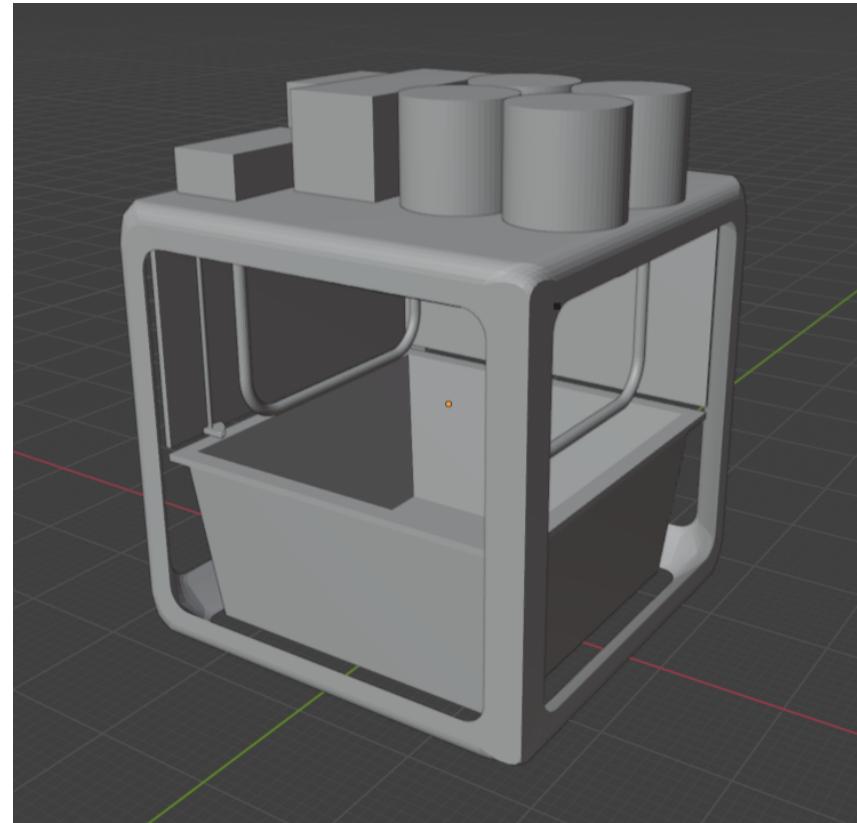


# Portable Grow Box

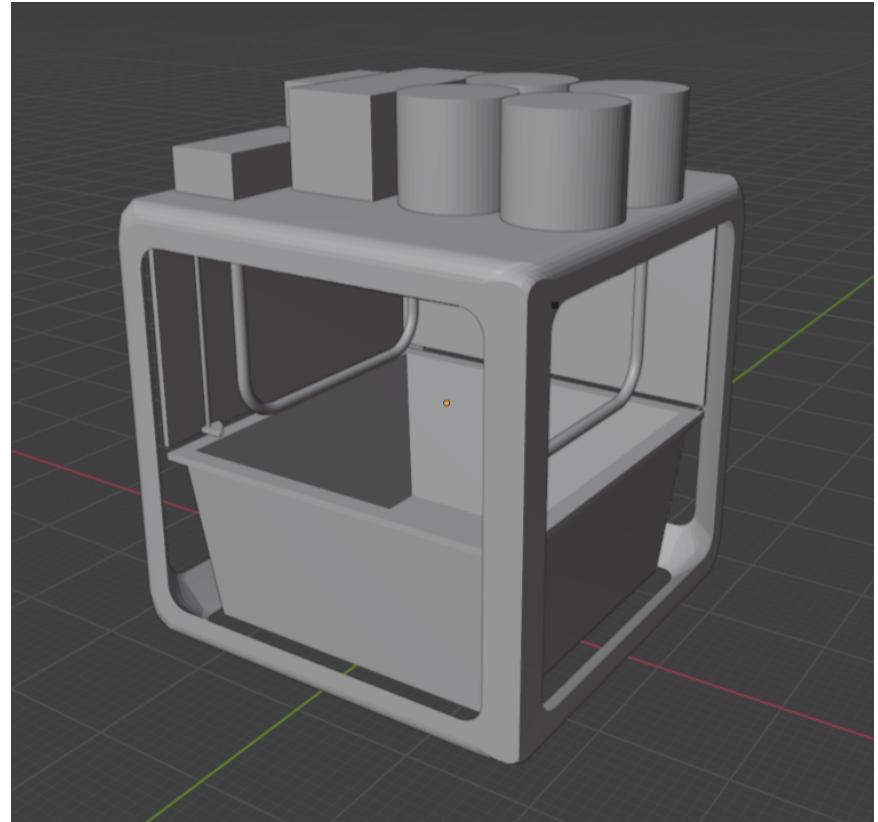
Growing vegetables in urban apartments



# Overview

The portable grow box is designed as a crop growing system specifically for families and individuals.

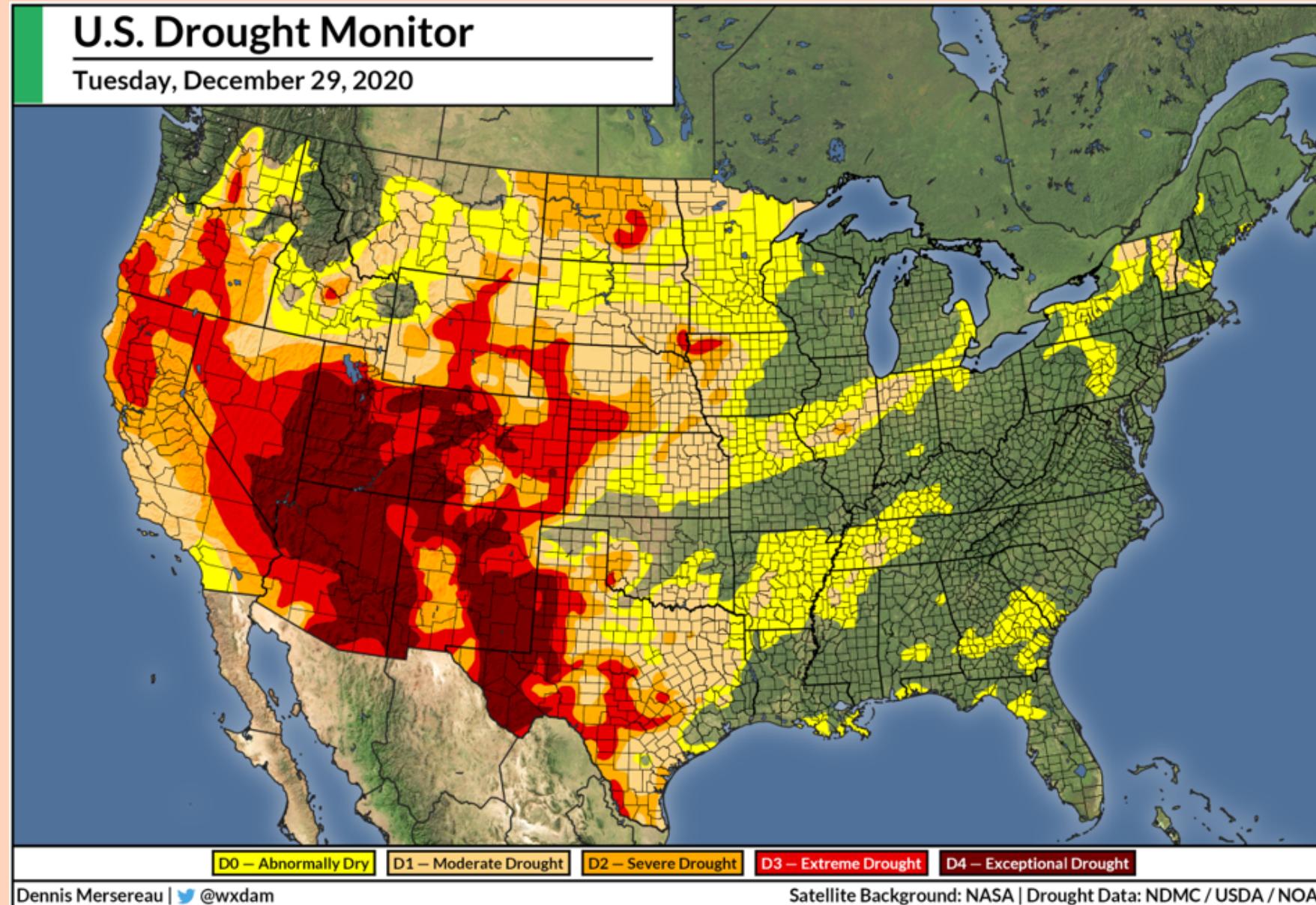
The purpose of the invention is to: Grow basic food for individuals in an environment lacking planting conditions.



# Global agricultural risks

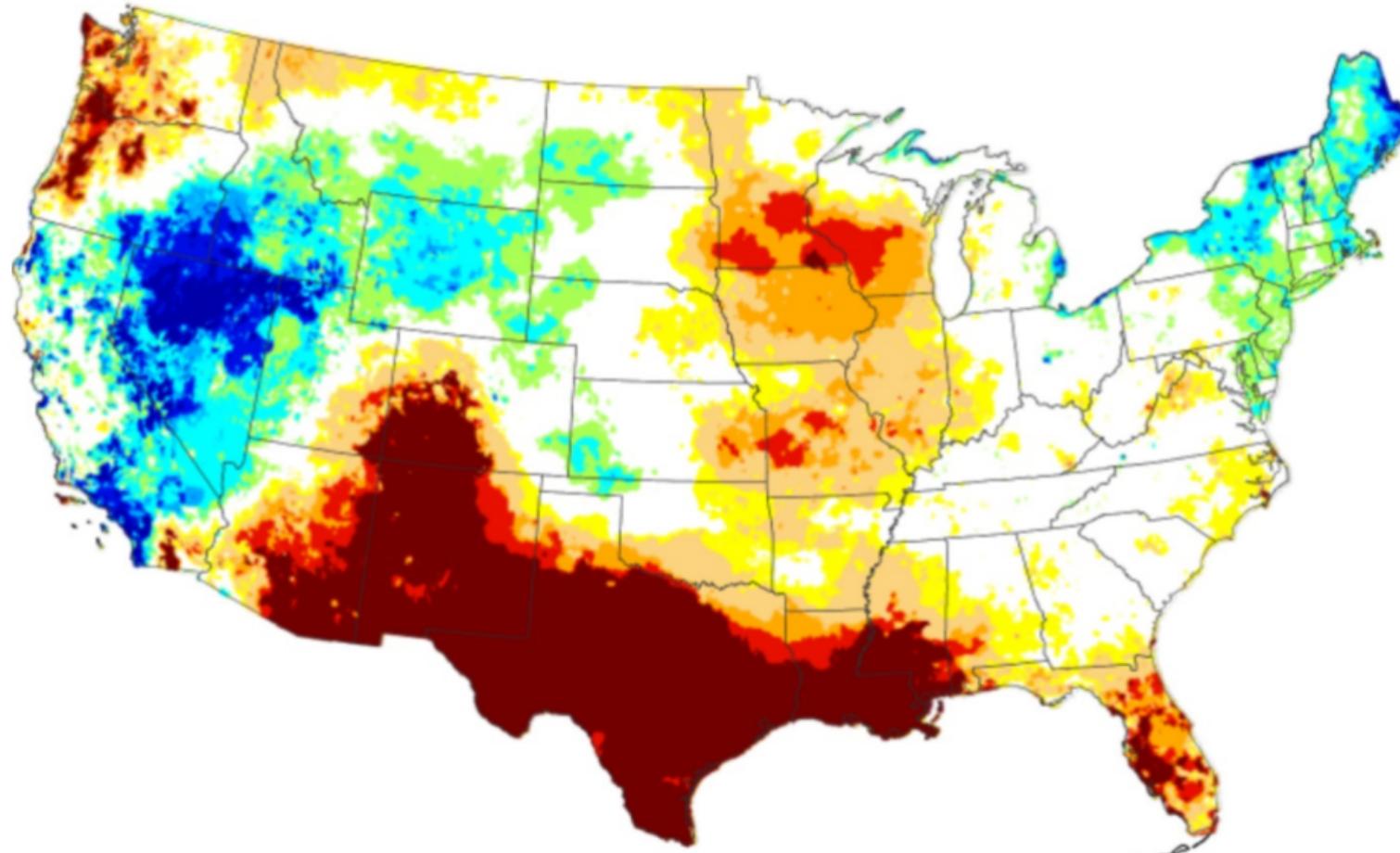
Extreme climate change has brought huge damage to agriculture, and current agriculture seems to be unable to cope with extreme climate.

2020: The U.S. experienced one of its worst droughts in history, especially in the Great Plains, affecting over 10 million acres of farmland.



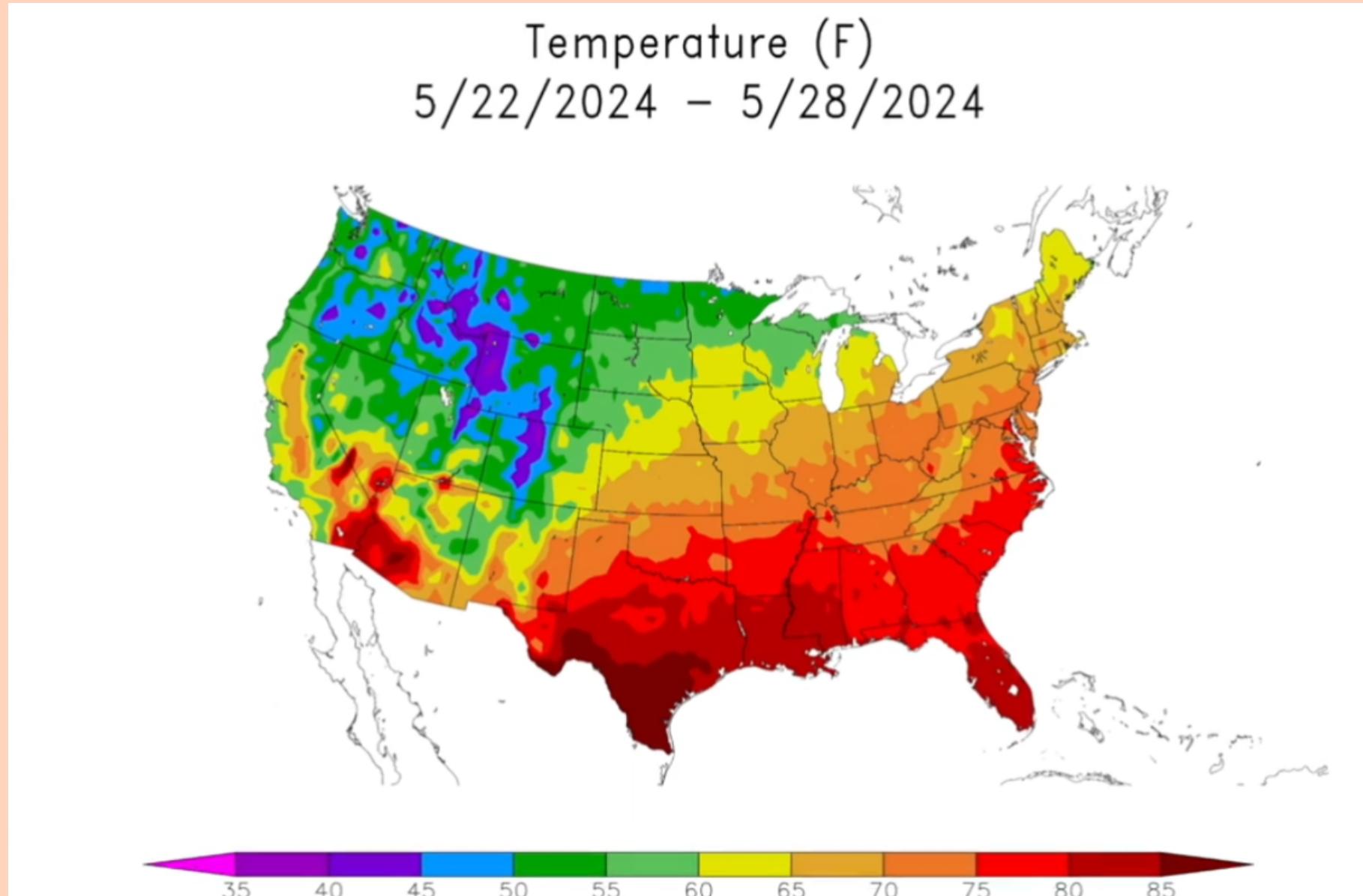
2023: Severe drought in the Midwest and South caused corn yields to drop by 24% and soybean yields by 22%.

3-Month Evaporative Demand Drought index (GridMET)

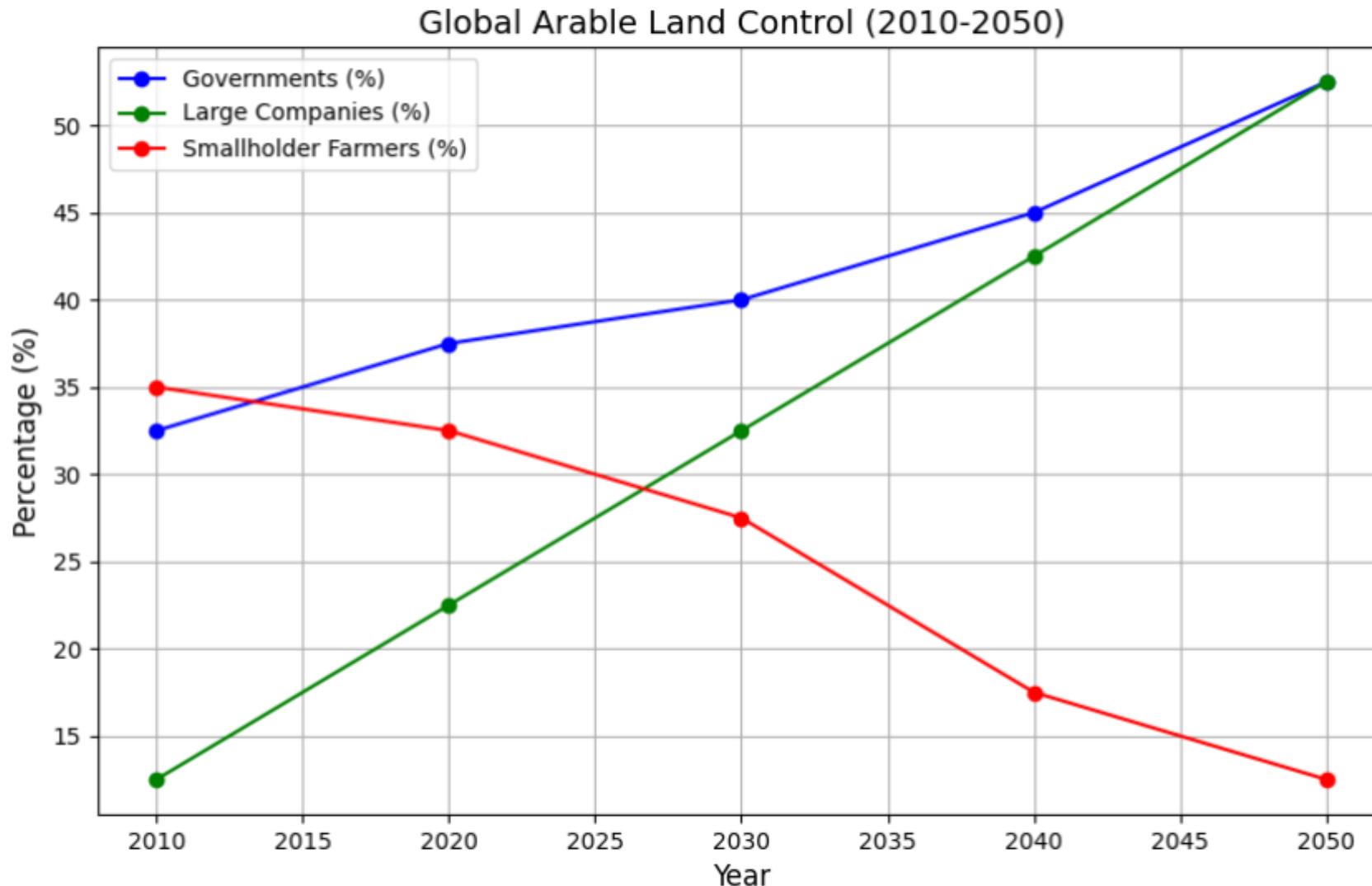


September 16<sup>th</sup>, 2023

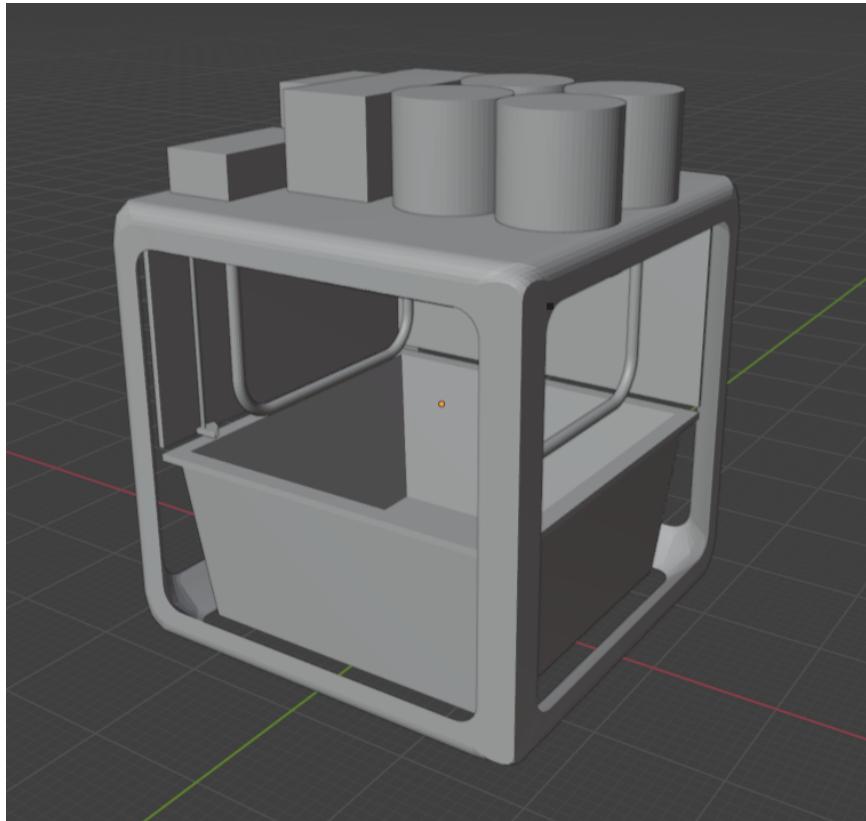
**2024: Drought in Texas and California led to a 15%-20% decrease in corn and soybean yields, with heatwaves intensifying water stress.**



# Farmland risk



# Solution: Portable Planter Box



No reliance on large-scale agriculture

Planting is not restricted by region

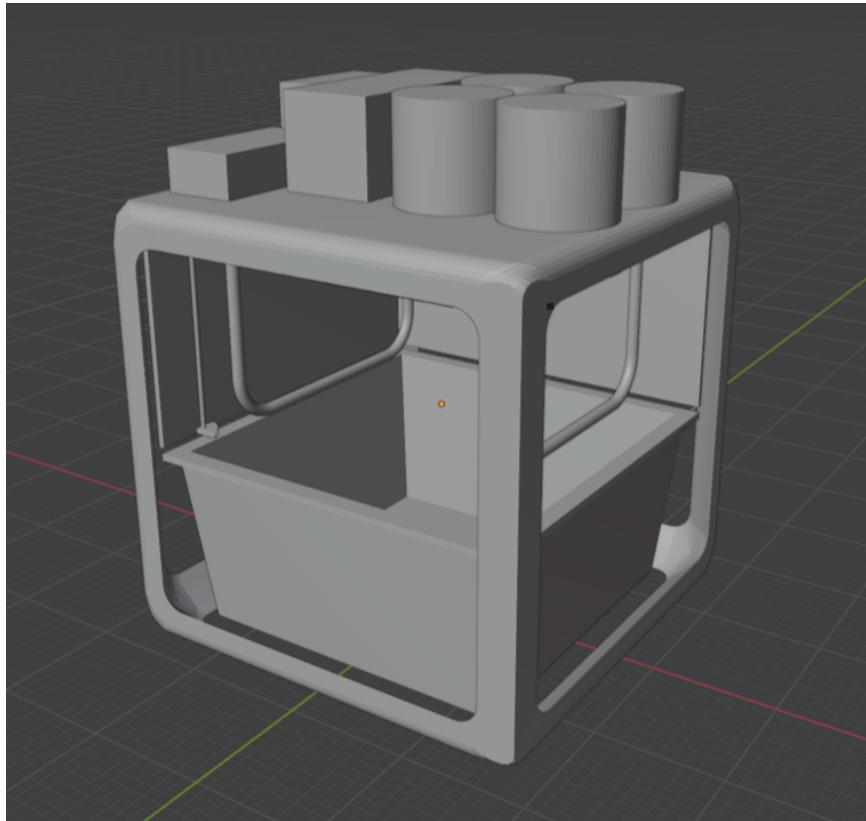
Almost unaffected by weather

Eliminate the anxiety of lack of land and food

New technological innovation projects

Looking for enthusiastic young people

# Go beyond tradition grow vegetables freely



## Cities:

Grow fresh food in limited space,  
whether it's an apartment or a dorm  
room.

## Original ecology:

Self-selected planting materials,  
original ecology, safe and green.

# One year plan

- 1,Prototype design completed in three months
- 2,The prototype was produced in three months
- 3,One month to test usability and improve efficiency
- 4,Seeking cooperative investment within one month

# Member recruitment

1. Graphic Designer
2. Industrial Designer
3. Embedded technician
4. Manual specialist



# Get to know your project leader

Currently an undergraduate student at Hunan Institute of Science and Technology, majoring in Data Science and Big Data Technology.

(Note: Suspension for one year due to health-related issues, specifically kidney problems.)

Completed high school at Yongzhou No. 1 High School.

Peter.C    Male

Contact information : [VaultBlueV@gmail.com](mailto:VaultBlueV@gmail.com)