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# INTEGRATED RIVER MANAGEMENT FOR MALACCA STATE: A CONCEPTUAL APPROACH

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## ABSTRACT

This paper gives a conceptual approach into the integrated management of rivers in Malacca state. The basic concept of integrated river management regards the river mechanism as a dynamic but fragile ecosystem supported by a number of highly interdependent components. To manage the interdependent components systematically there is a need to provide the river managers with a comprehensive tool for decision making.

## BACKGROUND

Matters that relate to land and water in Malaysia are the prerogative of the state. While land matters are well looked after, matters that concerned water or rivers are otherwise. Though, historically, rivers have been providing growth and prosperity to the state, however they have until now been neglected.

The river systems in Malacca constitute an approximate total length of 566 km running over a total land area of 1650 km<sup>2</sup>. There are about 99 river systems with Sungai Linggi and a small part of Sungai Malacca share their catchment with Negeri Sembilan and Sungai Kesang shares its catchment with Johore. The Malacca River is the main river with a basin covering an area approximately 600 km<sup>2</sup>.

These rivers have served the needs of water resources, navigation, recreation, ecological balance and supporting a diversity of riverine flora and fauna. Over the years however, tremendous strides in the state development have created impacts on the rivers, most of them are negative. Several issues have long been left to take its own course of fate without much action taken.

One of the several issues akin to water hence rivers is that of values. As far as water is concerned, it is more tending to consider it purely as a social good rather than as socioeconomic good. When water merit little economic justification, the management of rivers become neglected and unattractive.