

# CLIMATE CHANGE: UNDER THE RADAR FACTORS

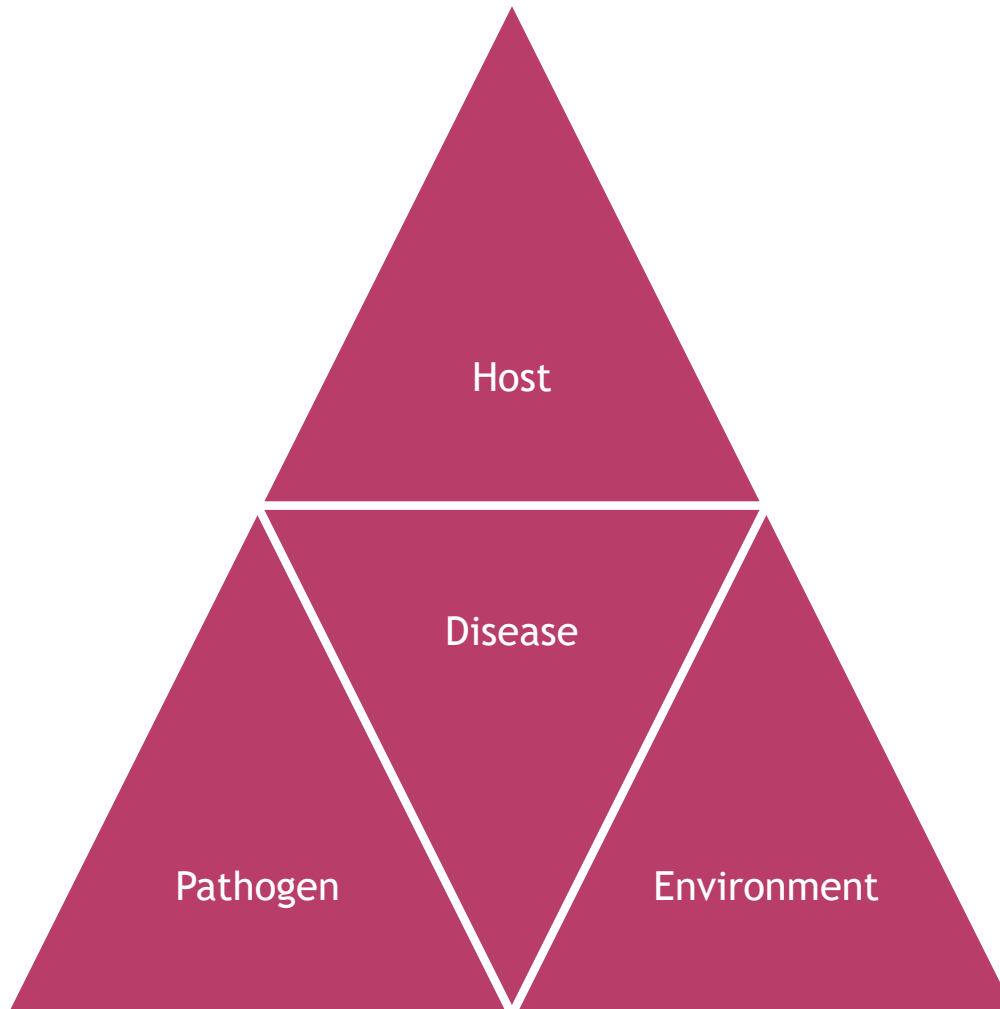
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# DEFINITION

climate change

- ⦿ *noun*
- ⦿ noun: **climate change**; plural noun: **climate changes**
- ⦿ a change in global or regional climate patterns, in particular a change apparent from the mid to late 20th century onwards and attributed largely to the increased levels of atmospheric carbon dioxide produced by the use of fossil fuels.

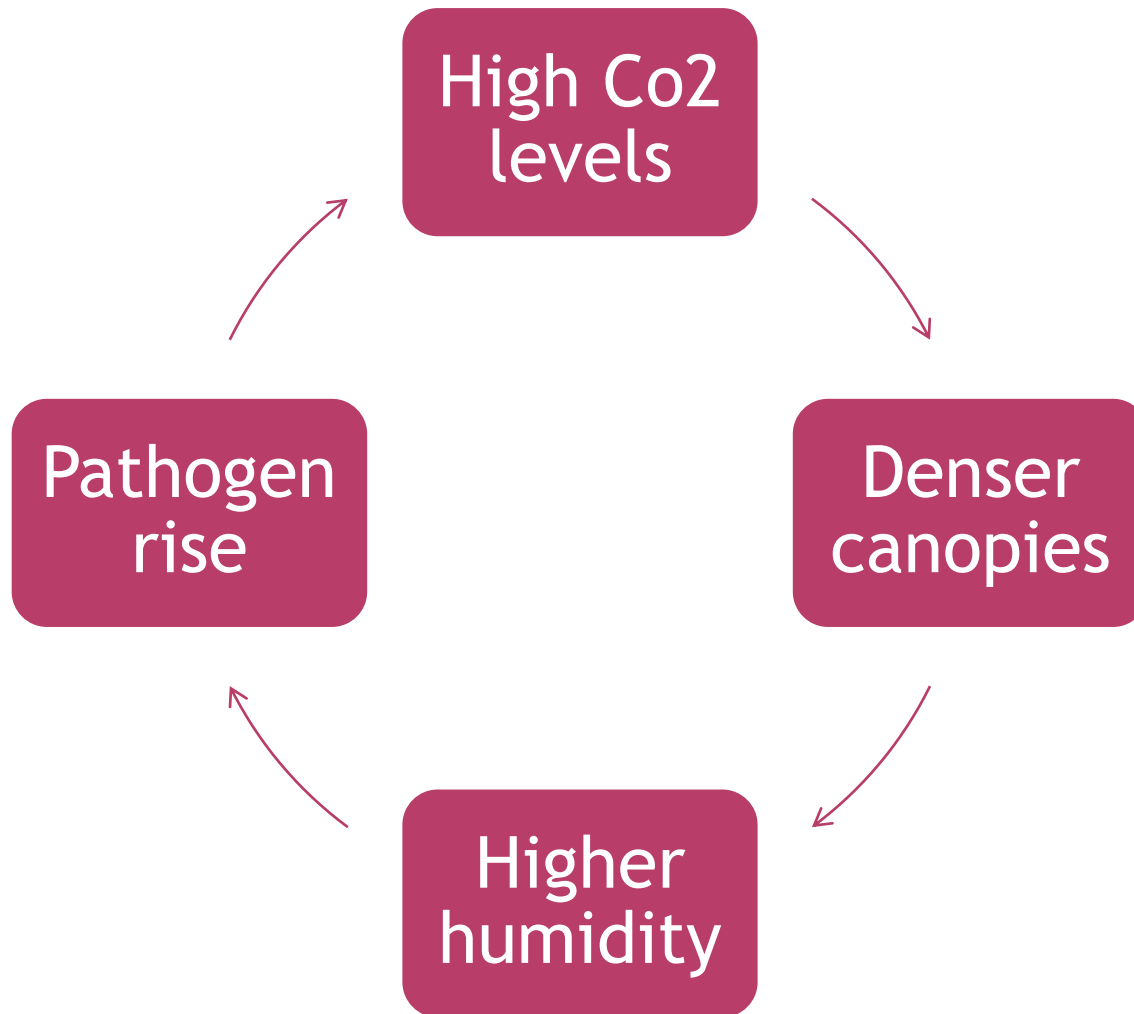
# TRIANGULAR INTERPLAY



# CLIMATE CHANGE IMPACTS: AGRICULTURE

- Increased/ decrease in temperatures could increase/ decrease insect (predators vs. pests) populations
  - soybeans grown in elevated CO<sub>2</sub> atmosphere had 57% more damage from insects (primarily Japanese beetle, potato leafhopper, western corn rootworm and Mexican bean beetle)
- Moisture changes - pathogens and disease
- Higher CO<sub>2</sub> levels to denser canopies, humidity and growth of pathogens

# CLIMATE CHANGE: AGRICULTURE



# TRENDS

- ◉ White fly on paddy in Telangana and AP
- ◉ Pink bollworm on cotton in all States
- ◉ paddy swarming caterpillar in Assam
- ◉ wheat blast diseases in Bengal and Bangladesh
- ◉ Semi-looper on neem tree
- ◉ Higher use of insecticides
- ◉ Future of Pollinators?



# RESULTS

- ⦿ Higher usage of agrochemicals
- ⦿ Poisoning of farmers, their families, soil and ecology
- ⦿ Lower/ higher crop yields
- ⦿ Market losses
- ⦿ Increased health expenditures
- ⦿ Contaminated food



# THANK YOU

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