

FARMER PERSPECTIVE AND PHYSICAL IMPACT OF SOIL CONSERVATION
TECHNOLOGIES ADOPTED IN VEGETABLE GROWING SLOPPY LANDS IN
MATALE DISTRICT

D.G.U.K. Dhanapala¹, K.M.A. Kendaragama² and D.M. Jinadasa¹

¹Department of Soils and Water Resources Management, Faculty of Agriculture, Rajarata University of Sri Lanka, Anuradhapura, Sri Lanka

²Natural Resources Management Centre, Department of Agriculture, Peradeniya, Sri Lanka

Soil erosion has become a serious problem in vegetable growing lands in the Matale district and soil conservation technologies adopted needs periodic evaluation. Study was conducted to review the status in the adaptability, to assess the physical impact and farmer perspective of soil conservation technologies. A field survey was conducted with a sample of 40 farmers who adopted lock and spill drains and stone bunds in 2005 and 2006, in Salagama, Walmoruwa, Dambawa and Medabedda in the Matale district. The lands are sloping and cultivated with brinjal, beans and capsicum under rain-fed condition. The questionnaire included details of soil conservation technologies, incentives, maintenance of soil conservation structures, physical impact and farmer perspectives.

Results showed that farmers prefer material incentives like, seed, fertilizer and mamoty. They observed a reduction in runoff and soil loss with the adoption of soil conservation measures. Majority of farmers in the intermediate zone and 53% in the wet zone observed increase moisture retention. Majority of farmers in the intermediate zone and 46% in the wet zone observed improvement in soil. 66% of farmers in the intermediate zone and 26% in the wet zone observed an improvement in crop yields with the adoption of stone bunds. It was 33% in the intermediate zone with the adoption of lock and spill drains. More than 85% farmers realized that soil erosion takes

place during land preparation and weeding. Majority of farmers in the intermediate zone and 35% in the wet zone feel that soil erosion causes declining soil quality. Majority of farmers realized that soil erosion is a serious problem taking place in their farming lands. However, majority of farmers in the intermediate zone only think that it causes soil quality. In addition, only minority of them both in wet and intermediate zones think that erosion causes declining in their crop yield and as a result priority attention has not been given for soil conservation.

Key words: Farmer perspective, Physical impact, Soil erosion control, Vegetables