SESSION E3

Axioms and Ideologies:
Rethinking the Experience of
Philippine Agricultural Modernization

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Abstract

This study was conducted to evaluate the effect of different variables on the contribution of agriculture to the gross domestic product of the Philippines. Moreover, an optimum model was developed. The data were analyzed using descriptive statistics, correlation analysis, and partial least square regression analysis. With regard to the trend of investments to the different variables included in the study, it was found that most of them had a fluctuating trend. Only investments on human capital and electrification have increasing trends. Correlation analysis shows the strong influence of the different variables. The top 5 factors are productivity of labor (0.992), credit (0.909), production subsidy (0.624), seaport (0.549), and bridges (0.530). There are 12 variables that significantly affects the contribution of agriculture to GDP: physical connectivity in the form of infrastructure such as (1) roads and (2) bridges; (3) airport; (4) electrification; innovation and technology in terms of (5) research and (6) extension; (7) irrigation; (8) human development; (9) distribution of land through the Comprehensive Agrarian Reform Program (CARP); (10) production subsidy; (11) credit; and (12) human capital. From this result, the optimum model was developed. Contribution of Agriculture to GDP = 3.5 + 220*Roads – 468.30*Bridges + 513.52*Applied and basic research budget + 136.32*Extension budget + 2.47*Land distribution CARP + 625.23*Irrigated area – 121.67*Barangays with electricity + 5.2*Airport + 120.74*Production subsidy + 23.74*Credit + 30.34*Human development budget + 345.84*Human capital. With the above result, it is highly recommended that budget for the different variables should be increased to effect growth in agriculture and eventually result in the modernization of the sector.