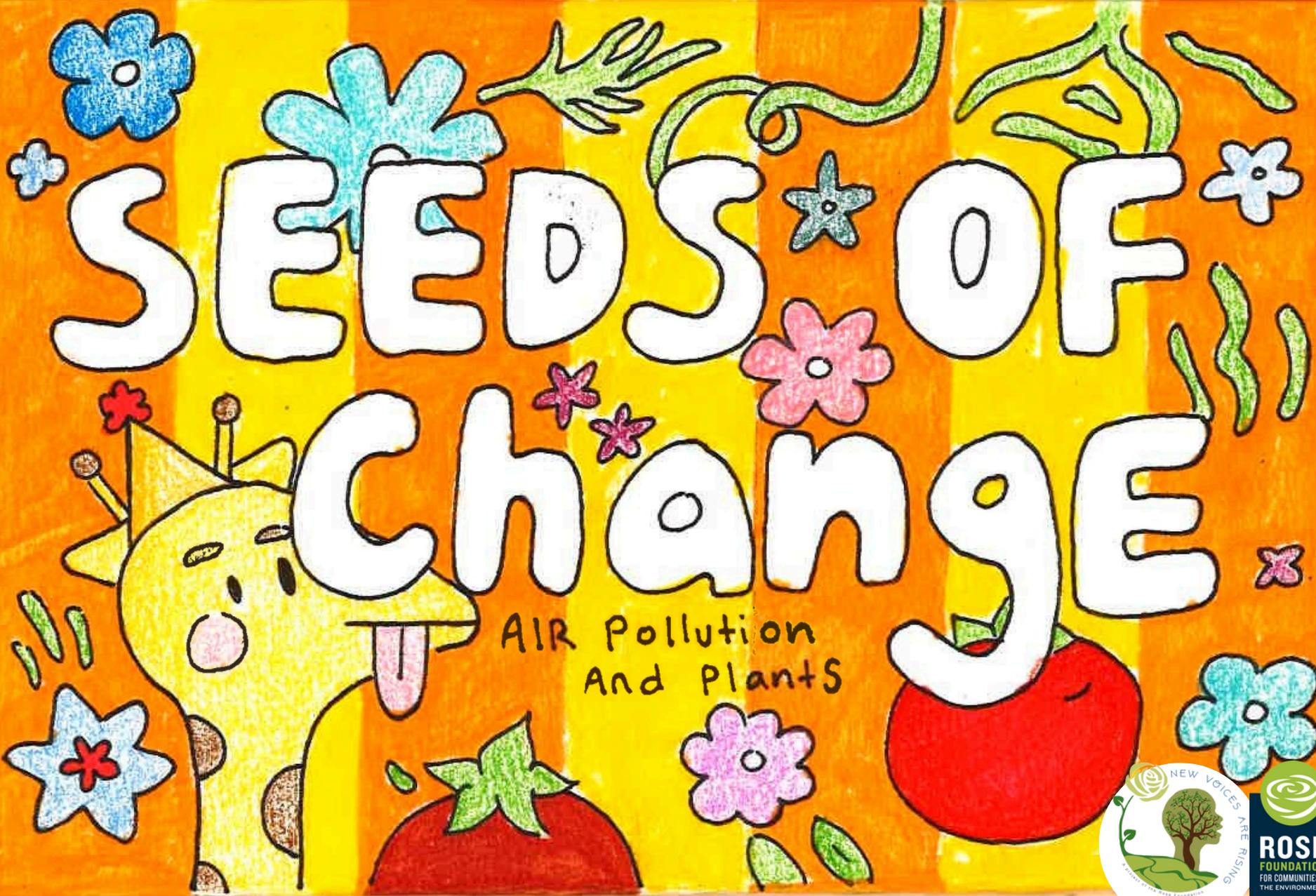
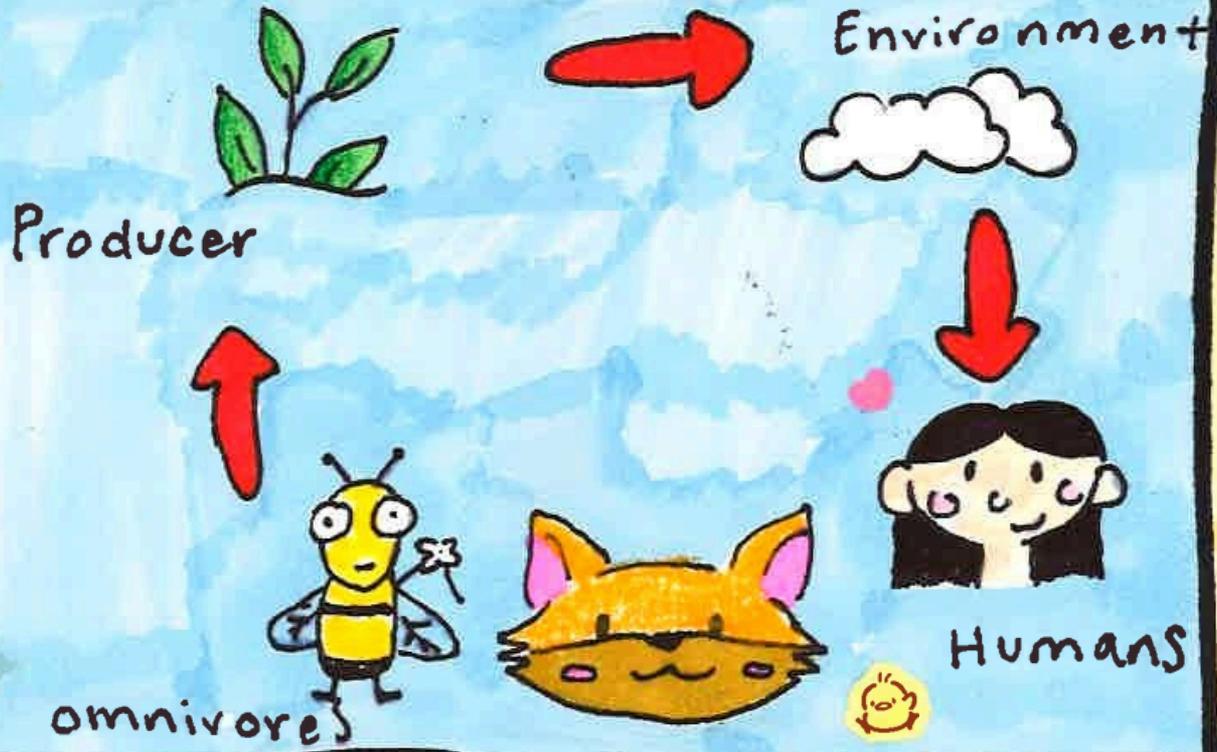


SEEDS OF CHANGE

AIR Pollution
And Plants





1 thing
Can impact
everything else



**LET'S
TALK**

Everything in an ecosystem is
connected.

• An ecosystem is a
community of living
organisms

How AIR Pollution
Affects Plants

What is AIR quality?



- How clean or Polluted the air is

Importance

- Clean air helps us breathe easily and reduces risks
- Healthier Plants
- Supports Biodiversity
- Reduces Climate Change

WAIT!

Did you know not everyone has the same Quality of air Ex. low income, People of color neighborhoods are located near factories, highways and facilities with less access to resources

Air

Pollution is dirty air, happens when things like smoke, dust, and chemicals mix with air.

- Weakened immune system
- Reduces Biodiversity
- Agricultural losses



AIR



Pollution



PLANTS



- They damage leaves
- They hinder flowering
- They damage roots
- Contribute to global warming
- Pollutants like Sulfur Dioxide damage plants and makes more susceptible to disease
- These pollutants come from human made sources like fossil fuels, construction, and mining

IMPACTS

- Nitrogen Pollution slows the growth of trees
- Ground level ozone decreases seed production in sensitive plants
- Reduces photosynthesis
- Reduces reproduction
- Lower crop yields



HUMANS

- Skin aging
- Lung diseases like asthma and cancer
- Strokes
- Heart disease

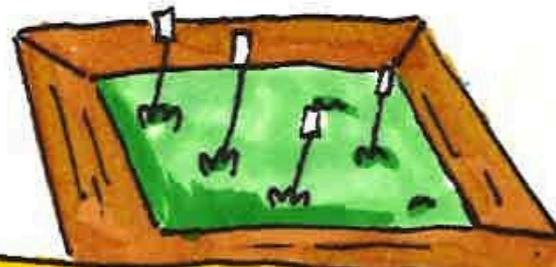
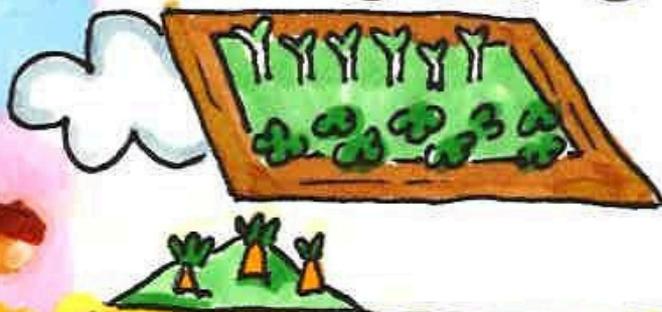


Short story



Plants and agriculture can be damaged directly by air pollutants when ozone enters the leaves of a sensitive plant, it can reduce photosynthesis.

This is yummy!



Ozone is absorbed through leaf pores which damages cell membranes and the cells collapse.

Ozone forms when sunlight mixes with pollution.

Story

Some toxic air pollutants include heavy metals such as mercury can deposit into soils or surface waters, where they are taken up by plants and ingested by animals.



Mercury is a dangerous metal that is liquid at room temp. Acidic soils have lots of aluminum ions which damage roots and prevent the plant from taking vital ions and nutrients from it.



Story

Air Pollutants have been reported to be responsible for immoderate vegetation injury and inordinate losses to crop yields.

Humans may take in harmful substances like metals and chemicals. Some metals can settle on or get absorbed by the vegetables as they grow.

Over time, eating polluted vegetables may increase the risk of diseases like cancer and affect growth and development.

SOLUTIONS

You can make a difference!

PERSONAL SOLUTIONS

- use Natural pesticides
- Reduce agricultural runoff
- promoting green spaces

PLANTS/AGRICULTURE

- use buffer zone, with trees or shrubs around agriculture fields to trap pollutants
- watering plants helps clean dust and soot
- using Antioxidant treatments like vitamin C
- Mulching - covering soil with organic matters



ABOUT THE AUTHOR



Hello! My name is Jamia

Jamia is a Bay Area high school junior who's always on the lookout for her next Creative project. She likes to build legos, draw, paint, and watch movies in her free time. And is passionate about advocating for environmental justice and making sure that all voices are heard.

She is the 2024-2025 Food Justice Fellow and has been working with New Voices Rising since Summer of 2023. New Voices Rising is a youth program increasing awareness on global and local environmental injustices. She wanted to create an educational piece about Air quality and Plants! Her doodles inspired this zine!

