



SDG13: CLIMATE ACTION

Completed by: *Gottumukkala Gayatri, Gollapudi Venkata Mahati, Lakshmi Sai Niharika Vulchi, Galidevara Sai Venkata Meghana*

Gokaraju Rangaraju Institute of Engineering and Technology

INTRODUCTION

Climate change is a change in the usual weather found in a region. It also reflects the changes in earth. While the weather can change in a very short time, climate changes occur over a long period of time. The climate is changing each and every day. The causes of climate change may be Deforestation, Human changes, Ocean currents, Volcanic eruptions, GreenHouse effects.

The ways to control these changes are Renewable energies, Energy and Water Efficiency, Sustainable Transportation, Sustainable Infrastructure, Sustainable Agriculture and Forest Management, Consuming Responsibly and Recycling.

Most significantly, agriculture is extremely vulnerable to climate change. Higher temperatures eventually reduce yields of desirable crops while encouraging weed and pest proliferation. Changes in precipitation patterns increase the likelihood of short-run crop failures and long-run production declines.

We've interpreted the overall trend of the weather and rainfall patterns in Telangana and visualised it to get better results.

METHODS

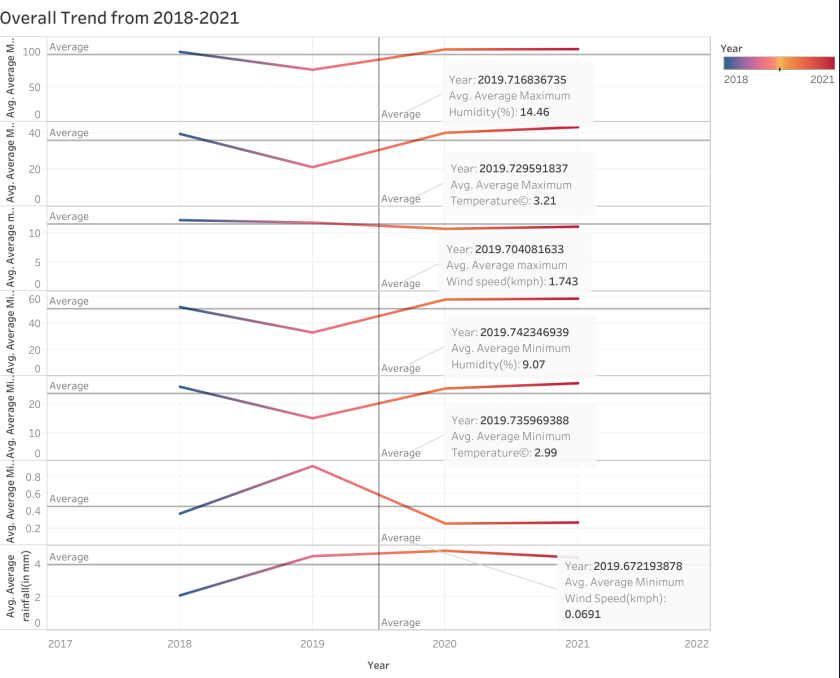
We've used Tableau for visualising the data. We've categorised the data with respect to various parameters such as average rainfall, maximum average temperature, maximum average humidity etc., and analysed it for various districts in Telangana.

Based on the visualisations, we've come to conclusions that decide the recent weather patterns in Telangana.

The depictions have been shown below:



CONCLUSIONS



By observing the above graphs, the average rainfall is around 4mm and the humidity is also high at its maximum rate. The average maximum temperature is around 32 degrees celsius and the maximum average wind speed is approximately 10 km/hr.

For good crop yield, sufficient rainfall is required and apt climatic conditions should be met.

Climatic Zone	Annual Rainfall (mm)
Desert	less than 100
Arid	100-400
Semi-arid	400-600
Sub - humid	600-1200
Moist sub-humid	1200-1500
Humid	more than 1500

Hence, for sustainable agriculture, proper climatic conditions have to be met and Telangana has to achieve still in this way to become a self-sustaining state for agriculture.