

IMPACT OF AGROCHEMICAL POLICY CHANGE ON MAIZE PRODUCTION IN THE SELECTED DIVISIONAL SECRETARIATS OF THE ANURADHAPURA DISTRICT OF SRI LANKA

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Maize (*Zea mays*) is the second most important cereal crop in Sri Lanka. It is used mainly as human food and animal feed. The recommended rate of fertilizer application is important to increase maize grain yield. However, the Gazette notification made on 6th May 2021 by the Sri Lankan government restricted and banned the importation of chemical fertilizers and agrochemicals has led to less availability of agrochemicals and fertilizers in the market. Although the government policy was abolished in November 2021, the policy decision has made a significant impact on maize production. A survey was conducted among 125 maize growers randomly selected in Anuradhapura district of Sri Lanka to ascertain the degree of impact on maize production using a semi-structured questionnaire from July to October 2022. Data from the 2020/21 and 2021/22 *Maha* seasons were collected to represent the situations at the pre-and post-implementation of the policy. Data were analysed using descriptive statistics, paired t-test, and point-biserial correlation analysis using SPSS. A significant ($p < 0.05$) yield reduction of 65% was recorded in the 2021/2022 (1.67 ± 1.64 t ha⁻¹) than the 2020/2021 *Maha* season (4.90 ± 2.45 t ha⁻¹). The application of chemical fertilizers was identified as a strong predictor ($p < 0.01$, $r = -0.25$) for the yield gap between the two seasons. The application of organic fertilizers has increased among farmers by 28% after the implementation of this policy. According to growers, the non-availability of chemical fertilizers, insufficient availability of organic fertilizers, and pest and disease outbreaks were identified as major reasons for yield reduction. In conclusion, this policy change has made a substantial impact on maize growers in the selected divisional secretariats of the Anuradhapura district. Therefore, the heavy reliance on agrochemicals is necessary to bring down by promoting integrated approaches in maize farming.

Keywords: Agrochemical ban, Gazette notification (No:2226/48), Maize production, Policy change