Resource-use and allocative efficiency of paddy rice production in MADA, Malaysia

ABSTRACT

The study examined resource-use and allocative efficiency of paddy rice production in the MADA, Malaysia. A total sampling size of 396 rice farmers were selected using a multistage random sampling through a well-structured questionnaire. The independent samples F-tests, Ordinary Least Square analyses techniques, descriptive statistics, Gross margin analysis and Cobb-Douglas production function analysis that combines the conventional neoclassical test of economic and technical efficiencies was employed in the study. Findings revealed that all inputs used were positively significant. Rice production was found to be profitable as farmers realized RM2,054.03 per ha as Gross Margin in the study area. Result of the allocative efficiency of inputs confirmed that rice producers in the area did not attain optimal allocative efficiency, seed input (0.29) had the highest allocative efficiency while fertilizer input (0.06) showed the least allocative efficient input. The findings of the study emphasized the need to improve farm efficiency at all levels. It is therefore, recommend that the rice farmers be encouraged to use their inputs up to the point the values of the marginal products (MVPs) equates their factor prices (i.e. MVPs = PXs).

Keyword: Resource-use; Allocative efficiency; Paddy rice; MADA; Malaysia