The determination of optimum farm enterprise mix for agro-biodiversity farmer field school households in Bondo district, Kenya

In Proceedings of “From soil to soul crop production for improved african livelihoods and a better environment for future generations, 10th African Crop Science Society Conference, 10th – 13th October 2011, Maputo – Mozambique

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Abstract
Farmers in marginal areas of Kenya where high-yielding crop varieties and livestock breeds do not perform well have relied on a wide array of enterprises to support their livelihoods. The coping strategy has helped to sustain their livelihoods in the face of unfavorable circumstances such as vagaries of nature, disease attack and fluctuation in the price of farm inputs and outputs. However, intensification and commercialization of agriculture over the years has led to a continual decline in crop and livestock diversity, increasing vulnerability of smallholder farmers to food insecurity. The objective of this study was to determine the optimum farm enterprise mix for agro-biodiversity in farmer field school households in Bondo District, Kenya. The study showed that to achieve an optimal enterprise combination that would be able to meet household needs, farmers ought to reduce on enterprises with negative gross margins in their farm plans either by bringing in new enterprises or by improving on the productivity of the existing enterprises. As a means of improving productivity, modern technologies need to be employed, this requires more capital. This is because smallholder farmers are often not credit worthy, policies targeting subsidized credit need to be encouraged.

Keywords: Agro-Biodiversity, Enterprise, Mix, Kenya.