

LIMNOLOGY AND FISH YIELDS OF NEWLY BUILT STANDING WATER BODIES IN THE MAHAWELI RIVER BASIN

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Mahaweli, the longest river (349 km) with the largest annual discharge in Sri Lanka, drains an area of about 18 percent of the island. This river has been dammed onstream to form three hydropower reservoirs in the central highlands and partially diverted to store two irrigation "tanks" in the Dry-zone lowlands. This massive development project has resulted in about 50 percent reduction of the river's discharge into the Indian Ocean and the formation of standing water bodies of 22,670 hectares. Basic limnological characteristics in both onstream and offstream reservoirs from the headwaters to the downstream are determined using standard techniques. Some limnological features and fish yields of those standing water bodies indicate substantial changes with decreasing altitude. Trophic status and fish yields are significantly different among these newly built standing water bodies. A pronounced impact of damming and diversion on the river ecosystem is also observed.