of structural changes based on Chow tests. All price data and other variables will be taken in log form when analyzed.

The distribution of monthly rainfall

Monthly distributions of rainfall in space and time can provide guidelines for crop scheduling and for introducing better cropping patterns in the region.

To determine the periodicity of the monthly rainfall sequence at a station, the method developed by Vujica M. Yevjevich was used, in which the parameters involved are clearly defined.

It was found that monthly rainfall sequences at all the stations under consideration have six significant harmonics, which means that the monthly rainfall has a periodic part that consists of components corresponding to the following six periods: 12, 6, 4, 3, 2.4 and 2 months. The variances of the monthly means and the monthly standard deviations are explained up to more than 90% by these six significant harmonics. These findings show that after removing the first six periodic components, the residual rainfall sequence at a station can be considered to be stationary at least in the mean and standard deviation. (See Table 1.)

For most cases, the serial correlation coefficient between two successive monthly rainfall sequences at a station were found not to be significantly different from zero. Nonsignificance of correlation does not necessarily imply statistical independence, monthly rainfall totals were analysed separately and a probability distribution was fitted month by month.

It was concluded that each monthly rainfall sequence has a periodic part consisting of six constituents corresponding to the following six periods: 12, 6. 4, 3, 2.4 and 2 months. At each station the rainfall sequence in a month is independent of the rainfall sequences in the other months. Since many monthly rainfall sequences in the Northeast have zero values, the leakage law is most appropriate for fitting these sequences. Monthly rainfall in the region varies greatly from month to month, resulting in high degrees of irregularity, ranging from 45 to 70 per cent. Monthly rainfall also varies greatly from year to year as indicated by the high values for the coefficient of variation. The eastern and north-eastern sections of the region are the wettest areas of the Northeast from April