

ชื่อเรื่อง

Status of Vetiver Grass in Upland Farming Development in Indonesia

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Abstract

There are two kinds of soil conservation techniques developed by Farming Systems Research (FSR) component of Agency for Agricultural Research and Development (AARD) of Indonesia, i.e., mechanical and vegetative. Vegetative soil conservation includes cropping pattern arrangement, tree plantation, grasses and legumes as terraces strengthen on strips and alley cropping systems. In that case, vetiver as grass barrier could control run off and decrease 'CP' factor and land audibility lower than control plot, as well as increase organic matter on soil. On alley system, vetiver could control erosion to 13.21 and 0.56 ton at second and third years respectively (in average erosion on control plot was 120.08 ton/year), while height of ridge soil at third year was 29.7 cm lower than Flemingia (38.9 cm) and Caliandra (39.7 cm). But, adoption of farmers' upland on vetiver plantation were low. Resources limitation of upland farmers led them on short term orientation and only adopt technologies that give direct benefit. In that case, farmers more prefer plant other grasses (such as king grass, elephant grass and setaria) or legumes (Flemingia, Gliricidia, Leucaena, etc) on alley system. Grasses and legumes were planted by farmers for fodder and fuel wood but not for soil conservation orientation. Lower forages production and palatability of livestock on vetiver grass compared with other grasses and legumes being the cause.