Trends and cyclical components in monthly price series

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ABSTRACT

A study was carried out during 2003-2004 to determine trends and cyclical components in monthly price series. The intra year price variation in paddy indicated at an overall level intra year rise was 22.09 per cent there was 19.89 per cent variation in seasonal prices. The overall coefficient of variation in paddy was observed to be 5.85 per cent. The intra year price variation in vegetables indicated that at an overall level intra year price rise in case of vegetables was 42.51 per cent and there was 35.06 per cent variation in seasonal prices. The overall coefficient of variation in vegetables was observed to be 11.48 per cent. The intra year price rise in case of pulses was 82.84 per cent with 58.48 per cent variation in seasonal price. The overall coefficient of variation in pulses was observed to be 15.47 per cent. The trend and cyclical component in monthly price series was worked out by using seasonal index numbers and it was observed that the estimated trend for paddy is $Pt = 96.25 + 0.13\ Tt$ with value of R^2 is 0.23 for rice estimated trend line is $Pt = 105.63 + 0.21\ Th$ and the value of R^2 is 0.29. In case of vegetables the estimated trend line is $Pt = 105.45 - 0.16\ Th$ and the value of R^2 is 0.20.

Key words : Price Variation, Coefficient of Variation, Seasonal Index Numbers, Price series

INTRODUCTION

Analysis of trend component in annual series of prices involves ascertaining the general direction of the movement of prices over a period of several years. The general direction should be such that movements in one or two years away from this direction have the tendency to return in subsequent years. The trend is generally expressed in terms of straight line

Intra year price rise should never exceed the cost of storage for that commodity. In other words, the produce is stored for later sale, if and only if, the price rise exceeds storage costs and there are little margins left over to owners. Therefore, an attempt has been made in this paper to study trends and cyclical components in monthly price series of selected Agril. Commodities.

Mujumdar (1961) studied the trends in prices at cereals during the decade 1950-60 at national level. He compare the index number of wholesale prices of general commodity with the index numbers of manufactured goods. He concluded that the price index at cereals showed slight decline by 4 points in 1958 again moved up and by 1960 it raised by 8 points.

Surya Prakash *et al.*(1979) studied on analysis of prices and arrivals of potato in Karnataka.The study concluded that the prices of potato were relatively low when the arrivals were high and prices were high when arrivals decreased. The seasonal effect however was more in case of arrivals then prices. The seasonal price fluctuations can also be minimized by establishing processing unit or by making increased use of cold storage facilities by the potato growers.

MATERIALS AND METHODS

Intra-year price variation :

One of the objectives of construction of seasonal price indices is to access the extent of intra-year price variation and quite often the interest is in knowing whether this variation has changed over time and whether it differs between crop and markets. The monthly data of prices of selected commodities from APMC Panvel for the period from 2000-01 to 2003-04 was used to compute average index number for each month by averaging over the year The following approaches are used to precisely measure the intra year price variation.

Extent of the intra-year price rise :

The difference between lowest and highest price within a year is termed as intra-year price rise. The prices of most of commodities usually remain the lowest in the harvest season and rise thereafter till they reach the highest level in the next pre-harvest season. The extent of this price rise is termed as intra year price rise. One way of measuring this price rise is to compute the following percentage coefficient.

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