COMPARING THE CORRELATION BETWEEN RICE YIELD AND PRICE DUE TO THE IMPACT OF FERTILIZER POLICY IN 2021, SRI LANKA

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This study investigates the impact of Sri Lanka's 2021 fertilizer policy on the relationship between rice yield and selling prices in the South Coastal region of the Ampara District. Following the government's prohibition on the importation of chemical fertilizers and agrochemicals in May 2021, rice cultivation was significantly affected, leading to a decline in yields and an increase in rice prices. The study hypothesizes that the new fertilizer policy may have affected the correlation between yield and selling price, prompting farmers to become less attentive to pricing based on their yield. Data for the study were collected from 145 farmers during the Yala 2021 season (pre-policy) and the Maha 2021/22 season (post-policy) using structured questionnaires. Yield per acre and price per kilogram of dry paddy were calculated for both seasons, with wet yields converted to dry yields for consistency. The results indicate that during the Yala season, there was a significant correlation between yield and price (r = 0.254, p = 0.002). This suggests that yield and price were not independent, and farmers were keen on selling prices based on their yield (F= 1.877). In contrast, during the Maha season, the F-statistic (1.02) was lower than the table value, indicating independence between yield and price, and farmers were less focused on selling prices. Although there was no significant difference in income variance between the two seasons, the variance in selling prices was significantly higher during the Yala season (124.38 Rs./kg²) compared to the Maha season (55.18 Rs./kg²). This variation in Maha was reduced following the implementation of the fertilizer policy, leading to less concern among farmers about pricing. Overall, the study concludes that the fertilizer policy led to reduced price variation, a shift in farmers' focus away from pricing based on yield, and an increase in income during the Maha season despite lower yields, driven by rising paddy prices.

Key words: Agricultural economics, Ampara District, Fertilizer policy 2021, Price correlation, Rice yield.