

Research News

**ESTIMATION OF SOIL MOISTURE IN PADDY FIELDS UTILIZING
SEBAL ALGORITHM IN VAVUNIYA DISTRICT USING REMOTE SENSING**

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Cultivation of paddy, other field crops and cash crops under rainfed conditions is the major agricultural livelihood option in Vavuniya district. In these agricultural systems, soil moisture is an important soil bio-physical parameter that determines the water availability for plant. Hence, it is of paramount importance to know in advance the state of soil moisture regime in these systems to plan appropriate agronomic activities to ensure a high agricultural productivity in the area. A study conducted in Vavuniya district during the *maha* season 2012 using remote sensing tools associated with Surface Energy Balance Algorithm for Land (SEBAL) in paddy lands has revealed that there is a strong possibility of utilizing residual moisture in paddy lands for cultivation of vegetable, chilli, oil crops, onion and some other cash crops after harvesting the *maha* season crop. Experiments are continuing to validate the results for second season.