



# Farming Adaptations in the Face of Climate Change



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## Introduction

A range of factors may influence whether and how farmers adapt to climate change. Beliefs about and experiences with climate change in particular may influence adaptation. Further, a range of other factors may influence the relationship between climate change beliefs and experiences, and adaptation. However, little research has examined how presence of an heir and location on the rural urban interface (RUI) may affect farmer adaptation strategy.

### This research asks:

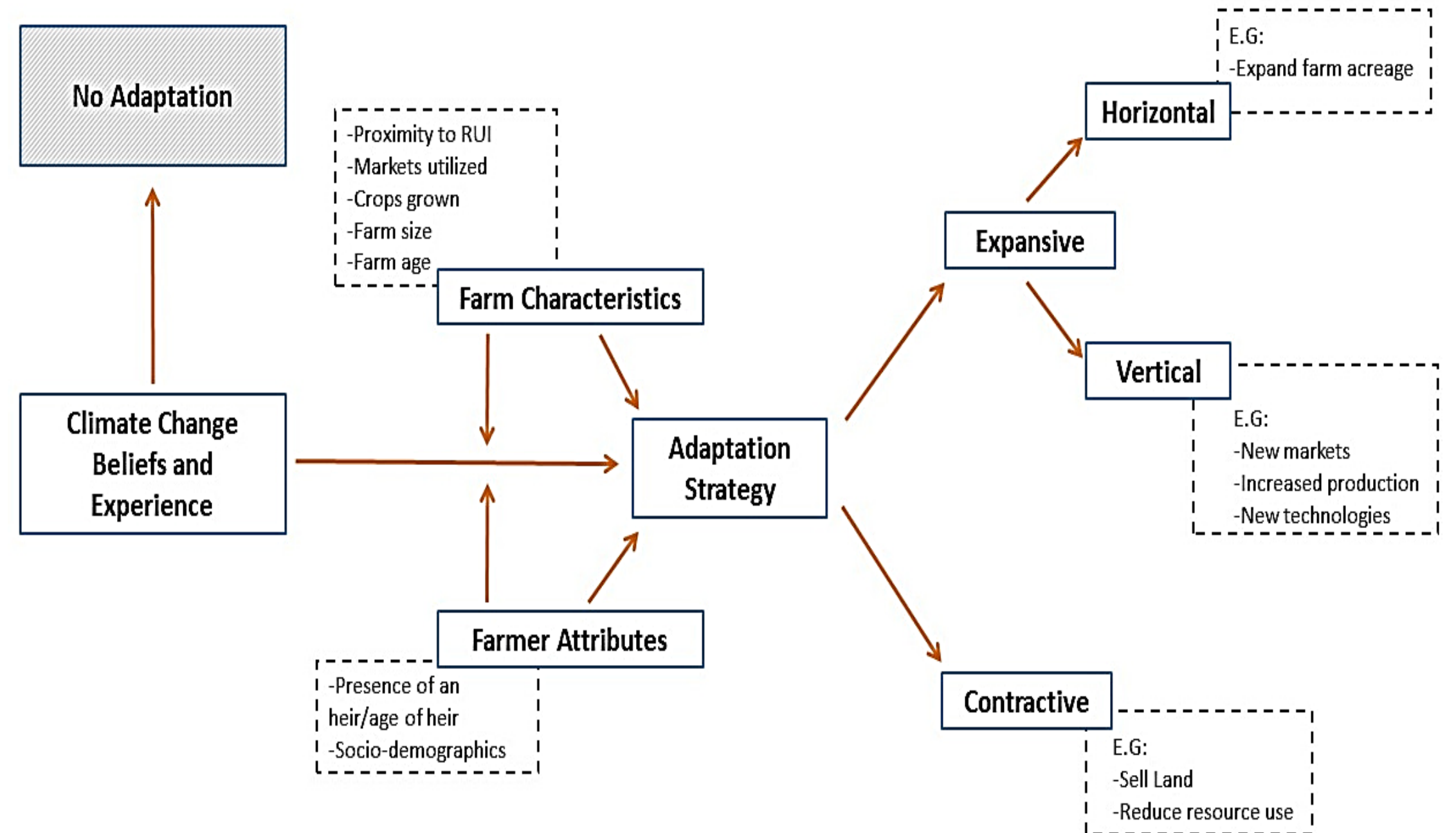
"How do climate change beliefs, as well as other farm attributes and farmer characteristics, particularly presence of an heir and location on the RUI, relate to climate change adaptation?"



## Model Development

Building on previous literature we anticipate that adaptation will occur in the following ways:

1. Contractive: Reducing resource use and selling the farm.
2. Horizontal Expansion: Where a farmer would acquire more land.
3. Vertical Expansion: Where a farmer would explore new markets and technologies to increase production without acquiring more land.

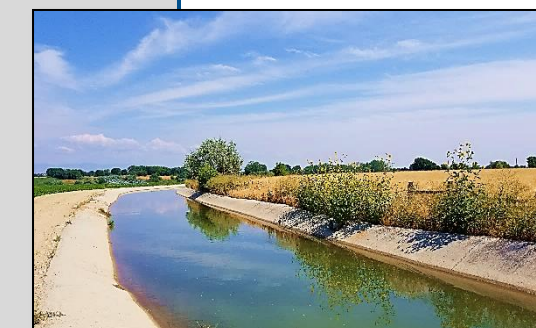


## Initial Findings

The data collected has largely confirmed these adaptation strategies, and has assisted in the development of the conceptual model. In particular:

- Initial data collection suggest that the presence of an heir influences adaptive strategies
  - In a number of instances we were told that adaptations would not have occurred without involvement of younger generations
  - Age also appears to be an influence, particularly the age of the potential heir
- Geography also appears to influence how an operation adapts.
  - Farms at the RUI who have experienced climate change, or believe climate change is occurring, appear to have a number of adaptation strategies available to them that those in more rural locations may not have, enabling them to expand vertically.

## Conclusion



This research examines climate change adaptation among farmers in the Treasure Valley. We have developed a model which anticipates that climate change beliefs and experiences with climate change influence climate change adaptation, but that this relationship will be influenced by other factors, in particular location on the RUI, and presence of an heir.

We will continue to collect data throughout the following year in order to provide more robust evidence to test this model.

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## Methods

To examine this research question we have been utilizing a qualitative research design, including participant observation, informal interviews, and formal, semi-structured interviews. We have also been gathering demographic data through a survey at the end of interviews.

We have collected and analyzed preliminary data. Using this data to build upon our literature review we have developed a model which conceptually demonstrates the ways in which farmers may adapt to changing climatic conditions, paying particular attention to their location on the RUI, as well as family dynamics, including presence of an heir.