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Integration of Local and Academic Knowledge to Enhance Agroecological Production of African Indigenous Vegetables (Kenya)

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Abstract

Agricultural development in the past decades was focused on disseminating high yielding crop varieties, promoting the use of inputs such as chemical fertilisers or standardising technologies as a solution-package to address low productivity. On top of causing biodiversity erosion and disruption of local ecosystems, this approach led to the loss of traditional knowledge and know-how regarding indigenous crop production.

In 2013 the HORTINLEA research project took interest into AIVs as a way forward to improve livelihood and nutritional situation of eastern African farmers'. Since these vegetables were produced as subsistence crops in East Africa for generations, it was of utmost importance to document sustainable local practices before their extinction and to enhance them through their integration into academic knowledge system.

In order to promote this knowledge integration, and to contribute to the edition of a guidelines' manual to be disseminated throughout East Africa, a qualitative approach was adopted. Twenty two farmers from Western Kenya were interviewed, with a focus on their agricultural and consumption practices, as well as challenges and sources of knowledge. Thirty two academics, mainly from Central and Western Kenya, were questioned on their perception of AIVs challenges and opportunities, as well as on current knowledge transfer methods and suggestions for improvement. Two focus group discussions provided insight on farmers and academics interactions and opened a window of opportunity to improve the situation.

A set of sustainable practices were identified for each step of the AIVs production process. These practices, embedded in a given environment submitted to several challenges, are facing possible disruption. However, a clear synergy between local and academic knowledge was identified and by complementing each other's knowledge gaps, farmers and academics could be able to overcome them. AIVs' potential can be tremendous, especially regarding their nutritional content and marketing opportunities, and thus a bright future seems to await their consumers and producers. By promoting the adoption, at a small-scale level, of sustainable and efficient AIVs production practices, emerging from the integration of local and academic knowledge, a step towards food security and better nutrition could be reached in Kenya, and in East Africa.

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