Effect of improved high yielding rice variety on farmers productivity in MADA, Malaysia

ABSTRACT

Worldwide, technological change in rice production has given in an era of agricultural development and increased productivity performance. However, such performance appears to be unevenly distributed among farmers. Though, with new technologies introduced in Malaysia, development is premised on the recognition that low productivity is a major cause of the lack of advancement in the rice sector. There was no significant improvement in yield as the average farm yields varies from 3-5 tons per hectare below the neighbouring countries such as Vietnam and Indonesian at 5.5 and 4.9 tons per hectare respectively. Therefore, this study examined social-economic factors influencing the use of improved high yielding varieties and its impact level on rice yield in MADA, Malaysia. A total sampling size of 396 rice farmers were selected using a multistage random sampling through a well-structured questionnaire. The findings re-affirmed the claim that socio-economic factors such as education, experience, and farm size were the factors influencing the adoption of improved high yielding varieties. There exist upward neutral shifts in production function when MR 263, MR 220CL1 and MR 220CL2 are used by 1.5 times more yield compared to local varieties. It may be concluded that the improved high yielding varieties of seed are more important and beneficial for the productivity of rice. Therefore, the study suggested that extension agents in the area as a whole need to be improved on various ways used in disseminating improved high yield varieties to farmers. The strategies for rice technology transfer to farmers should be specially packaged.

Keyword: HYV; Logit regression; Production function; Rice; MADA; Malaysia