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“Competition for Resources in a Changing World:
New Drive for Rural Development”

New Bananas for Poor Farmers in Tanzania – The Contribution of Agricultural Research to the Millennium Development Goals

DANIELA BESE¹, HILDEGARD GARMING², MGENZI BYABACHWEZI³, JACKSON NKUBA³, HERMANN
WAIBEL¹

¹*Leibniz University Hannover, Institute of Development and Agricultural Economics, Germany*

²*Bioversity International, Costa Rica*

³*Maruku Agricultural Research Institute, Tanzania*

Abstract

Bananas are a main staple food for rural households in East and Central Africa. Low productivity and susceptibility to diseases of traditional cultivars are major constraints for the production of food and income generation. In order to address these problems, banana cultivars with resistance to major diseases and higher yield potential have been disseminated in Kagera Region, Tanzania since 1997.

This study investigates to what extent the introduction of the new banana cultivars has contributed to the Millennium Development Goal on the reduction of poverty and hunger. Three questions were posed with particular reference to the poorest farm households in Kagera Region **(a)** to what extent have poor households adopted the new banana cultivars, **(b)** what factors drive or hinder the adoption of new banana cultivars among this group of farm households and **(c)** what has been the impact on food security and income generation. Panel data from household surveys in 2003 and 2008 were analysed to assess income growth and food security using a differences-in-differences approach. Rather than comparing absolute differences between adopters and non-adopters, in this approach growth rates over time are compared, controlling for fixed household effects e.g. differences in assets, education and/or infrastructure.

The results show that the new cultivars demonstrate increased productivity thereby improving food availability in adopting households. The first adopters were households with higher education levels and larger farms. Households with more livestock assets were more likely to adopt the new cultivars, which is explained by the production of fodder as a by-product of the new bananas. However, over time, the differences in adoption rates of the new cultivars for poor and wealthier households diminished. The more marginal households were also able to use and benefit from the cultivars. Especially the lack of knowledge about processing and use of the new cultivars seemed to be a factor in delaying the adoption by poor households. These results show that in order to achieve faster impacts on poverty reduction and food security, the specific information needs of poor farmers should be addressed more explicitly in the dissemination of new technologies.

Keywords: Banana production, food security, impact assessment