Environmental impacts due to river sand mining: A case study

Ranjana U. K. Piyadasa
Department of Geography

Sand is an essential element of construction and has direct and indirect impacts on a country's development processes. The sustainable use of sand resources is important to maintain natural ecosystems and support overall development. Sri Lanka's construction industry which contributes over 8% to the country's GDP requires over 7 million cubic meters of sand annually (expanded in the short term due to additional demands of post tsunami construction) which is obtained from the country's river beds, river banks or mined from previous riverbeds and sand dunes. Although until recently manual harvesting was the norm, increasing mechanized and often illegal river sand harvesting has caused a major loss of water security and ecosystem damage due to the lowering of water tables, bank erosion, land degradation and salinity intrusion, damage to infrastructure, and increased health hazards. The present research study was conducted to identify the behavior of environmental impacts due to river sand mining in the Nilwala river. Over-mining of the Nilwala River causes many problems like salinization of Matara drinking water due to the intrusion of sea water into the river, collapse of river banks, and loss of river land. The study was focused mainly on groundwater quality changes due to sand mining in the Nilwala river basin area. Wells dug in the right bank of the Nilwala river basin were selected to identify groundwater quality changes due to sand mining in the river. The GIS package Arc View was used to identify the water quality changes in the river and as well as in the flood plain area.

Fiscal Problems and the Need for the Enhancement of Indirect Taxation in Sri Lanka

Kopalapillai Amirthalingam
Department Economics

In the past three decades a number of developing countries have experienced major episodes of financial crises that were brought in by unsustainable fiscal deficits. As in the case of a number of other developing countries, the fiscal deficit in Sri Lanka too has been high for a long period. Though the fiscal deficit was at its peak at 23 per cent in 1980, it averaged 13 per cent during 1977-1991 and 9 per cent during 1992-2007. However, even a 9 per cent deficit could be a dangerous phenomenon as it could act as a catalyst to financial instability in the country. When government revenue is insufficient to offset its expenditure, the country is forced to depend on foreign and domestic sources to bridge the fiscal deficit. As a result, government's debt as a percentage of GDP increases. However, high level debt will increase the pressure on the government's ability to meet its other expenditure commitments. This is of particular concern when these commitments involve essential and development oriented expenditure. It also tends to reduce resource availability to the private sector in addition to increasing the interest rate in the domestic markets. This will increase the cost of borrowing by the private sector and thereby crowd