



Research Paper

# Black gram price movement across major markets of Maharashtra

■ V.K. PATIL AND A.S. TINGRE

See end of the paper for authors' affiliations

Correspondence to :

**V.K. PATIL**

Department of  
Agricultural Economics  
and Statistics, Vivekanand  
College of Agriculture  
Business Management  
(PDKV), HIWARA (M.S.)  
INDIA

Email:mr.esctacy2008@  
gmail. com

**Paper History :**

**Received** : 06.08.2014;

**Revised** : 24.12.2014;

**Accepted** : 10.01.2015

**ABSTRACT** : The present study aimed to know price movement of black gram *i.e.* seasonal variation, price volatility and co-integration among the major black gram markets in Maharashtra. For study purpose the data related to monthly average prices of black gram were collected from major markets of Maharashtra state *viz.*, Akola, Latur, Amravati and Jalgaon for the period 2003-2013. Moving average method was used to study seasonal variations. The econometric tools like ADF test, Johansen's multiple co-integration test, Granger causality test and ARCH-GARCH model were used to study price volatility and co-integration among different markets. The results of study showed that the prices of black gram were higher in the months from September to November in all the selected markets. The cyclical variation was observed in the prices of black gram in the selected markets. For all selected markets, the price series showed the consequences of unit root and were stationary at first difference. The selected markets showed long run equilibrium relationship and co-integration between them. Most of the markets showed bidirectional causality influence on black gram prices of each other. Akola, Latur, Amravati and Jalgaon markets, showed that volatility shocks were not quite persistent in these markets.

**KEYWORDS** : Black gram, Price movement, Price volatility, ADF test, ARCH-GARCH, Co-integration, Granger causality test, Seasonal variation

**HOW TO CITE THIS PAPER** : Patil, V.K. and Tingre, A.S. (2015). Black gram price movement across major markets of Maharashtra. *Internat. Res. J. Agric. Eco. & Stat.*, **6** (1) : 32-38.