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**Assessment of water requirement of sugarcane, banana and paddy in Sevanagala**

L M J R Wijayawardhana\*, A L C De Silva and W R G Witharama

*Crop and Resource Management Division, Sugarcane Research Institute, Udawalawe*

Conversion of irrigable sugarcane lands to paddy and banana has been a major threat to the Sevanagala sugar industry. This has not only reduced availability of land for sugarcane cultivation, but has also created an additional irrigation water demand within the project. The objective of this study was to make a comparative assessment of water requirement of sugarcane, paddy and banana in Sevanagala to pinpoint the problem.

Relevant meteorological data were obtained from Sevanagala Sugar Industries. Water requirement for sugarcane and banana was calculated using the class A pan evaporation method. The total water requirement for paddy was taken from the data published by the Department of Agriculture, Sri Lanka. Monthly reference evapo-transpiration ( $ET_0$ ) was calculated by multiplying class A pan evaporation with pan coefficient ( $k_p$ ).

The total water requirement estimated for sugarcane, banana and paddy was 1294, 1356 and 2891 mm per annum respectively. Thus, paddy and banana need respectively, nearly 123% and 5% more water than sugarcane.