

Week-02-L-04

# Agricultural Statistics in Practice

## Forecasting Techniques in Agriculture

## Forecasting Accuracy & its need

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# What it is?

2020

$$\frac{2000 + 10\%}{2200}$$

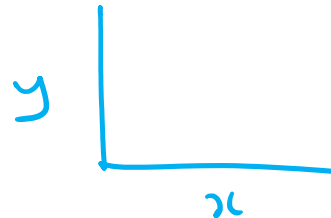
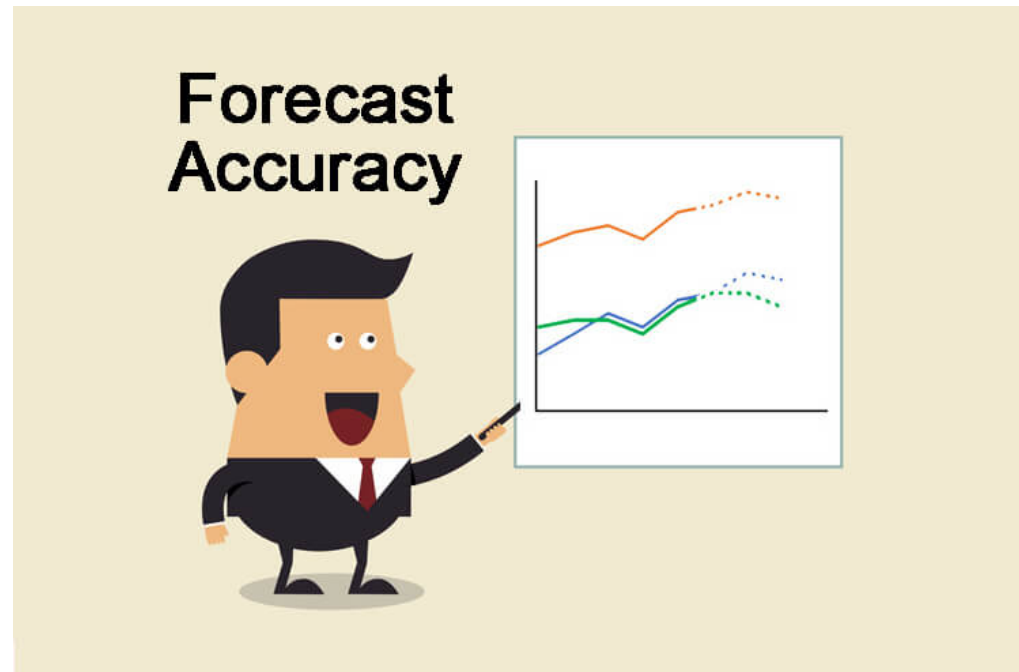
- Forecasting accuracy refers to the ability to predict future outcomes in farming, such as crop yields, market demand, and resource needs.
- It helps farmers make informed decisions and plan for the future based on accurate predictions.
- Accurate forecasting allows farmers to optimize production, reduce risks, and improve profitability.
- Acceptable ranges for forecast accuracy:
  - Excellent ( $\leq \pm 5\%$ ) ✓
  - Good ( $> \pm 5\%$  and  $\leq \pm 10\%$ )
  - Terrible ( $> \pm 10\%$ )






# Approach

- Forecasting accuracy in farming involves analyzing historical data, weather patterns, market trends, and other relevant factors.
- Statistical models and techniques are used to identify patterns and relationships between variables.
- The approach considers various factors that influence agricultural outcomes to make reliable predictions.





# *Implementation & Application*

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- Farmers can implement forecasting accuracy by collecting and analyzing relevant data, such as past crop yields, weather data, and market information.
  - Statistical software and tools can assist in analyzing the data and generating accurate forecasts.
  - Regular monitoring and adjustment of forecasts based on new information or changing conditions are essential for effective implementation.
  - Forecasting accuracy in farming is applied in various areas such as crop planning, resource allocation, and market decision-making.
  - It helps farmers determine optimal planting schedules, irrigation requirements, and fertilizer application rates.
  - Accurate forecasting enables farmers to align their production with market demand, avoid oversupply or shortages, and make pricing decisions.



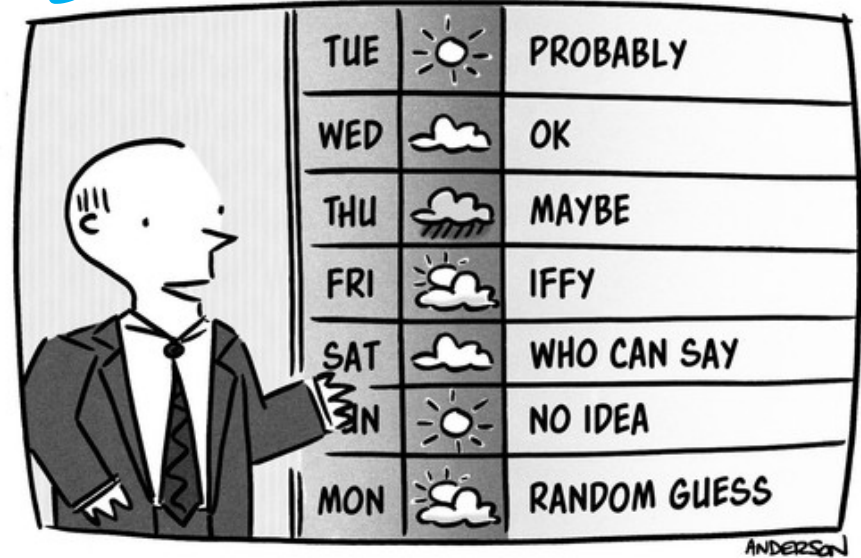
# Conclusion

- Forecasting accuracy plays a crucial role in the success of farming operations by providing farmers with valuable insights into future trends and outcomes.
- It enables proactive decision-making, efficient resource utilization, and improved profitability.
- By embracing forecasting accuracy, farmers can enhance their ability to adapt to changing conditions, mitigate risks, and achieve sustainable agricultural practices.

$$y = ax + by + c$$

$a + b$  are constant

temp & humidity apart  
Soil condition



"And now the 7-day forecast..."

# Thank You



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