

# Assessing Urban Agricultural Practices in the Desert Cities



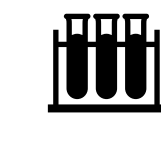

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*Is there a mis-match or an alignment between urban farmers' perceptions of their farm's environmental sustainability and its actual environmental impact?*

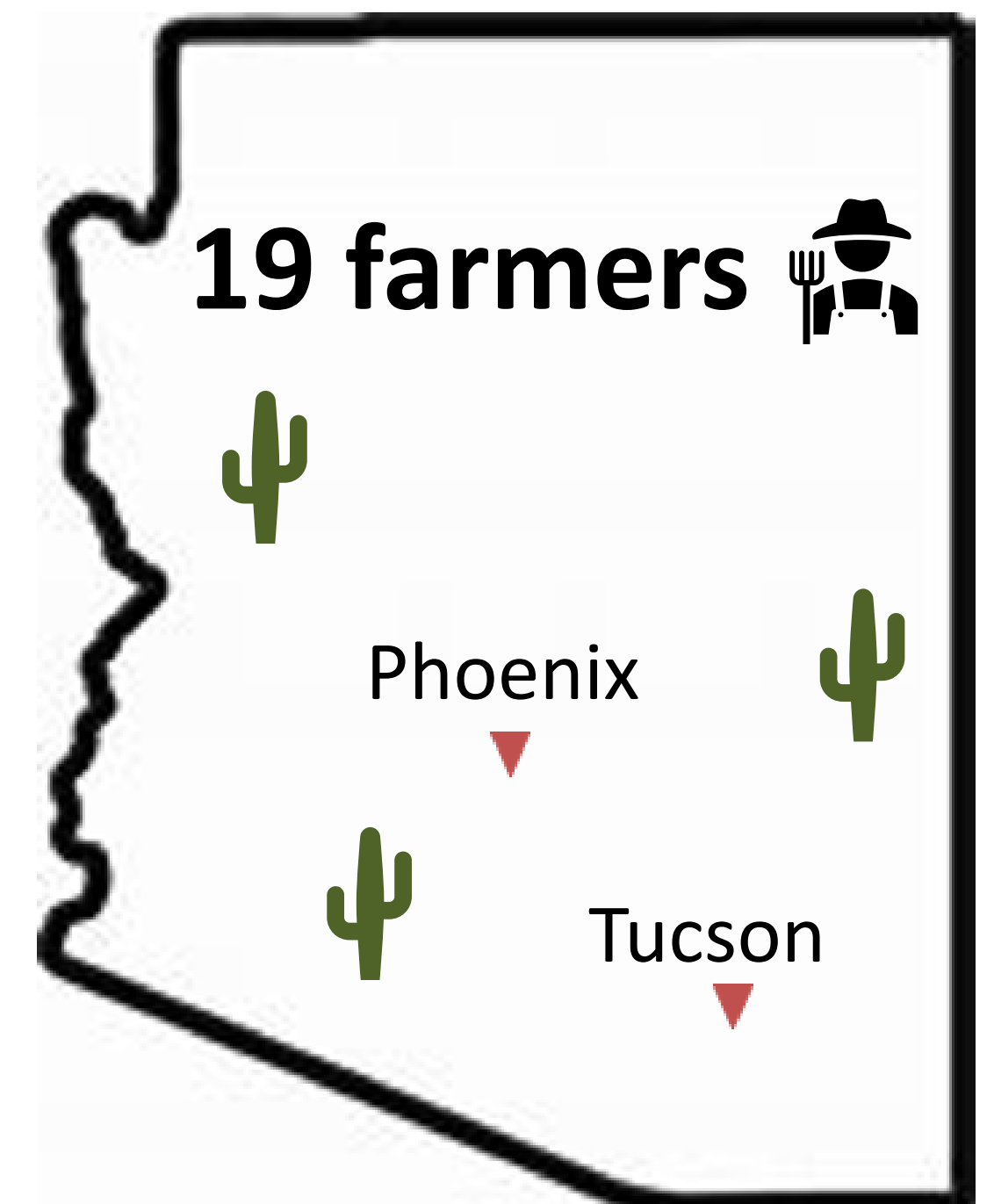
## Project Approach:

-  Interview process
-  Data Analysis
-  Soil and Water Testing
-  Determine overall **"Sustainability Score"**

## Hypothesis:

**"Irrational Rationality"**

Practices not aligning with ideals



## Irrational Rationality

The use of contradictory logics to retrospectively defend and sustain practices that violate one or more of those logics

*"Our urban farm uses 1/10 or one percent the water of a conventional farm.' They're comparing their hydroponic lettuce farm to like, a field operation growing avocados."*

## Sustainability Score

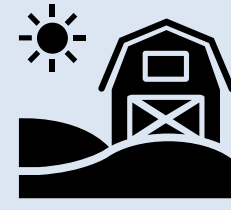
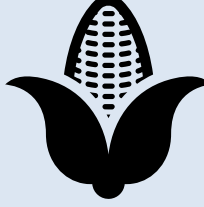
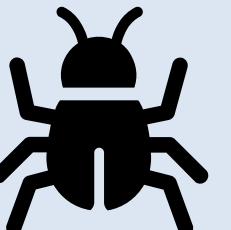

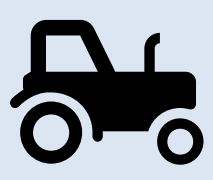


Each factor is rated on a scale of 1-3

- 1 - not sustainable
- 2 - undetermined
- 3 - sustainable

## Provisional Findings:

- Claims to be organic but use synthetic fertilizers
- Use of city water
- Growing crops not native to the desert climate
- Suspected overuse of synthetic fertilizers

## Factors:

- Location 
- Farm Type & Size 
- Crop Type & Number 
- Water Source & Use 
- Irrigation Method, Timing, & Frequency 
- Pesticide Use 
- GMO Use 
- Fertilizer Type & Application
- Livestock
- Fuel-powered Equipment

*"I like to grow bananas... I grew up in the tropics, I miss the tropics. So I liked to look for plants that reminds me of a tropical place. And then that reminds me of home."*

**1 - not sustainable;** although tropical plants may thrive in hot climates, they require a lot of water which is scarce and expensive in the desert

## Going Forward:

- Soil and water testing to compare farmer perceptions to physical environment
- Determine the overall sustainability score for each farm

