



Research Paper

Forecasting of green chilli prices in West Bengal by holt-winters method using expert system

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ABSTRACT : The present study was conducted to access the market trend of green chilli in West Bengal using user friendly expert-system. Windows operating system and MS Office package is required to run the system. Triple exponential smoothing (Holt-Winters method) has been applied for forecasting the monthly price of chilli. To measure the accuracy, mean absolute percentage error (MAPE), mean absolute error (MAE) and mean square error (MSE) at different levels of smoothing constants such as α , β and γ have been used for the model selection criteria that can describe the trend the price of green chilli during January 2010 and March 2017. Price of green chilli from April 2016 to March 2017 was considered for model validation. Price forecasts of green chilli from April 2017 to March 2018 were found to be in between Rs. 16/kg to Rs. 58/kg highest price forecast during Sept. 2017 and lowest during May, 2017. Upper control limit and lower control limit along with forecast value has given a narrow range of forecast that proves its accuracy in forecasting.

KEY WORDS: Green chilli price, Forecasting, Holt-winters method, Expert-system

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