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Breeding Goals Reloaded: The Case of the „tasteless” Plantain in Ghana

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Abstract

Ghana is the world's largest producer of plantain and the fruits are among the top four staples consumed in the country. Despite its importance, only confined breeding programs have been implemented, mainly focusing on yield and fruit size increase as well as on pest tolerance. A set of innovations were introduced in the Central Region in Ghana over the last ten years: (i) high yielding hybrid varieties and (ii) macro-propagation techniques to reduce pest incidence. This research applied a qualitative approach to identify plant traits and innovation features leading to adoption (or lack thereof) by smallholder farmers using a gender sensitive approach. Additionally, a nutrition survey was carried out to identify the importance of plantain micronutrients in farmer's diets. The study revealed that organoleptic attributes, cooking qualities and low storability leading to reduced marketability were reasons for low adoption. Locally, the introduced varieties are referred to as “the tasteless ones.” The availability of naturally produced suckers from the mother plants and the perception of low parasitic pressure affected the uptake of the macro-propagation techniques. However, both innovations are still promoted in the region by different institutions. This study questions the implementation of the widely promised participatory approaches and highlights the importance of qualitative, gender sensitive data collection at early stages of research and intervention schemes. The study suggests that breeding programs have to include nutritional aspects as well as emphasise on people's preferences and perceptions. Additionally, innovations are likely to be adopted if intra-household tasks and resource distribution are considered.

Keywords: Breeding, gender, Ghana, innovation, nutrition-sensitive, plantain hybrids