

The Impact Of Climate On Food Security

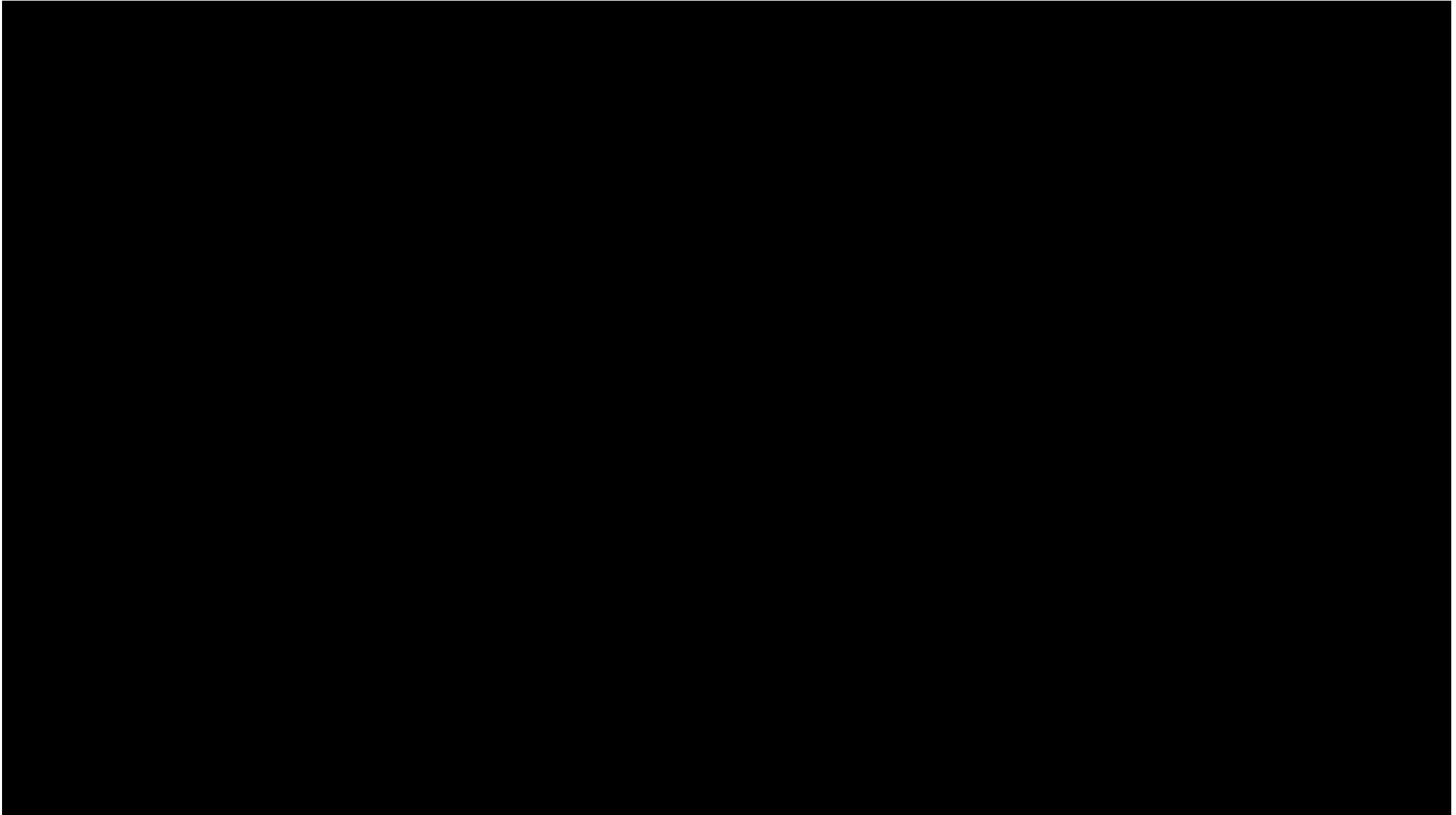
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Please watch this:



What is food security?

When all people, at all times, have physical, social and economic access sufficient, safe and nutritious food.

But:

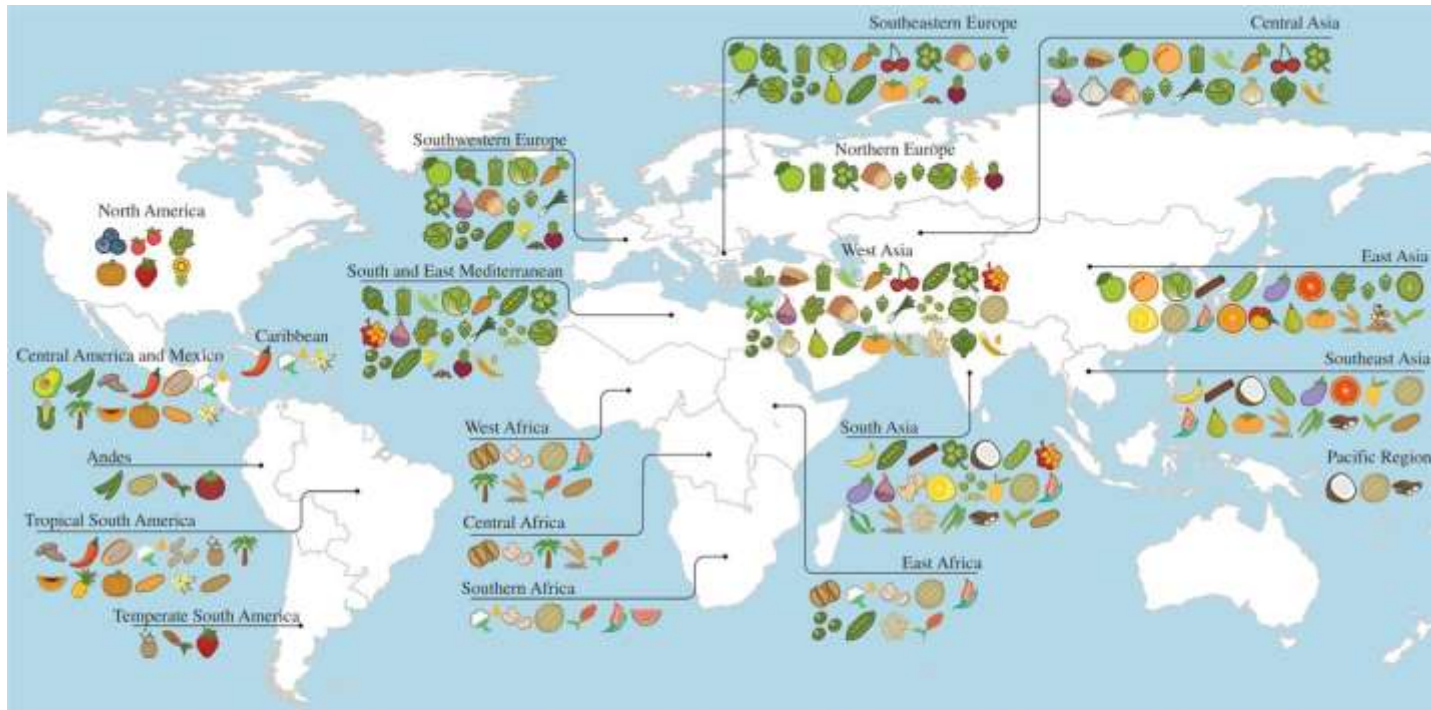
- Population increase
- World hunger on the rise
- Droughts and climate change



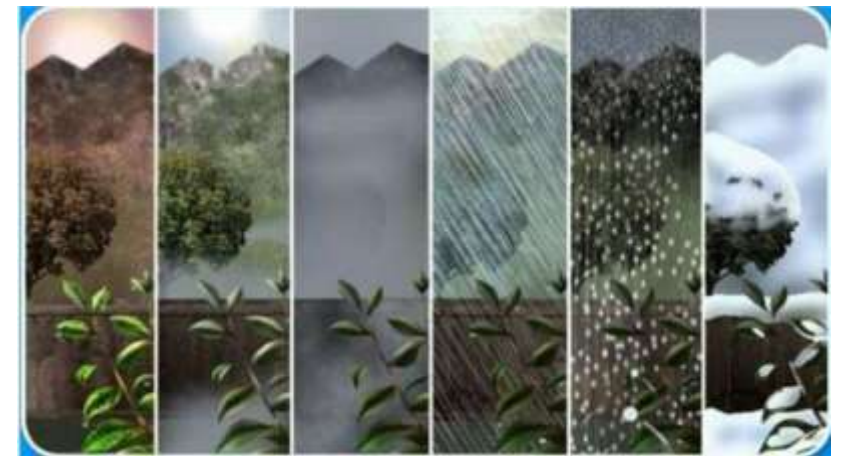
Crops



Climate



- | | | | | | | | | |
|-----------------------|----------------------|----------------|------------|------------------|------------------------|-----------------------|--------------|----------------|
| alfalfa | beans | clover | eggplants | hops | melons | pears | rice | sunflower |
| almonds | blueberries | cocoa beans | fabo beans | kiwi | millet | peas | rye | sweet potatoes |
| apples | cabbages | cucumats | figs | leeks | oats | pigeonpeas | sesame | taro |
| apricots | carrots | custard | garlic | lemons and limes | olives | pineapples | sorghum | tea |
| artichokes | cassava | cottonseed oil | ginger | lentils | onions | plums | soybean | tomatoes |
| asparagus | cherries | cornpeas | grapefruit | lettuce | oranges | potatoes | spinach | vanilla |
| avocados | chickpeas | cranberries | grapes | maize | palm oil | pumpkins | strawberries | watermelons |
| bananas and plantains | chillies and peppers | cucumbers | groundnut | mangoes | papayas | quinoa | sugar beet | wheat |
| barley | cinnamon | dates | hazelnuts | mole | peaches and nectarines | rape and mustard seed | vegetarian | yams |



What crops?

- **wheat**



- **Maize**



- **Rice**

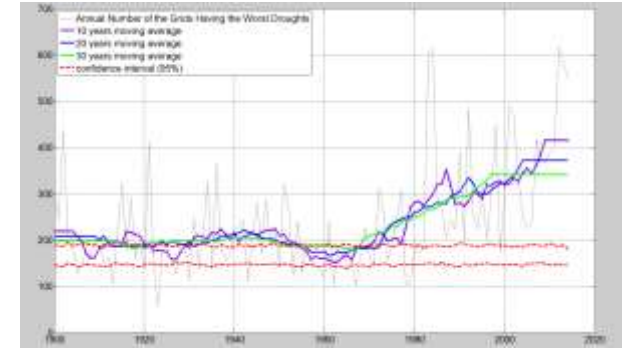


- **Barley**

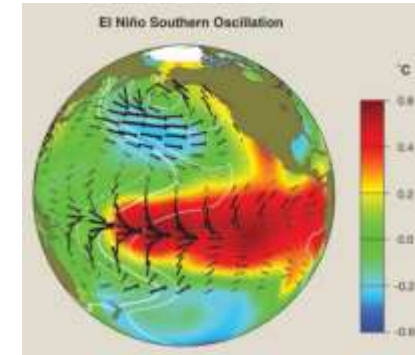


What climatic patterns?

- **Drought**



- **ENSO**



- **Climate change**



Where can we find the dataset?

FAO



FOOD AND AGRICULTURE
ORGANIZATION
OF THE UNITED NATIONS

NOAA



NASA



WORLDBANK



WORLD BANK GROUP

How can we study this topic?

- **Statistics and Mathematics**
- **Programming**
- **ArcMap**

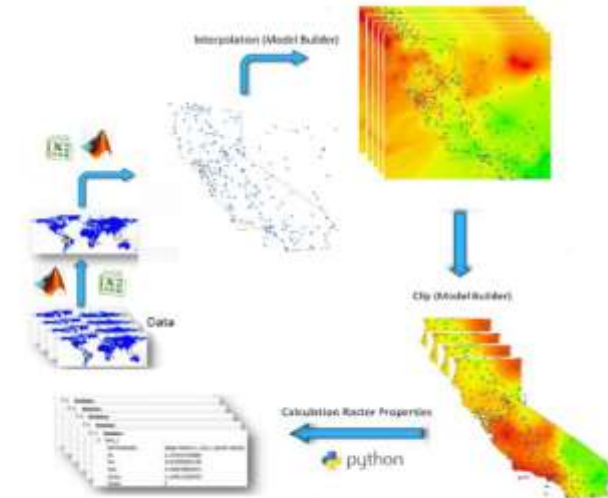
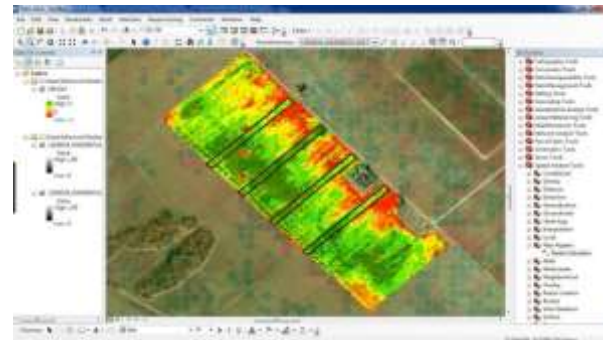


Figure 5. Schematic view of the iterative processes for drought calculation