

Influence of Seasonal Farming Patterns and Paddy Variety Preferences on Seed Scarcity and Economic Stability in Ganewaththa Divisional Secretariat, Sri Lanka

R.M.A.S. Rathanayake*, and U.B.E. Sasanka

Department of Agribusiness Management, Faculty of Agricultural Sciences,
Sabaragamuwa University of Sri Lanka, Sri Lanka

*rmasrathnayaka@std.agri.sab.ac.lk

Seed scarcity has become a significant challenge in Sri Lanka's paddy sector, particularly during peak cultivation periods, affecting timely planting, production efficiency, and the economic stability of smallholder farmers. Limited access to affordable, quality seed paddy often compels farmers to delay cultivation, shift to alternative varieties, or reuse poor-quality seed, increasing production risks and reducing income stability. This study examined the influence of seasonal farming patterns and paddy variety preferences on seed scarcity and economic stability among paddy farmers in the Ganewaththa Divisional Secretariat of Kurunegala District, Sri Lanka. Based on Cobweb Theory, the study explored how farmers' responses to previous season price signals and delayed supply adjustments contribute to recurring seed shortages and price instability. A quantitative cross-sectional research design was adopted, and primary data were collected through a structured questionnaire administered to 70 randomly selected paddy farmers cultivating 2 to 5 acres from a population of 113 farmers. Data were analysed using descriptive statistics, chi-square tests, correlation analysis, and multiple regression analysis using SPSS and Microsoft Excel. The findings revealed that all respondents cultivated paddy during both *Maha* and *Yala* seasons, while 78.6% preferred hybrid varieties. High yield was the primary factor influencing variety selection, followed by market price and crop duration. Seed access difficulties were reported by 78.6% of respondents, mainly due to high seed prices and poor seed quality. Significant relationships were identified between seed access difficulties and income instability, and between delayed cultivation and economic instability. The study concludes that seasonal farming behaviour, paddy variety preferences, and price-responsive decision-making contribute significantly to recurring seed scarcity and economic instability. The findings emphasise the need to strengthen certified seed production, ensure timely seed distribution, improve market forecasting, and enhance agricultural extension services to support sustainable paddy cultivation and economic resilience.

Keywords: Cobweb Theory, Economic stability, Paddy variety preference, Seasonal farming patterns, Seed scarcity