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The catchment studies conducted in an area of 64 ha at Glenmorgan (Nilgiri) revealed a reduction of 16% on an average in the expected water yield from the open grasslands, if

the bluegum plantations raised in these plantations do not add rotation of 10 years (1978-82), but these plantations do not add any sediment load into the reservoirs. During the first half of the second rotation (1983-87), the reduction in total flow has further increased about 25%. Manmade forests were observed to have some moderating effects on instantaneous flow as compared to grasslands and hence planning and managing such catchment areas for assured and steady inflow into the hydel reservoirs through appropriate silvicultural management is highlighted.