

Identification of Factors Influencing Yield Fluctuation of Maize Farmers in Anuradhapura and Monaragala districts

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The Agricultural sector plays a key role in the Sri Lankan economy and cereal crops contribute a large share in the agricultural Gross Domestic Products of Sri Lanka. The second most demanding cereal crop is maize in Sri Lanka; cultivated in over 70,000 hectares of land around the country. Over the last decade the local maize production has been highly fluctuating, this research was designed to find out factors that affect to the maize production fluctuation. The main objective of this research was to identify the factors influencing yield fluctuation of maize farmers in Anuradhapura and Monaragala districts. Multi-stage cluster sampling technique was applied to select the sample of 200 maize farmers (n=200). Primary data was collected through a pretested structured questionnaire. The data collected from the sample were analyzed using descriptive statistic and inferential statistical methods in SPSS software. A multiple linear regression was used to reach the main objective. The results showed that, in socio-economic factors, farmer age and experience on maize cultivation had a positive and significant influence ($p < 0.05$) on the production. Factors such as temperature, soil, availability of extension officers, loan, upland of land type, training program and land extent were also determined to positively and significantly influenced at ($p < 0.05$) level to the maize production fluctuation. It was found that minor irrigation, home garden and low-land of land type and pest control were negative and significant at ($p < 0.05$) level affected to the maize production fluctuation. Finally, it can be concluded that maize yield fluctuation over the last few years due to environmental and some socio-economic reasons. Government policy makers should be focus on this regard and need to make a ground level development strategy to empower the livelihood of local maize farmers and supply infrastructure facilities like irrigation projects and input markets, while transportation sector should also be developed as soon as possible to increase the production.

Keywords: *Anuradhapura, Maize Production, Moneragala, Yield Fluctuation*