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Communication channels for accessing horticultural knowledge among smallholder farmers in Kilifi County, Kenya

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Abstract

Timely access to horticultural knowledge remains challenging for smallholder farmers growing fruits and vegetables in Kilifi County. This results in low horticultural productivity and poor uptake of horticultural innovations despite ongoing agricultural interventions. This study investigated communication channels for promoting horticultural knowledge access among smallholder farmers participating in Farmer Fields Schools (FFS) in the frame of the AfriNutriForest project. The project promotes intensified, agro-ecological fruit-vegetable agroforestry systems using participatory, innovative methods. A descriptive cross-sectional mixed-methods design was employed. Quantitative data were collected through a survey of 100 farmers across four farmer groups in Kilifi County using a semi-structured questionnaire, while qualitative insights were obtained from four focus group discussions (FGDs). Data were analysed descriptively to examine preferences for communication channels and barriers to accessing certain channels. Farmer groups and elders/family members were named as first preferred communication channel by 26 and 23 % of the respondents, respectively, followed by radio programmes (20 %), neighbours/friends (10 %) and NGOs (9 %). Only few respondents preferred TV programmes (5 %), social media (5 %) or mobile apps (2 %), and no one government extension officers as first choice. The most preferred interpersonal communication channels were favoured due to their participatory, hands-on, and trust-based nature. Radio, as compared to other technical devices, was important due to its easy accessibility and use of local languages. Barriers to using these channels were mainly the limited availability of extension officers, low literacy levels, language problems and poor infrastructure (poor internet and electricity). Major constraints to digital channels use included lack of smartphones, preference for face-to-face learning, high data costs and lack of digital skills. FGDs revealed that barriers to intergenerational knowledge transfer were primarily the low interest of youth in farming and their limited availability. In conclusion, traditional channels like farmer groups, family/neighbours and radio are still important ways of horticultural knowledge dissemination and should be further strengthened. However, improving digital skills and addressing other barriers to the

use of modern communication methods could improve effective horticultural knowledge access, foster the spread of innovative agro-ecological practices and build sustainable horticultural knowledge systems among smallholder farmers in Kilifi County and beyond.

Keywords: Agroecology, agroforestry, dissemination, Farmer Field Schools, innovative methods