



**Research Paper**

# Integration of cotton prices of major markets in Saurashtra region of Gujarat state

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**ABSTRACT** : Agriculture is one of the important activities in both the developed and developing countries which provide basic raw materials to human beings and various agro-based industries. It continues to be the mainstay of the Indian economy contributing for 14.50 per cent of GDP and is also an effective antidote to poverty and unemployment. This paper tests the extent of co-integration of wholesale prices of cotton among major markets (Amreli, Rajkot, Gondal, Jamnagar and Junagadh APMC) of Saurashtra region by using Johansen test, examined the causality by granger causality test and also captures the speed of adjustment to deviations in long run equilibrium by using vector error correction model. Monthly wholesale price data were used for the study. The results of the Augmented dickey-fuller (ADF) unit root test for cotton showed that the level data were non-stationary but their first differences were stationary. Hence, all market price series were integrated of the order 1 *i.e.* I(1). The Johansen's co-integration test revealed that all the markets were integrated in the long run. The Vector error correction model (VECM) revealed that there was long relationship between the prices of all the markets *viz.*, Amreli, Rajkot, Gondal, Jamnagar and Junagadh. The results of Pairwise Granger Causality test revealed that there was a bidirectional influence on prices of Junagadh and Amreli, Rajkot and Amreli, Jamnagar and Gondal, Junagadh and Gondal, Rajkot and Gondal and Rajkot and Jamnagar. There was a unidirectional influence on prices of Gondal and Amreli, Jamnagar and Amreli, Junagadh and Jamnagar and Rajkot and Junagadh markets.

**KEY WORDS** : Cotton, Market, Integration, Augmented dickey-fuller (ADF), Vector error correction model (VECM), Granger causality

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