

D-02: Some environmental impacts on watershed of the accelerated Mahaweli Development Programme (AMDP)

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An EIA performed at the early stages of the AMDP, predicted potential environmental impacts of the project and recommended mitigator measures to overcome the problems. Nevertheless today signs of those predicted impacts in the Mahaweli System are observed.

This study highlights the salient features of environmental impact of Mahaweli watershed.

Field observations were carried out at all reservoirs and down stream systems. Relevant officers and community were interviewed and official records on water quality, reforestation and soil loss were consulted.

On side soil loss in upper catchment areas continues to be considerably greater than tolerable limits. This is primarily due to low priority given to institutionalize ad-hoc soil conservation programmes.

Water quality of several reservoirs (Kotmale, Victoria and Rantambe) have shown moderate levels of eutrophication. Although this may be desirable (in fish production), if allowed to progress it could be disastrous.

Kotmale reservoir has filamentates, Blue green algae such as *Microcystis* and *Anabaena*. Fertilizer application at excessive rates in catchment areas of reservoirs (vegetable cultivation in Nuwara Eliya) have contributed to nutrient build up in waters.

Soil erosion due to improper land use practices in catchments is the major cause of sedimentation. Degradation of wetland and riverain habitats in the lower catchment areas has resulted in change of hydrological balance and has increased river bank erosion.

As a result of these environmental impacts the economic returns expected from Mahaweli could be greatly undermined. The Mahaweli Authority should quantify the extent of these impacts and instal necessary mitigatory measures.