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Economic cost and benefit of integrating horticulture with staples among smallholder women farmers in Kenya

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Abstract

The demand for African Indigenous Vegetables (AIVs) in Kenya is increasing rapidly providing potential for income generation among small-scale farmers. However, the supply is rather inadequate against the wide promotion by agricultural development practitioners. The intrinsic agronomic strengths of AIVs are not enough to warrant its widespread promotion without first evaluating its economic potential to farmers. To assess the economic viability of AIV system for an archetypical small-scale women producers situated at the nexus of a specific socioeconomic status, geographical location, and production-scale capacity, data was collected from 1206 women farmers randomly selected in the counties of Kisii, Muranga and Vihiga utilising in-depth interviews, key informant interviews and field observations. Data were then analysed through descriptive statistics while a gross margin analysis was employed to assess the economic performance of the indigenous vegetables production practices vis a vis maize as a representative staple in this study. Results indicate that the return on investment in indigenous vegetable production is higher than that of maize (representative staple). However, the proportion of land allocated to vegetables remain small (24 %) with the likelihood of limiting the farmers visibility of the enterprise potential. Muranga & Kisii county has absolute advantage in indigenous vegetable and maize production respectively attributed to variation in agroecological conditions and land sizes. This means that agroecological conditions and land sizes are key consideration in optimising benefits from integration of vegetables with staples. Additionally, seed, fertiliser and labour costs are the key input parameters that significantly influence the indigenous vegetable value of harvest. Overall, there is enough evidence to encourage stakeholders to promote production of indigenous vegetables among small-scale farmers. Unlocking the potential of the indigenous vegetables at small-scale demands addressing the cost of seeds and fertiliser as the major factors for attaining positive returns. A better understanding of the regional variation in indigenous vegetable enterprise performance by the extension practitioners could help improve the potential for emerging agribusiness to reduce rural poverty.

Keywords: Benefits, cost, indigenous, smallholder, vegetables