

# Experiencing climate change on the farm: How specialty crop farmers are adapting in Oregon

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## Introduction

### Regional significance of climate change to specialty crop production:

- Specialty crop production is an economically important industry to Oregon, earning \$2.16 billion in sales in 2017.<sup>5</sup>
- Climate change leads to higher temperatures and less water during the growing season.<sup>3,4</sup>
- Long-term forecasts are available but often not utilized.<sup>1,2</sup>

### Research questions:

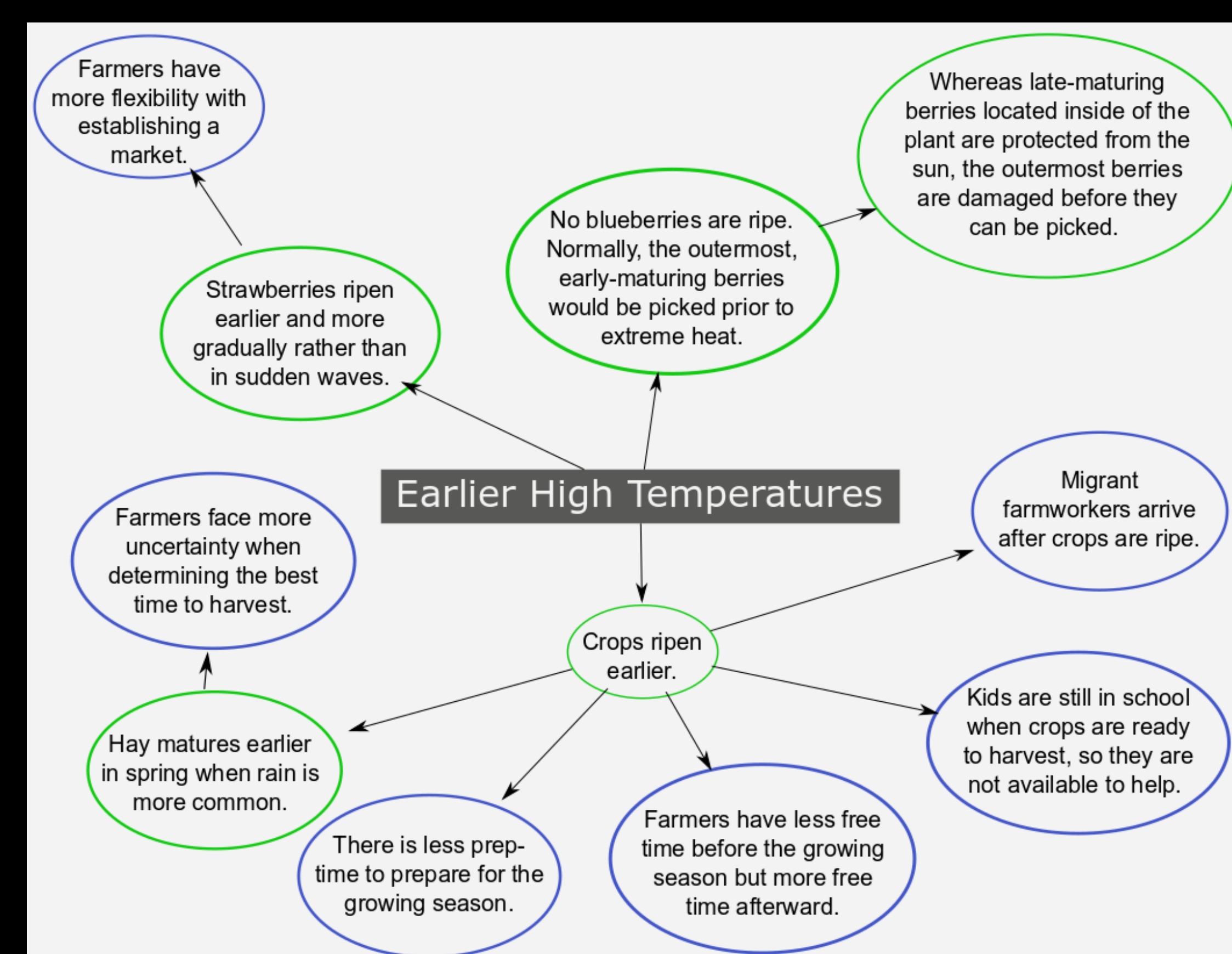
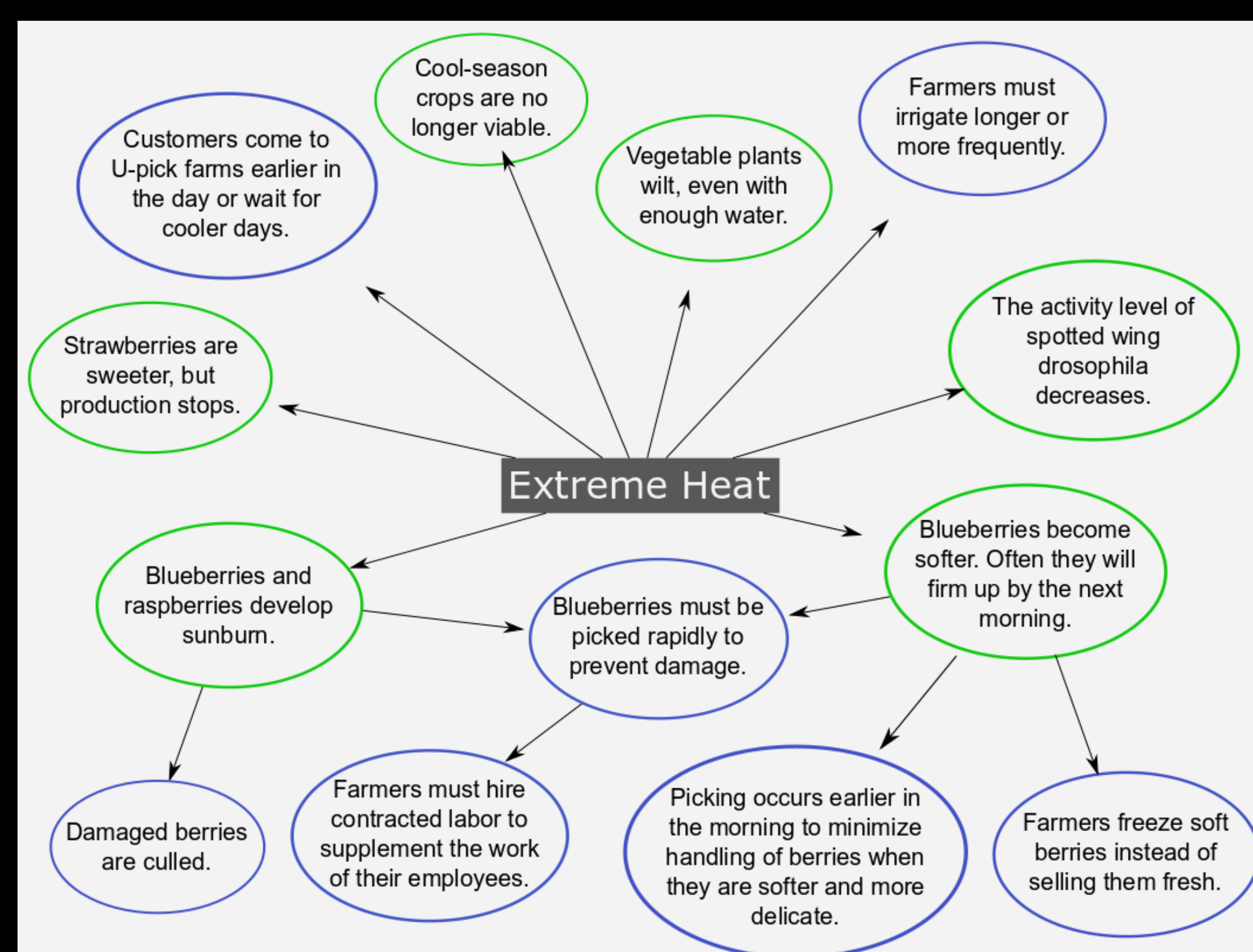
- 1) How are small-scale specialty farmers in Oregon experiencing climate change?
- 2) How are farmers making climate-related management decisions?

## Methodology

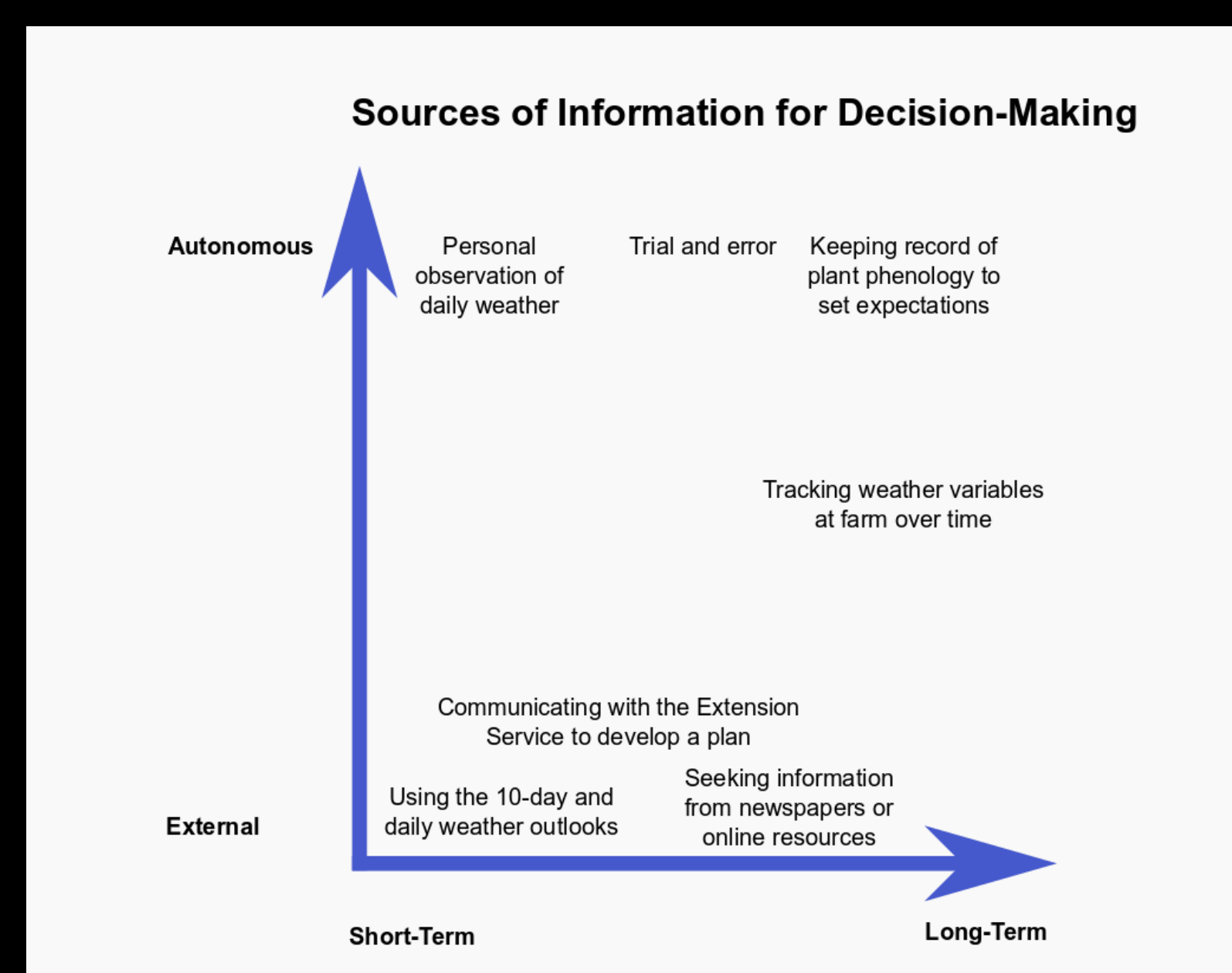
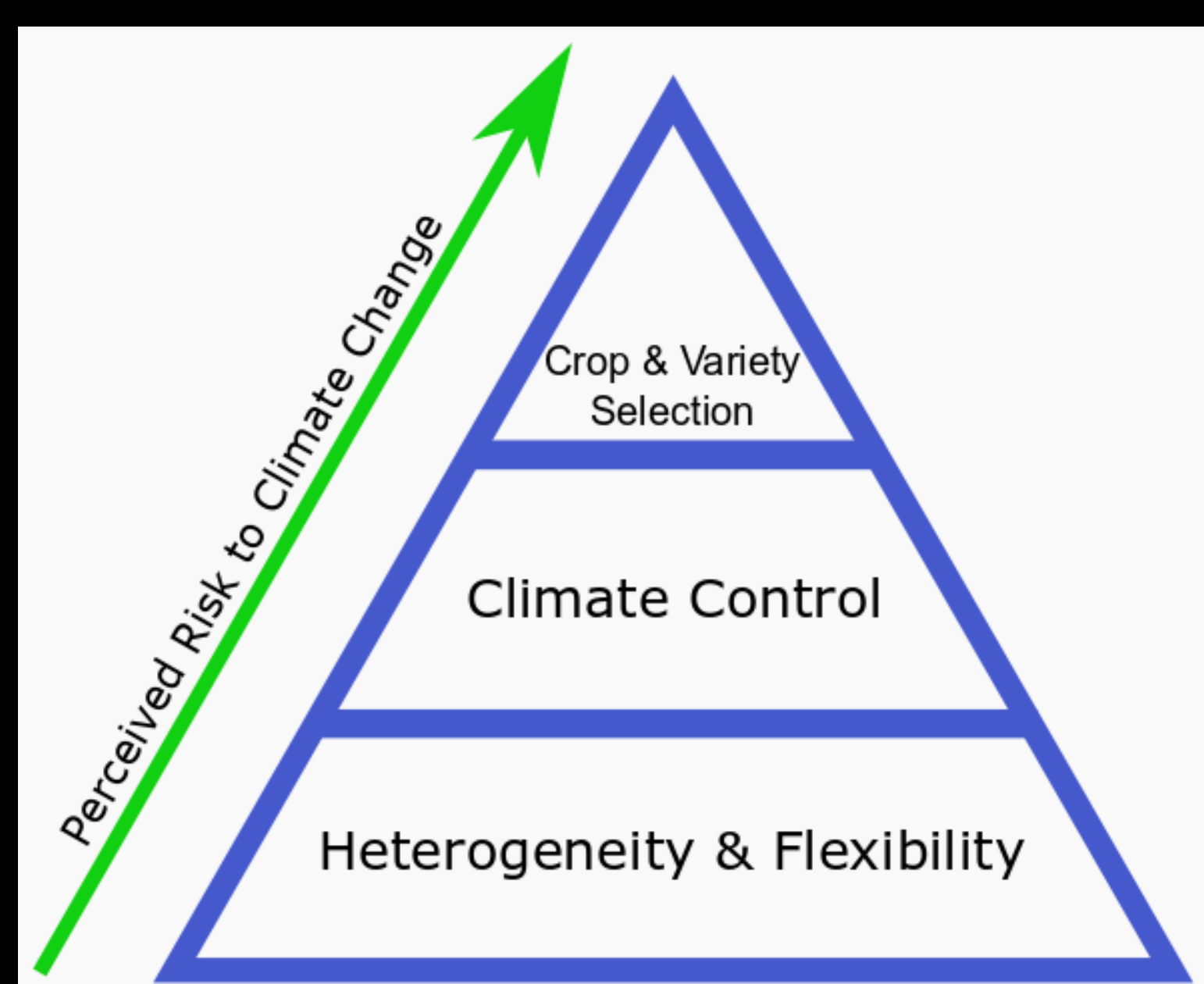
- Visited the Corvallis Farmers' Market and farms in Corvallis, OR
- Conducted seven semi-structured interviews
- Recorded, transcribed, and coded interviews

## Results

"We normally start at 6:30 in the morning. If it's really hot, we start picking at 6. We have to stop earlier. There's a point where berries can be softer because they're warm; you leave them on the bush, and they'll be fine in the morning. But there's also a point where if we don't get them off, they're gonna cook, and they won't be as good." (Farmer 5)



"We were thinking of doing raspberries in tunnels because the raspberries are so fragile. They get sunburned." (Farmer 7)



"I wouldn't trust [long-range forecasting tools] very much because I think there is too much uncertainty in the long-range forecast type things because you know, even in our 10-day forecast, they change everyday. You look at it one day, and it will say, 'Oh, rain by Friday' and then the next day, 'Nope, no rain.'" (Farmer 2)

## Conclusions

- Farmers are observing signs of climate change, including more extreme heat, hot temperatures earlier in the growing season, drier growing seasons, and more erratic weather.
- Farmers utilize many strategies to manage risk, which can be applied to risks associated with climate change.

### Acknowledgments

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### Citations

- <sup>1</sup>Capalbo et al. (2018). *Climate Smart Agriculture: Building Resilience to Climate Change*.
- <sup>2</sup>Crane et al. (2009). *Weather Clim Soc*.
- <sup>3</sup>Houston et al. (2018). *Climatic Change*.
- <sup>4</sup>Mote et al. (2019). Fourth Oregon climate assessment report. *Oregon Climate Change Research Institute*.
- <sup>5</sup>USDA. (2017). Census of Agriculture - Oregon State Profile.