Anurat Srisura 2007: Methods of Soil and Crop Management for Soil Erosion Control of Cassava Field: A Case Study of Cassava Development Village Project Nakhonratchasima Province. Master of Science (Sustainable Land Use and Natural Resource Management), Major Field: Sustainable Land Use and Natural Resource Management, Interdisciplinary Graduate Program. Thesis Advisor: Professor (Emeritus) Piya Duangpatra, Ph.D. 140 pages.

During the years 2004-2005, an investigation was carried out by interviewing 180 and 120 of representative farmers who have had been participated (PF) and had not been participated (NPF) respectively in the Cassava Development Village Project (CDVP) in Darnkuntod, Serngsarng, Teparak and Khonburi districts, Nakhonratchasima province. Moreover, 24 other stakeholders were also enquired for their pertinent views. The main objective of the task was to study on the farmers' adoption of the soil and plant management practices for controlling erosion in cassava fields of the two groups of farmers (PF and NPF) under studied.

Overall, as compared to the NPF, the involvement of the PF in the CDVP activities had markedly induced them to adopt the plant and soil management methods in more intensive and appropriate ways to control erosion than those of the NPF. The plausible reasons which entailing this comprise the earnestly and continuously support and encouragement from the government particularly the acquisition of the pertinent knowledges on how to effectively manage the cassava plant and soils by ways of organizing relevant short term training, study tours and by putting up cassava demonstration plots and others.

Obviously, some of the highly accepted plant and soil management methods for controlling erosion of the PF were: growing vetiver grass (VG), plough the uneven land against the slope, using the green manure crops and by planting at closed spacing. Apparently, the main causes which normally hindered farmers' adoption were the lacking of income from either VG or some other hedged row plants, insufficient green manure seed for farmers' needs and high cost of labor wages. Besides, the occurrence of soil erosion also brought about low cassaya yield, causing steadily loss of surface soil mass and consequently depleting the fertility of the soils substantially. Basically, the recommendations for farmers' considerations to properly use any soil and plant management method should be embraced also the socio-economic, natural resources and the environmental factors.

Thesis Advisor's signature

Student's signature