IMPACT OF BANNING INORGANIC FERTILIZER ON PADDY PRODUCTION AND FARMERS PERCEPTION: A CASE STUDY IN SRAWASTHIPURA AGRARIAN SERVICE CENTER DIVISION

W.G.A.S. Gunarathna¹, N.S. Abeysingha¹, S.P. Dissanayake² and D.M.S. Duminda¹

¹Department of Agricultural Engineering and Soil Science, Faculty of Agriculture, Rajarata University of Sri Lanka, Puliyankulama, Anuradhapura, Sri Lanka.

²Department of Agricultural Systems, Faculty of Agriculture, Rajarata University of Sri Lanka, Puliyankulama, Anuradhapura, Sri Lanka.

The government of Sri Lanka announced an agricultural policy banning all chemical fertilizers in April 2021. Hence, a study was conducted to investigate the impact of inorganic fertilizer ban on paddy yield, farmers' economy and perception in Srawasthipura agrarian division, Anuradhapura. Questionnaire survey was conducted using semi-structured pre-tested questionnaire over randomly selected 60 paddy farmers representing both fully inorganic and organic cultivation. The assessment was restricted to Yala 2021 and Maha 2021/22. Independent sample t-test was used to identify the significant differences between two farmer groups in terms of yield, cost, hired labour, income and cost-benefit ratio. The results revealed that there were no any statistically significant differences (p>0.05) of the cost of production, paddy yield, income, and hired labour used between the fully inorganic and organic farmer groups in the area. However, the highest cost-benefit ratio was observed for the fully organic group. Among the respondents, 57% of farmers strongly disagreed with the government policy of completely banning chemical fertilizers and 70% of the farmers indicated that the cost of transportation of organic fertilizer is comparatively higher than that of inorganic. Although there were no significant differences in the paddy yield and other attributes between fully organic and inorganic farmers, respondents opposed the decision of banning inorganic fertilizer in paddy production.

Keywords: Agricultural policies, Inorganic and organic fertilizers, Organic paddy production