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Ecological Connections Between the Mekong Mainstream, the Tonle Sap Great Lake and the Mekong Delta

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Abstract

The Mekong River is one of the world's most important waterways. More significant than the length of the river is the importance of the Mekong's water to the people who live within its Basin, an estimated 60 million people who depend on the river for their livelihood. The Mekong River produces around 2.6 million tonnes of fish per year. Its value amounts to about USD 2,000 million/year at the landing sites. 57 percent of the Tonle Sap River derived the water from the Mekong River, so upstream developments influence two thirds of the Tonle Sap water. Dams are the main type of structure having an impact on fisheries production. Dam development would not only obstruct migration routes, but also result in modification of the flood height, duration and timing, reduce the amount of sediments arriving to the lake, with impacts on the fish production.

The South China Sea that is influenced by discharge from the Mekong River, up to 500 km beyond the mouth of the river, relies heavily on the nutrient input from the river. The Great Lake of Cambodia thus imposes its rule and its rhythm to a distant population at sea. River discharge has a strong positive effect on the production of coastal fisheries. River regulation is likely to have a dramatic effect on the production of coastal fisheries (plus other factors such as costal geomorphology).