

Week-05-L-03

# Data Presentation and Interpretation

## Practice on Selecting Graphs

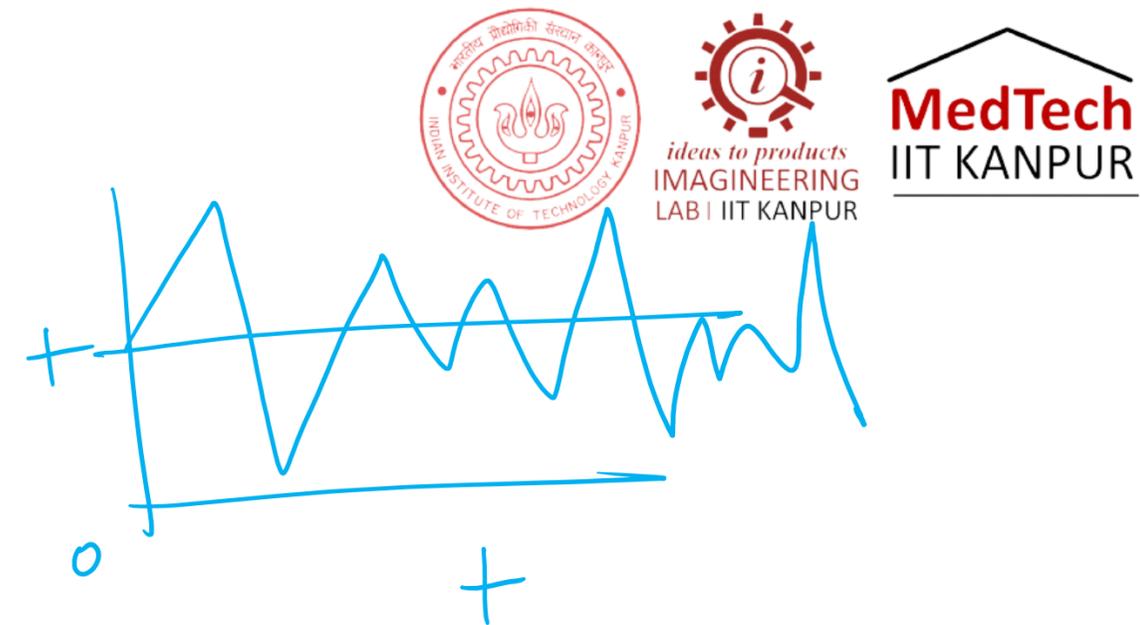
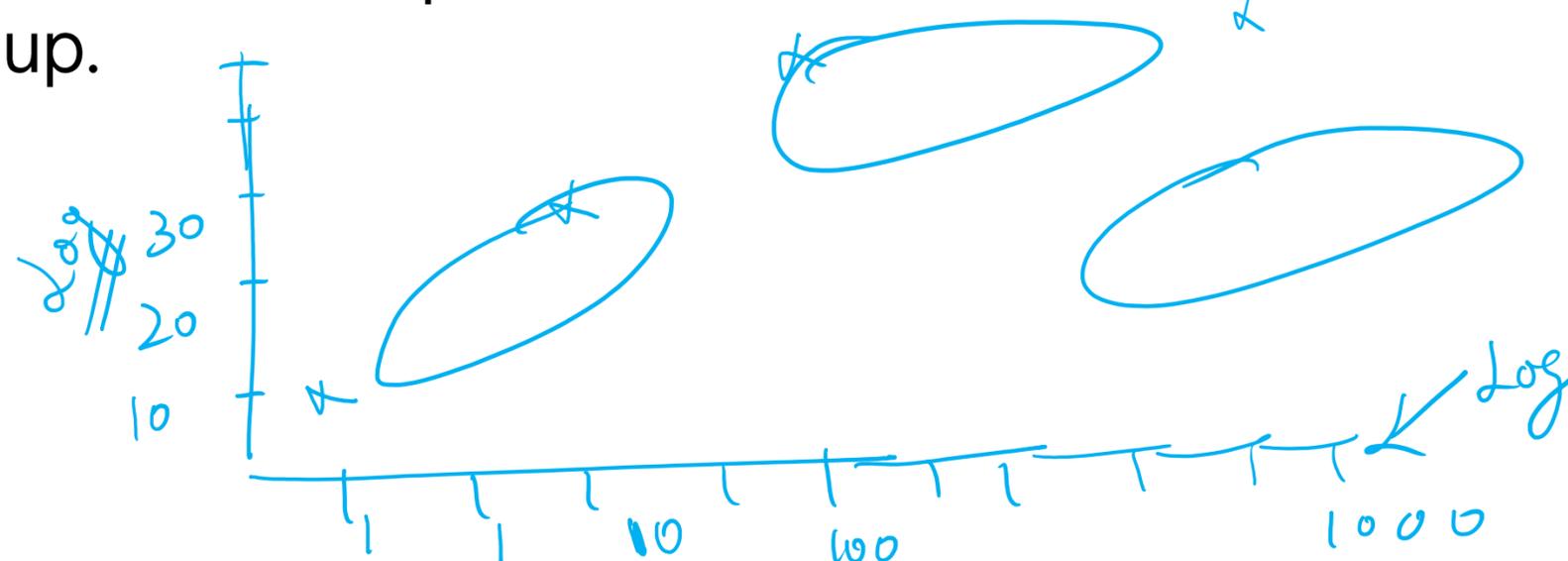
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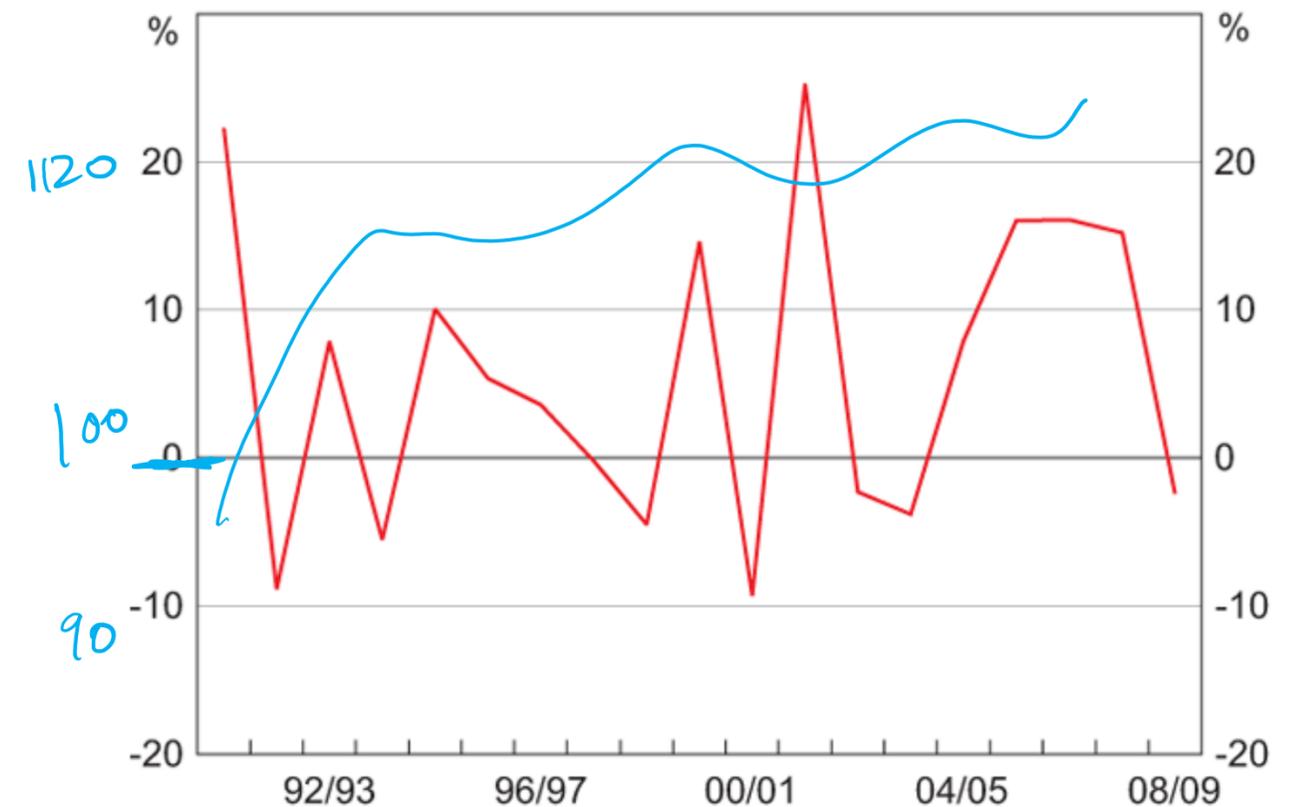


# Choosing Graphs- Line Graph

- Line graphs are used to track changes over short and long periods of time.
- When smaller changes exist, line graphs are better to use than bar graphs.
- Line graphs can also be used to compare changes over the same period of time for more than one group.



**India – Agricultural Investment**  
Real annual growth in gross capital formation

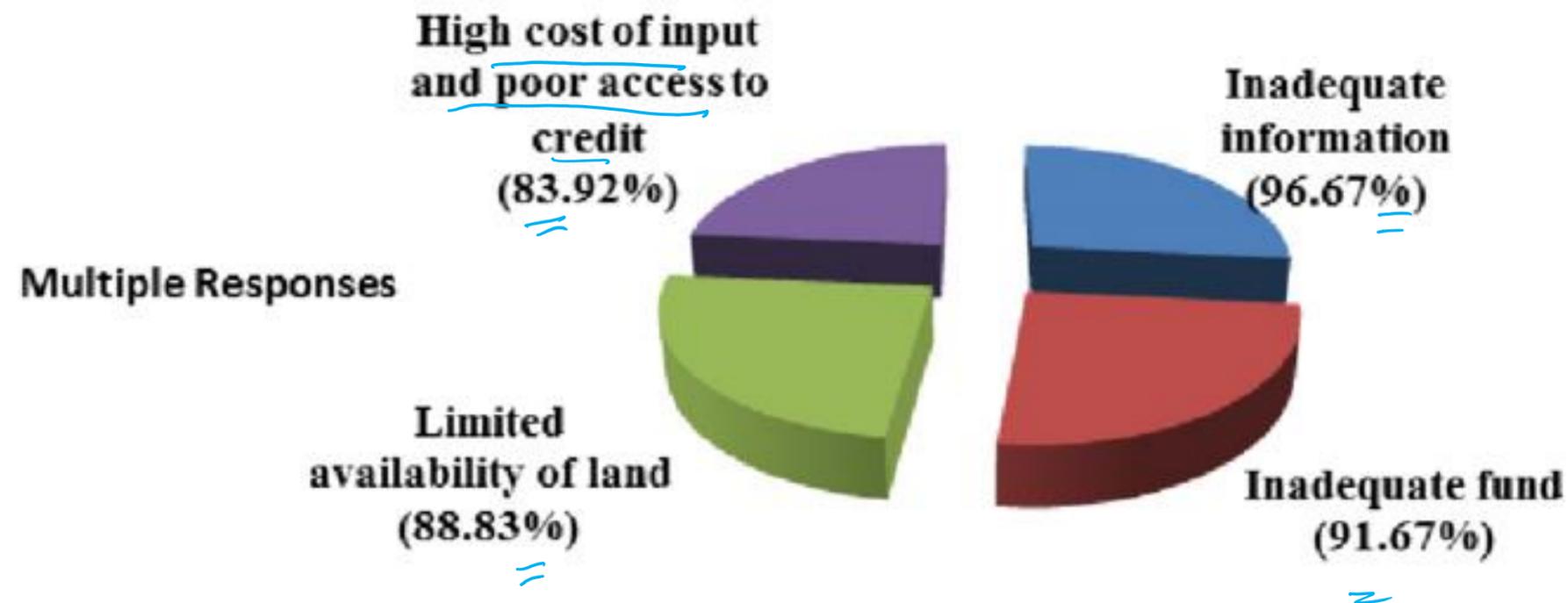


Sources: Central Statistical Office; RBA

# Choosing Graphs- Pie Chart



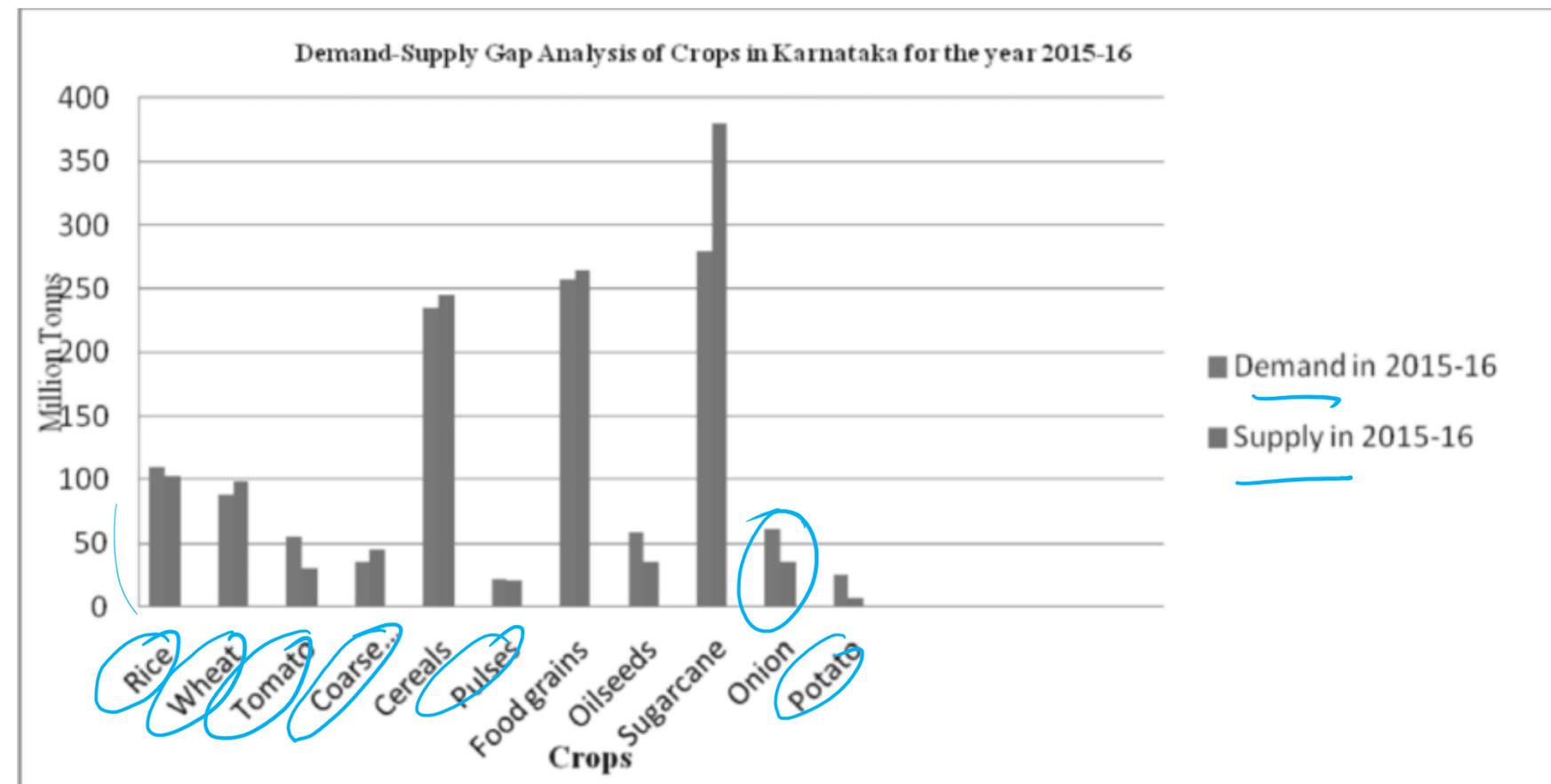
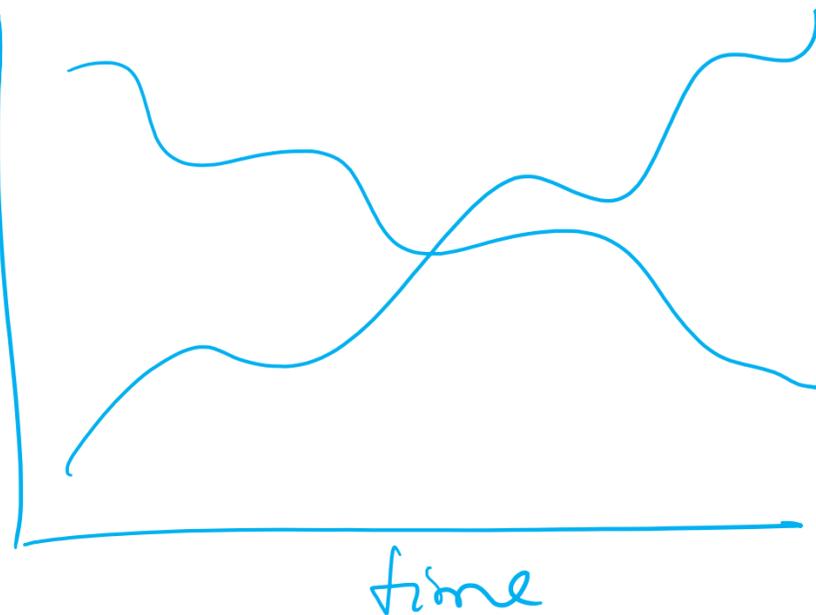
- Pie charts are best to use when you are trying to compare parts of a whole.
- They do not show changes over time.



# Choosing Graphs- Bar Graph



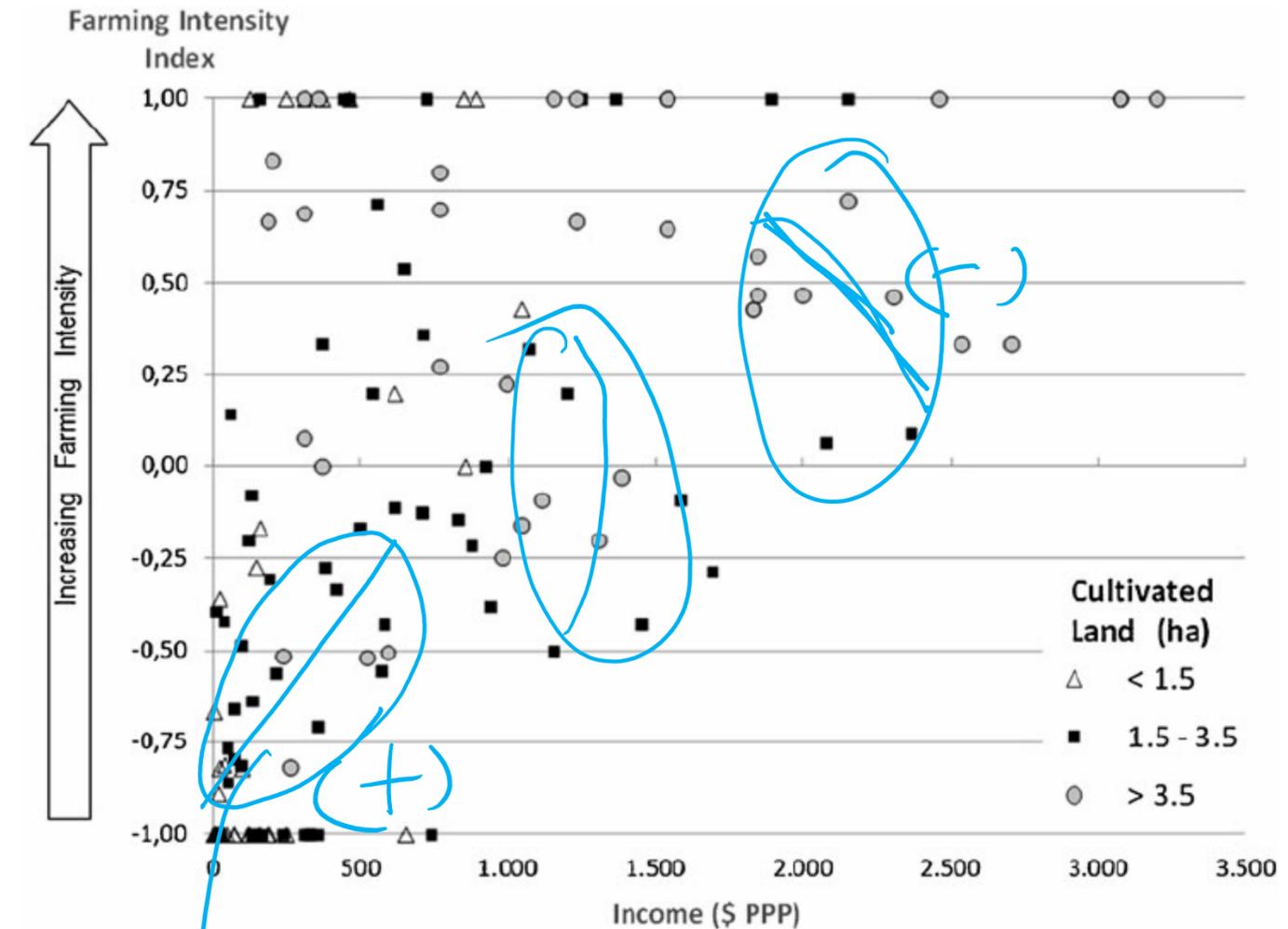
- Bar graphs are used to compare things between different groups or to track changes over time.
- When trying to measure change over time, bar graphs are best when the changes are larger.



# Choosing Graphs- X-Y Plot



- X-Y plots are used to determine relationships between the two different things.
- The x-axis is used to measure one event (or variable) and the y-axis is used to measure the other.
- If both variables increase at the same time, they have a positive relationship.
- If one variable decreases while the other increases, they have a negative relationship. Sometimes the variables do not follow any pattern and have no relationship.



m ± SD

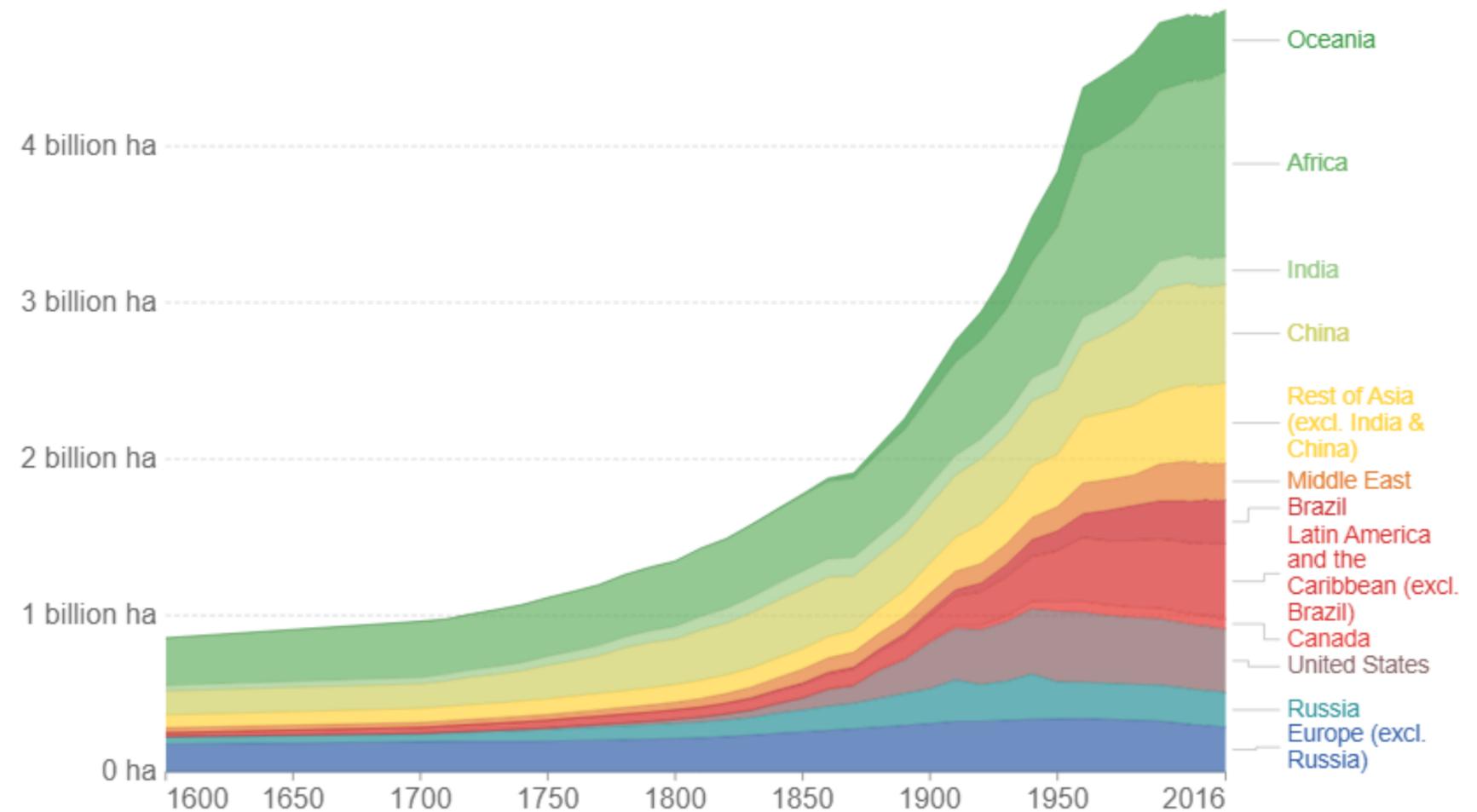
# Choosing Graphs- Area Graph



- Area graphs are very similar to line graphs.
- They can be used to track changes over time for one or more groups.
- Area graphs are good to use when you are tracking the changes in two or more related groups that make up one whole category (for example public and private groups).

## Agricultural area over the long-term, 1600 to 2016

Total areal land use for agriculture, measured as the combination of land for arable farming (cropland) and grazing in hectares.



Source: History Database of the Global Environment (2017)

OurWorldInData.org/yields-and-land-use-in-agriculture/ • CC BY

Source: www.ourworldindata.org

**Thank you**

