

Climate change disrupts agricultural systems around the world. This disruption requires changes throughout society but especially in farms' day-to-day operations and long-term planning. How farmers react to climate change is shaped by a range of personal factors and support from various organizations.

The choice to change your behavior to avoid losses or exploit potential benefits due to actual or expected changes in the climate must be made by each individual farmer or land manager. On farms these changes may take the form of water conservation, flood protection measures, changing what crops they grow and how they grow them, reducing heat stress on livestock, or even seeking alternative sources of revenue. Better understanding of what influences farmers' decisions about whether and how to react to climate change can shape more effective outreach and support efforts. Thus, this study aimed to understand these influences in two regions with similar climates and agricultural systems but differing cultures, governance structures, and historical developments: southwest Washington, USA and Skåne, Sweden.

In general, older and more experienced farmers are less likely to take climate change related actions. Unsurprisingly, farmers who frequently incorporate climate change in making other decisions are more likely to adapt to climate change on their farm. Farmers' decision making is also shaped by who they consult in the decision-making process and whether these people already know each other. However, the exact impacts differ between the two regions.

Farmers who are more likely to adapt to climate change are also more likely to see significant barriers to these actions. This is contrary to the common logic that seeing a barrier discourages actions. Rather, it may be the case that when a farmer is more interested in a particular action, they are more aware of the barriers and therefore see them as more significant.

Organizations (such as academic institutions, government agencies, and farm consultants) provide information, financial support, and networking opportunities to farmers which supports farmers to adapt to climate change. However, there is a need to spark interest in such adaptive practices and show farmers how these practices can be financially advantageous and how their land can benefit. In Southwest Washington, this process is complicated since conversations about climate change are seen as inherently political and often off-putting.

Results are based on a survey of farmers and interviews with experts who work to support farmers in both regions and may be useful for natural resource conservationists, agricultural extension workers, researchers, and others who support farmers in adapting to climate change. While the results of this thesis are specific to southwest Washington and Skåne, in some cases they represent general trends, particularly in areas with similar agricultural systems and climates, and may inspire similar work.