

ชื่อเรื่อง

Vetiver Grass Hedgerows for Soil and Water Conservation in Tea Lands in Sri Lanka – A Success Story

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Abstract

Soil erosion is severe in high rainfall Mid and Upland regions of Sri Lanka where the major crop is tea. 80% of this is seedling tea (tea from seeds). The Old Up and Down planting system adopted and absence of vegetative protection to existing mechanical measures results-in severe soil erosion. Studies reveal 115 cms top soil lost during last century. This relates to 40 MT/Ha/yr. Unplanned landclearing causes 250 MT/Ha/yr soil loss. Land rested 2 yrs under Managrass (*Cymbopogon confertiflorus*) without mulching results in 120-160 MT/Ha/yr soil loss. New contour planted VP tea during 4 year growth exhibits 75 MT/Ha/yr to 20 MT/Ha/yr soil loss mainly due to insufficient mulching.

Mechanical measures are generally not accepted due to high cost, repeated reconstruction, high maintenance, while Vetiver grass hedgerows popularly accepted due to low cost, easy application, low maintenance, permanency once established. No detailed research done on Vetiver hedge rows in tea, but significant results visually observed in its high efficiency of soil and water conservation. This is proved by its increasing adoption by tea estates for this purpose in Sri Lanka. The Poster presentation will depict use of Vetiver grass to treat different types of erosion damage in tea lands in Sri Lanka.