

Examining Coconut Farmers' Perceptions on Climate Change Adaptation Practices in Sri Lanka

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Abstract

Climate change impact on coconut production can be understood with more details by incorporating farmers' observation about plant growth and cultivation. However, past studies on the impact of climate change on coconut production process have not paid much attention to this salient aspect. Therefore, this paper examines Sri Lanka's coconut farmers' perceptions of climate change impacts on coconut as well as their adaptation practices. Using a quantitative approach, we conducted semi-structured interviews with 86 coconut farmers. The collected data were analyzed through descriptive statistics, Chi-square analysis, summated rating and multiple regression analysis. We found that farmers had identified climate change by changes in temperature (65%), prolong droughts (65%), a decrease in number of rainy days (76%) and an increase the rainfall intensity (61%). As coconut farmers are keen observers of plant growth, they reported more bud nut fall, smaller size nuts, and a decrease in nut weight. Our statistical analyses found that farmers' observation skill and levels of concern differed by such factors as education, household size and coconut farming experience. Regarding their adaptation strategies, the respondents had adopted organic fertilizer application, irrigation of young coconut trees and plant spacing. Despite these efforts overall adoption of recommended agronomic practices was found to be low (30%).

Keywords

Agronomic practices, Climate change adaptation, Coconut farmers, Perceptions, Sri Lanka.

