

New Remedial Measure for Silting in Dam

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Abstract: *The shortage of rainfall and its increasing variability leads to moisture stress particularly in dry and rain-fed areas. Reservoirs, created by dams, are constructed to store water for use in non-monsoon months. However, these benefits are not fully explored due to water storage loss due to siltation. The sediment management at dams and reservoirs have given rise to acute complications owing to its impact on water availability, reliability of infrastructure and impact on downstream users. Methods to calculate the volume of siltation trapped by gravity dams play an important role in addressing these issues. We are learning the various methods that can be adopted to calculate sedimentation in reservoirs of dams. Silt is somewhere between the size of sand and clay, and is an important component in the sedimentary dynamics of rivers. Silt comes in several forms. It might be found in the soil underwater or as sediment suspended in river water. Silt is geologically classified by its grain size and texture going through a sieve. Letters are assigned to the grain of soil, whether it is gravel, sand, silt, clay, or organic. Then, it is further delineated as to whether the sample is poorly graded, well-graded, has a high plasticity, or low plasticity. The sample composition is determined by passing it through differently sized sieves, and the result is classified with the combination of letters assigned to it based on its physiochemical characteristics...*

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