

PUERTORICAN TERRACES – AN ECONOMICAL AND ECO-FRIENDLY CONSERVATION MEASURE GETTING ATTENTION RECENTLY IN NILGIRIS

Bench terracing, commonly recommended soil conservation measure for the hilly regions requires initial heavy investment, an impediment for many farmers to take up this technology. In Puertorican method of terrace formation, the expenditure incurred is only one sixth of the cost as compared to mechanical terracing. Here, terraces are formed naturally without disturbance of the topsoil by using grasses or other suitable vegetation as vegetative barrier. On a sloping land selected for terrace formation, suitable species are planted in single or double row on contour at pre-determined spacing. The inter space between the two hedge lines of barrier is cultivated to take up crops. As a natural process, the tilled soil slowly moves towards the vegetative barrier and gets deposited against it, leading to the formation of terraces in 3 to 4 years time. This technology developed by this centre was successfully adopted in the farmer's field.

Shri C. Ragu of Melkavatti village in the Nilgiris had adopted this technology in 0.4 ha of sloping land under the Farmers Participatory Action Research Programme implemented by this Research Centre. Within a period of three years, terraces have been naturally formed in his field with minimum runoff, soil loss and nutrient loss as the chief benefit. Apart from fodder production of 8 t from the grass raised, he had also realized 22 % additional crop yield in comparison to the yield obtained before adoption of this technology. Two more farmers also got the same benefit following this technology. The District Collector, Nilgiri appreciated this technology and awarded the farmer with a memento and requested the Nilgiri farmers to follow this technology to avoid environmental hazards when the bench terraces are formed with machineries during Farm Innovators Day conducted in this centre on 21st February 2012.



Photo 1: Napier grass planted across the slope with potato crop during initial stage



Photo 2: Well established Napier grass with beans crop during II year



Photo 3: Puertorican Terrace formation-Intermediate stage (cabbage crop during II season of II year)



Photo 4: Mr. Ragu, Melkavkatty village who has successfully adopted the technology



Photo 5: Well established Puertorican Terrace at farmers' field



Photo 6: Award by the District Collector, The Nilgiris to the farmer for successful adoption the technology