A THREE-FACTOR AGRICULTURAL PRODUCTION FUNCTION: THE CASE OF CANADA

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A B S T R A C T

This paper estimates a constant returns to scale agricultural production function with just three inputs: land, labour and capital - the basic factors of production. It uses the shares approach that Solow used in 1957 and very disaggregated Canadian data. A constant returns to scale function of the three basic factors of production is a useful tool for macroeconomic, and growth and development studies. The main results of this paper are that, first, in Canada agriculture is less labour intensive than both services and industry, but capital intensity is similar in the three sectors. Second, the share of land in value added is estimated to be 16% Third, total factor productivity growth in Canada has been roughly the same -0.3% - in agriculture and manufactures over the period 1971-91.

KEYWORDS: Constant Returns to Scale; Land; Total Factor Productivity Growth.