# A REVIEW OF INTEGRATED WATER RESOURCES MANAGEMENT IN MALAYSIA

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#### **ABSTRACT**

# A REVIEW OF INTEGRATED WATER RESOURCES MANAGEMENT IN MALAYSIA

By

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#### September 2007

Supervisor: Mohd Nor Bin Mohd Desa, Ph.D.

The implementation of water management action plans in the country involves numerous government institutions, private organizations and the general public. In order to ensure sustainable water resources development and effective management of water-related problems, there is a need for greater involvement in the management of water resources by undertaking major changes to existing legislation and institutional arrangement with respect to water, land and environmental management.

This study therefore addresses the problems and solutions pertaining to water resources in Malaysia, as well as the existing legislations and institutional arrangements available. Besides that it looks into the Integrated Water Resources Management (IWRM) initiatives being done and its implementation challenges. From that, a conclusion is drawn to determine the status and further actions required for IWRM implementation in Malaysia.

#### **ABSTRAK**

# KAJIAN SEMULA PENGURUSAN SUMBER AIR BERSEPADU DI MALAYSIA

#### Oleh

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#### September 2006

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Perlaksanaan pelan tindakan untuk pengurusan air di negara kita melibatkan institusi kerajaan, organisasi swasta serta orang ramai. Untuk memastikan pembangunan sumber air yang berkekalan dan pengurusan berkesan masalah berkenaan air, penglibatan menyeluruh didalam pengurusan sumber air oleh pelbagai sektor adalah perlu. Ini dapat dilakukan dengan melaksanakan perubahan kepada dasar-dasar sedia ada, penyusunan semula institusi berkenaan air, pembangunan tanah dan pengurusan alam sekitar.

Kajian ini melihat secara mendalam masalah serta penyelesaian masalah berkenaan dengan sumber air di Malayisa, serta dasar-dasar dan penyusunan semula institusi berkenaan air sediada. Selain daripada itu, kajian ini juga melihat kepada initiatif Pengurusan Sumber Air Bersepadu (PSAB) yang sedang dijalankan dan juga masalah perlaksanaannya. Daripada itu, suatu kesimpulan dibuat untuk menentukan status dan langkah-langkah yang perlu di jalankan untuk mencapai perlaksanaan berkesan PSAB di Malaysia.

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#### CHAPTER ONE

#### INTRODUCTION

Water is a high priority concern in many countries, including Malaysia. Water has also been accorded a high priority in the global development agenda. At the Johannesburg World Summit on Sustainable Development (WSSD) in 2002, all countries were required to develop Integrated Water Resources Management (IWRM) and water efficiency plans by 2005 in order to reverse the current trend in water resources degradation and to achieve integrated management of land, water and living resources, while strengthening national capacities (Raja Dato' Zaharaton, 2004).

According to Global Water Partnership (GWP), IWRM is a process which promotes the coordinated development and management of water, land and related resources, in order to maximize the resultant economic and social welfare in an equitable manner, without compromising the sustainability of vital ecosystems. There have been other definitions, but the prime elements of IWRM are captured in the GWP version.

Indeed, over the years it has been shown that an integrated approach to IWRM will be critical for achieving many of the nations development goals, including not only those related to health, but also to poverty and hunger eradication, education, women's empowerment, environmental sustainability and global partnership for development. This has been achieved in many countries such as France, Denmark and Sweden. All that is needed is good water governance when implementing IWRM. Good water governance exists where government bodies responsible for

water establish an effective policy and legal framework to allocate and manage water in ways responsive to national social and economic needs, and to the long-term sustainability of the resource base.

In Malaysia, despite copious rainfall averaging 3,000 mm annually, giving the country a richness in water resources estimated at 566 billion m<sup>3</sup> of water runoff in river systems each year (Hj. Keizrul Abdullah, 2002), the country is still besieged by numerous water problems. Thus, an integrative outlook through IWRM should be adopted in managing water resources in Malaysia.

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