Statistics for Agriculturists

Why we use Statistics in Agriculture?

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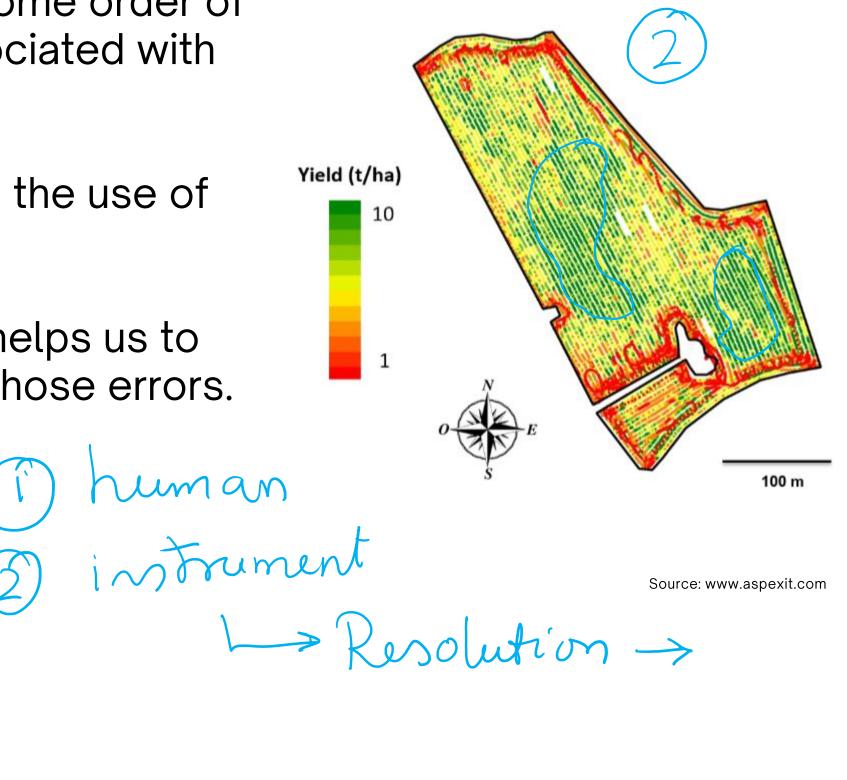
Indian Institute of Technology Kanpur

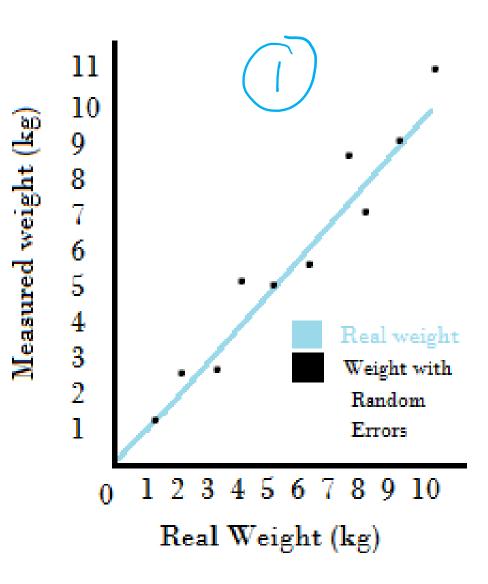


Why we use statistics in agriculture?



- Observations carry some order of variability (error) associated with them.
- This variability makes the use of statistics necessary.
- Statistics, therefore helps us to quantify and assess those errors.









Source: www.aspexit.com

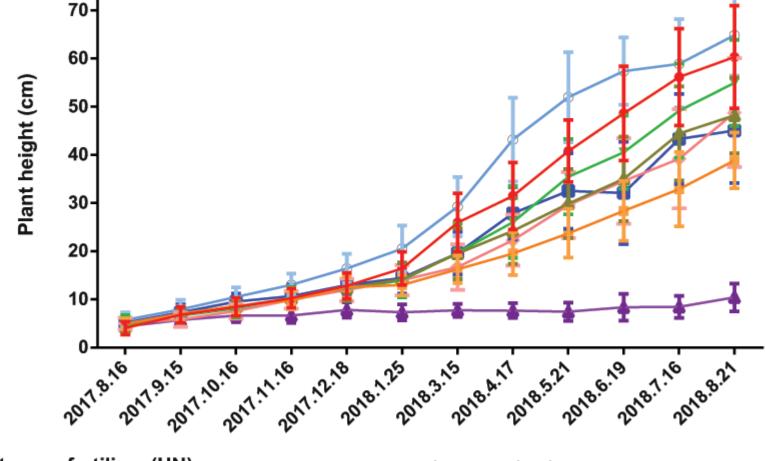
Source: www.statisticshowto.com



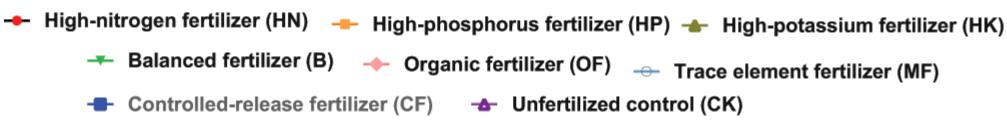
Benefits



- Improvement in production by the guidance of received data.
- Helps in determining if difference in variables is natural or accidental.
- Statistics helps us in understanding the current facilities and tells us what improves are to be made.



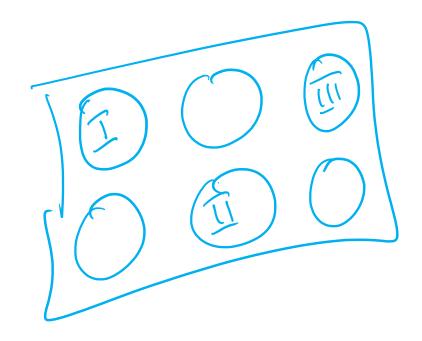


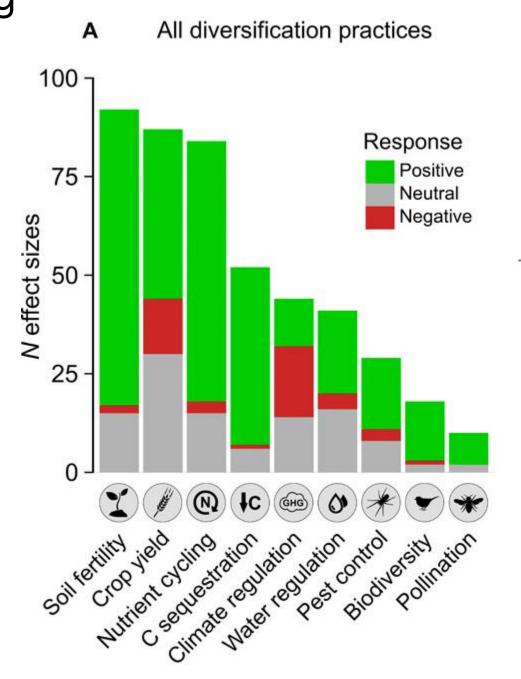


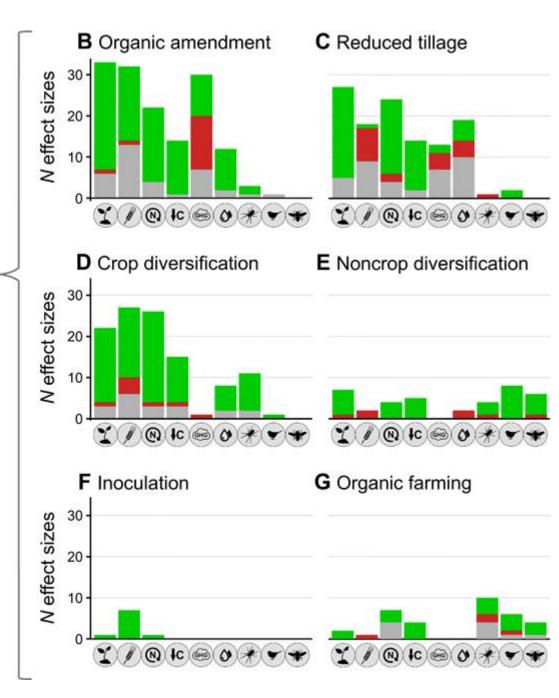
Benefits



- Statistics helps us in understanding which practices work better.
- Thus two:
 - a) Ensures replication
 - b) Ensures randomization





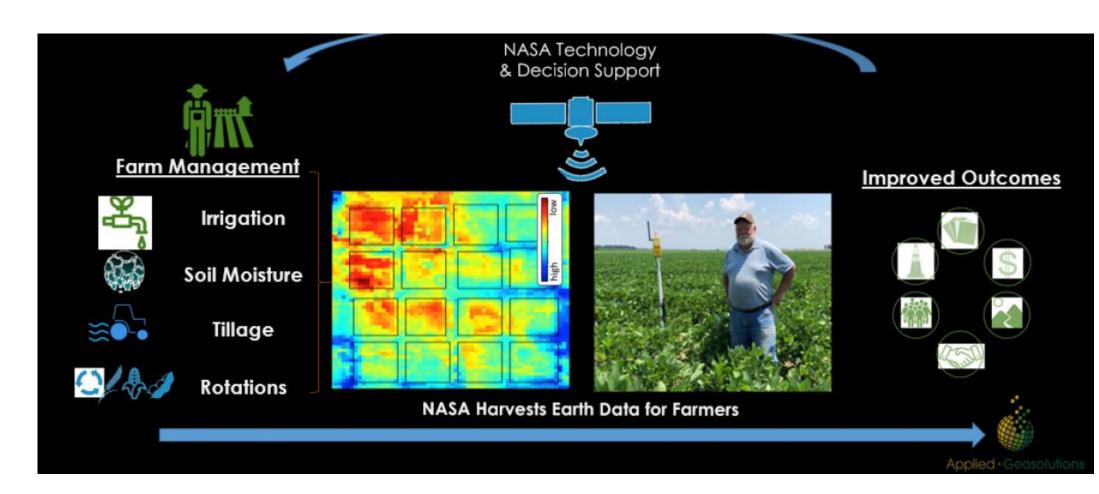






Enhanced productivity

 Organizations like NASA work on collecting data and organize it to helps farmers increase their yield, and income on least usage of resources.



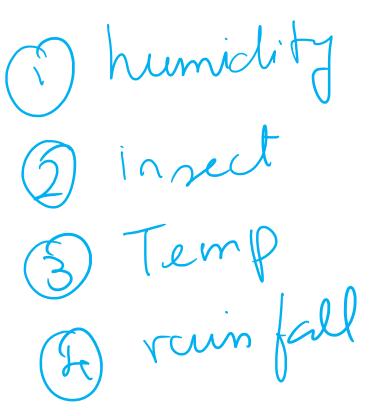




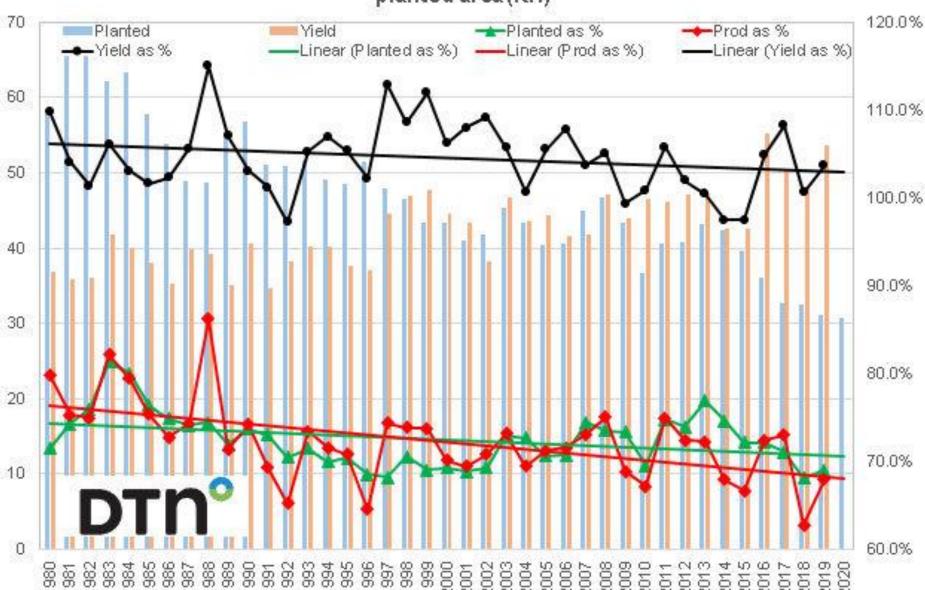


Making predictions

• It helps us in understanding the effects of modern factors like, increase in temperature, pollution, low rainfalls and thus future trajectories can be projected and steps can be taken.



U.S. winter wheat yield in bpa and planted area in mln acres (LH) vs. U.S. total wheat yield, output and planted area as % of total U.S. wheat yield, output and planted area (RH)



Thank you

