

Assessing the Impact of a New Technology on Poverty

Reduction: The Case of NERICA in Uganda

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Abstract

Persistent food shortage and the deteriorating poverty incidence in Sub-Saharan Africa (SSA) are major development issues. New Rice for Africa (NERICA) was developed to boost the crop yield and income of rural households in SSA. Although its high yielding traits have become fairly well known, there is no empirical analysis of its impact on income and poverty. By taking the case of Uganda where a NERICA promoting program was undertaken as one of the major poverty eradication measures, this study attempts to compare actual crop income with the hypothetical income without NERICA. We found that on average a shift from maize to NERICA with proper crop rotation increases income by between US\$273 and US\$481 per hectare. Moreover, introduction of NERICA tends to improve income distribution. These results indicate that NERICA has a great potential to not only decrease poverty to a significant extent but also improve income distribution.

Key words: Poverty Reduction, Food Security, NERICA, Uganda, Rice

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