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MEKONG RIVER BASIN AND CLIMATE CHANGE: THREATS TO CAMBODIA?

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Abstract

Mekong River runs through China, Myanmar, Lao PDR, Thailand, Cambodia and Vietnam. Mekong's potential has been traditionally utilized both as a source of water and of sustenance, but nowadays it has become increasingly important for economic growth of countries it irrigates. In recent years, though, demands for industrialization and growth have put new pressures on the Mekong and its habitats. Most of the new development is slated to happen within China's border, which will effect the entire river system downstream including Tonle Sap Lake in Cambodia. The Tonle Sap Lake and its floodplains provide the source of livelihood and food for millions of Cambodians. Existence of dams, combined with other detrimental human interference like deforestation and pollution, causes the Mekong water level to drop, making flooding less viable. Aside from harming fisheries, the dams are putting millions out of work who make and sell products from the river, including jobs like repairing boats and making fishing gear. This will be particularly harmful to Cambodia, where so many people depend on fish and fisheries for food and employment.

Keywords: Mekong River, Tonle Sap Lake, threats, climate change, Cambodia

Introduction

The Mekong is the longest river in Southeast Asia and one of the largest rivers in the world. In terms of drainage area (795,000 km²), it ranks twenty-first in the world and twelfth in terms of its length (4,800 km). From its source on the Tibetan plateau it runs for 4800 km through China, Myanmar, Lao PDR, Thailand, Cambodia and Viet Nam to the South China Sea (Figure 1), where it discharges on average 475 000 million m³ per year (Zhou & Guan, 2001). The total Mekong Basin (MB) catchment area covers 795 000 km² and has 73 million inhabitants (www.fao.org/docrep/007/ad525e/ad525e01.htm). In terms of river flow, the Mekong Basin has two almost distinct parts: the upper parts in China and Myanmar account for 16 percent and 2 percent of the flow, respectively; and the lower part covering the other four riparians accounts for 82 percent of the Mekong flow (Ti Le-Huu & Lien Nguyen Duc, 2003).

In the upper part of the basin, the Mekong is known as the Lancang River, which passes through a series of north/south Hengduan Mountains ranges, with Kawagarbo the highest mountain in Yunnan at 6,740 meters. The river flows south from Kawagarbo, through a series