and environment. As such, a scientific approach is imperative for the management of water resources through an utmost care in the exploitation of this precious resource to sustain economic growth.

In order to evolve a pragmatic and scientific plan for an integrated water resources management one needs data on hydrogeological, hydrological, hydrometeorological, hydrochemical and hydrogeochemical elements together with other relevant parameters, the use of these data in the design and operation of various categories of water resource projects forms the basis for water resources assessment and management. To that end, an optimal network for data acquisition, storage and retrieval has been set up.

The Hydrology Data Book (Year 2006-2010) prepared by the Hydrology Staff of the Water Resources Unit contains the following information : (1) An introduction on the Hydrology

of Mauritius; (2) Rainfall data; (3) River/Canal flow data; (4) Data on Groundwater Resources; (5) Data on Storage Reservoirs; (6) Data on Water Quality; (7) Hydrology of Rodrigues and Agalega. In conformity with normal hydrological practice, the data have been compiled by hydrological year, which is from 1<sup>st</sup> November to 31<sup>st</sup> October of the following year.

Thus, the Hydrology Data Book is a tool for policy makers, engineers, scientists and other specialists in the management and development of water resources in the Republic of Mauritius.

I am grateful to the staff of the Water Resources Unit more specifically that of the Hydrology Section for their devotion in the preparation of this edition of the Hydrology Data Book.

> D. Deepchand Director, Water Resources Unit