Impacts of Total Factor Productivity on Agricultural Growth in Pacific Island Countries

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https://doi.org/10.33318/jpacs.2016.36(2)-1

ABSTRACT

The agriculture sector plays an important role in small Pacific Island economies and has significant impacts on the livelihood of households. However, total agricultural production and productivity in these economies are generally low. This, together with limited sources of factor inputs, calls for improving technical efficiency and technology to enhance agriculture production. Based on the Malmquist index approach, this study computes growth of total factor productivity and its components, namely, pure technical efficiency growth, scale efficiency growth and technological growth for the agriculture sector of 15 Pacific Island countries over 1980-2012. Impacts of these productivity growth measures are further quantified by estimating panel data regression models using the generalized method of moments estimators. There is sufficient statistical evidence that agriculture's total factor productivity growth and its components, which though are slow in Pacific Island countries, contribute significantly to these small economies' agricultural growth.

Keywords: Agriculture, productivity, growth