Title: Impact of Cropping System Intensification Technologies on Poverty Reduction in the Great Lakes Region of Africa

Over the decades, the great lakes region made of Burundi, DR Congo and Rwanda witnessed episodes of civil strikes, conflicts, wars and political instability that devastated much of these countries’ physical, social and human capital since 1990s till 2005. As a result, agricultural productivity remained very low and poverty became prevalent. As the political instability in the region subsided in the mid-2000s, there arose a need out of necessity to establish research and development projects to accelerate economic growth and improve the well-being of rural households in the region. Hence, three independent CGIAR centers (IITA, CIAT, and Bioversity) came together to establish a joint research and development project called CIALCA - the Consortium for Improving Agricultural-based Livelihoods in Central Africa aiming at reducing poverty among smallholder farmers through increasing farm-level productivity (cropping system intensification-CSI), improved nutrition and household income.

After a decade of implementation, our study assesses the impact of adoption of cropping system intensification (CSI) technologies on poverty reduction in the great lakes region. Our study applies the Endogenous Switching Regression model to a cross-sectional household data collected between October and December 2014 from a sample of 1495 household in three countries (501 in Burundi, 503 in DRC and 491 in Rwanda). Our study indicates that adoption has increased crop income in the region, resulting in poverty reduction with DR Congo witnessing the most reduction (13% points) followed by Rwanda (6% points) and Burundi (2% points). It was estimated that about 200 thousand poor in the CIALCA targeted areas in the region were lifted out of poverty due to the adoption of the CSI technologies. This presents important evidence in favor of promoting CSI technologies as part of poverty reduction strategy. Further, current non-adopters, had they adopted, would have gained more crop income than the current adopters, potentially leading to an even greater overall poverty reduction than what was realized. Hence, targeting and reaching out to the current non-adopters will increase the average impacts of adoption on poverty reduction.