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TITLE: EVALUATING THE SOCIAL GAINS ASSOCIATED WITH TECHNOLOGICAL PROGRESS IN THE BRAZILIAN AGRICULTURE

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ABSTRACT:

This paper evaluates the distributional consequences of the high total factor productivity growth observed in the Brazilian agriculture in this decade, through the use of a detailed general equilibrium microsimulation model of Brazil. The model has a detailed inter-regional description of the Brazilian agriculture, distinguishing 27 regions inside the country, and is calibrated for the 2004 year. The core CGE model is linked to a micro-simulation model of Brazil, which uses two main sources of information: the Pesquisa Nacional por Amostragem de Domicílios -PNAD (National Household Survey - IBGE, 2004), and the Pesquisa de Orçamentos Familiares- POF (Household Expenditure Survey, IBGE, 2006). After preparation, the micro-simulation database comprises 283,363 persons (older than 15 years old) and 121,849 households. Results show a negative impact on employment of the less skilled workers in Brazil, even though there is a gain in aggregated welfare, measured by the Hicksian Equivalent Variation. The results, however, vary across regions and workers types, showing a complex pattern of impacts on the economy.