

**Project Dissertation on**  
**DEVELOPING A DIAGNOSTIC TOOL AND**  
**TIME SERIES ANALYSIS IN RESPECT OF**  
**PADDY ARRIVALS AND PRICES**

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## **CERTIFICATE**

This is to certify that the dissertation report titled “**Developing a Diagnostic Tool and Time Series Analysis in Respect of Paddy (Dhaan) Arrivals and Prices**” is a bonafide work carried out by **Mr. Shakti Mann** of **MBA 2015-17** and submitted to Delhi School of Management, Delhi Technological University, Bawana Road, Delhi-42 in partial fulfilment of the requirement for the award of the Degree of Masters of Business Administration.

**Signature of Guide**

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## DECLARATION

I, **Shakti Mann**, student of **MBA 2015-17** of Delhi School of Management, Delhi Technological University, Bawana Road, Delhi – 42, hereby declare that the Dissertation report “**Developing a Diagnostic Tool and Time Series Analysis in Respect of Paddy (Dhaan) Arrivals and Prices**” submitted in partial fulfilment of Degree of Masters of Business Administration is the authentic work conducted by me.

The information and data given in the report is original to the best of my knowledge.

This report is not being submitted to any other University, for award of any other Degree, Diploma or Fellowship.

**Place:**

**Shakti Mann**

**Date:**

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**Shakti Mann**

## **ABSTRACT**

India is an agrarian society, so timely disseminating marketing related information of agricultural produce throughout the country is essential in modern scenario. The AGMARKNET portal is the front step taken by the Directorate of Marketing and Inspection, Ministry of Agriculture and Farmer Welfare, Government of India, with an aim of collecting compiling and disseminating marketing related information of agricultural commodities throughout the country. This information is highly important in nature as it can be used by various stakeholders, such as farmers, traders and policy makers among others, to make important decisions at individual as well as national level. It also aims to strengthen the economic position of farmers as well as consumers by providing them with marketing related information of agricultural commodities spanning over all the markets in the country. Such information will let the farmers get fair returns on their crops. For consumers, it means that they will be able to obtain agricultural commodities at fair and affordable prices.

Two main objectives of this study. First, to develop a diagnostic for major markets where paddy arrivals are high. This diagnostic tool will help the concerned stakeholders to have various checks on the entire process of data entry. Thereby, improving the data quality by monitoring the data reporting process continuously. Statistical Process Control (SPC) can help the correct reporting of data. Microsoft Excel 2013 was used for diagnostic tool development.

The second objective of the study is to forecast the modal prices of paddy for a particular variety using time series modelling. Data filtering, sorting and cleaning are the essential tasks conducted as part of this process. The time series modelling has been attempted to forecast paddy prices in 2017. Microsoft Excel 2013 and Error Trend Seasonal forecasting (ETS) in R (language) have been used for time series analysis.

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