Reservoir sediment retention in large Asian river basins

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Asian rivers used to supply a large proportion of suspended sediment to the seas. However, many large Asian rivers have been experiencing a dramatic sediment decline, mainly due to sediment retention by numerous reservoirs. However, information such as the location and water storage capacity of these reservoirs is often not available. This talk will introduce our recent work on remote sensing of individual reservoirs conducted in two large river basins as pilot studies, Huanghe and Zhujiang where reservoirs are extensive. The research aims to find out the spatial distribution, the total storage capacity and the total sediment retention of the existing reservoirs. The ultimate goal is to evaluate their impact on water flow and sediment flux changes.

ACKNOWLEDGEMENT

The author gratefully acknowledges the support & contributions of Singapore-Delft Water Alliance ("Multi-objective Multiple Reservoir Management research programme" (R-264-001-005-272)).