**Objective: Forecast Crop Yeield for the 4 quarters of year 2024 using the Data on Crop Yield.**

Perform the following tasks and comment wherever relevant

1. Import the CROP YIELD data in R.
2. Check if the Time series is Stationary using Grpahical and analytical method and comment on the same.
3. Convert the time series to stationary time series if needed.
4. Check if the converted time series is now stationary or not by Graphical as well as Analytical method.
5. Identify the Model Parameters using ACF and PACF plots.
6. Indicative model is p=2, q=1, d=2 but set the max.2 and max.q=2 and use auto.arima. This is a quarterly data and hence to capture the seasonality use SARIMA with Seasonal AR(P) =1, Seasonal MA(Q)=1 and Seasonal Difference D=1.
7. Choose the Best Model.
8. Perform Diagnostic Checking using Box Pierce Test and comment.
9. Forecast Crop Yield for 4 quarters of 2024.