

ASPECTS OF HYDROLOGICAL REGIME CHANGES IN THE
UPPER KOTMALE OYA

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Annual discharge records available for the Kotmale Oya Basin prior to the construction of the Kotmale Dam together with long-term rainfall series available for selected locations, were analysed by using time-series methods to detect temporal trends. This reveals a declining trend of rainfall over the basin, particularly in the upstream areas. The declining trend of annual discharge of the Kotmale Oya basin can be attributed to a considerable extent, to the overall changes of rainfall regime of the watershed areas. Human modification of the environment can be seen as a primary cause of hydrological regime changes in this basin.