## PRICE BEHAVIOUR AND CO-INTEGRATION OF GREEN GRAM IN GUJARAT

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**Abstract:** The secondary and time series data on monthly wholesale prices and arrivals of green gram were collected from the website of agmarknet.gov.in of selected regulated markets for last ten years (2007 to 2016). The results evident that the inter-year price analysis shows upward trend of annual price indices and there was a significant increase in the price of green gram in all the selected markets with positive and statistically significant compound growth rate during the study period. The intra-year price analysis revealed that the general pattern of seasonal variations in prices were found with increased the prices in off season and decreased in main season all most in all the selected markets. By using Augmented Dickey Fuller Test, Johansen test and causality test was examined. The results of the study indicated that therefore ADF test at the first diffirence were significant so the null hypothesis was rejected about the presence of unit root. Thus three series were integrated of the order (I). The price series of all markets were stationary at their levels themselves. Trace statistic and maximum Eigen value test revealed that Gujarat Green Gram markets were found to be integrated with 3 co- integrating equations. All the market pairs exhibited bi-directional causality and prices were transmitted vice versa i.e., mutual influence was exterted by the market on each other.

Keywords: Green gram, Price behaviour, Wholesale prices, Causality test

#### REFERENCES

Asthana, A. N. and Chaturvedi, S. K. (1999). A little impetus needed. The Hindu, Survey Indian Agril., Pp. 61-65.

**Bhardwaj, S. P., Paul, R. and Singh, K. N.** (2015). Price forecast : An instrument for improvement in agricultural production and marketing in Rajasthan – A case study of rape & mustard seeds, *Indian journal* of Agricultural Marketing. **29**(2), 164-171.

**Biswas, A., Singh, R., Gangwar, A., Zalkuwi, J.** and Singh, H.P. (2015). Inter- state market integration in rapessed and mustard in India, *Indian journal of Agricultural Marketing*. **29**(2), 92-99.

Engle, R. F. and Granger, C. W. J. (1987). Cointegration and Error correction: Representing estimation and testing, Econometrica: *Journal of Econometrica Society*, **55**, 251-276.

**Granger Clive, W. J.** (1969). Developments in the study of cointegrated Economic variable, Oxford Bulletin of Economics and Statistics, **48**, 213-228. http://www.agmarknet.nic.in.

Johansen, S. (1988). A Statistical Analysis of co integration vectors, *Journal of Economic Dynamic and Control*.12, 231-254.

Kaur, J. P. and Sekhon, M. K. (2016). Price integration in Green Gram markets of Gujarat, *Indian journal of Agricultural Marketing*. **30**(2), 11-21.

**Mohanty, S. and Styasai, K. J.** (2015). Feeling the pulse, Indian pulses sector. NABARD Rural Pulse, E book issue X July-August. <u>www.iipr.rcs.in</u>

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