

Climate Smart Agriculture: What, Why, and How

Jennifer Hoffman

Adaptation/Insight

Session goals

Knowledge-sharing throughout this session will help you to:

- Explain climate change effects on agricultural interventions
- Distinguish between the process of climate smart agriculture and the technical interventions that may be part of it
- Articulate ideas for incorporating climate considerations into your own work.

Inputs



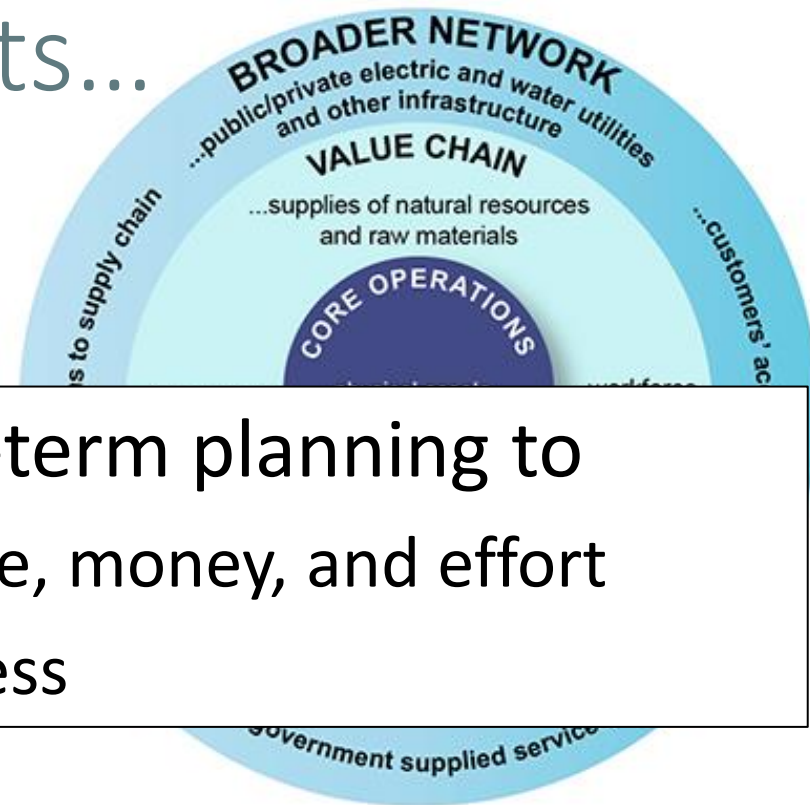
What problems are you solving? What problems remain?

Production



What problems are you solving?
What problems remain?
What problems are you creating

Climate change affects...



- We need to build it into long-term planning to
- Minimize risk of wasting time, money, and effort
 - Maximize likelihood of success

Two Big Questions:

1. How could climate variability and change affect our goals, objectives, strategies, and actions? [***vulnerability assessment***]
2. What can we do to limit or reduce vulnerability? [***adaptation planning***]

Vulnerability: drought



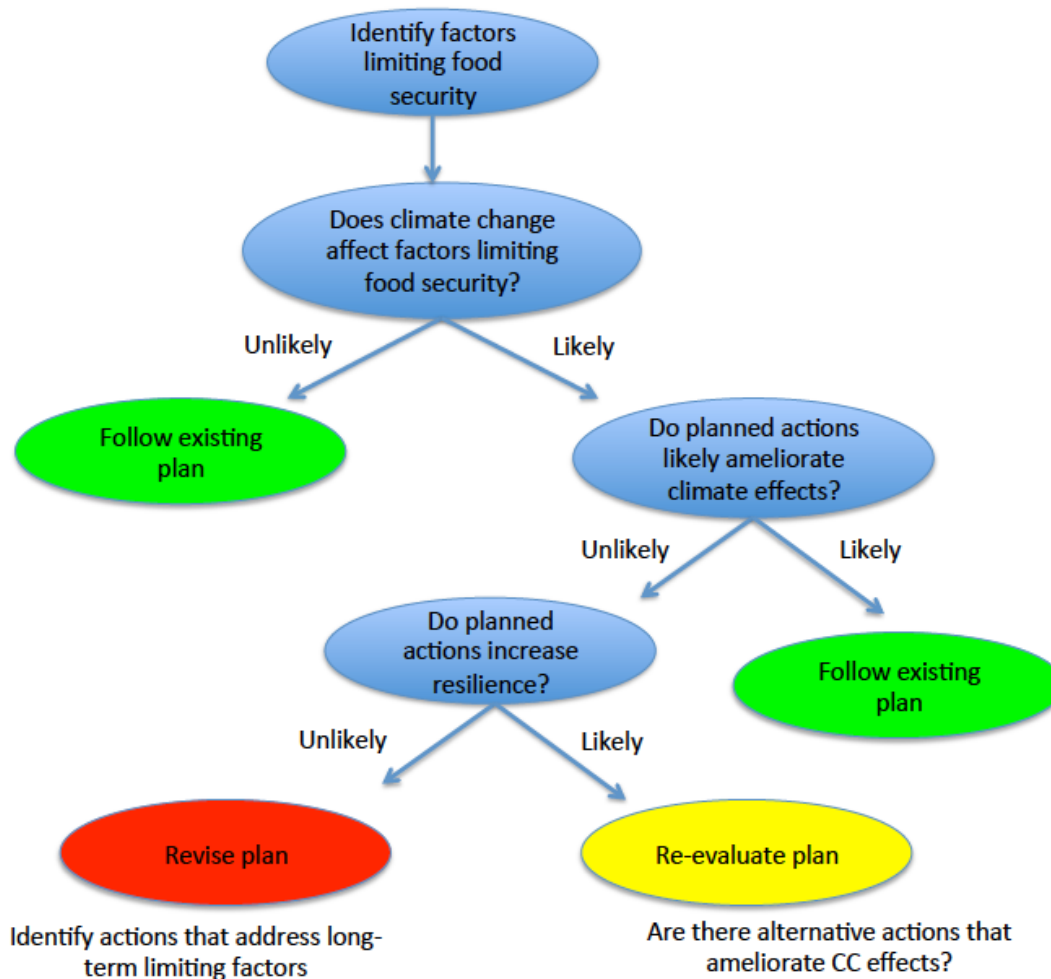
Solution: dryland rice farming or AWD

Vulnerability: salinization



Solution: indigenous salt-tolerant rice

Evaluating a food security plan or project



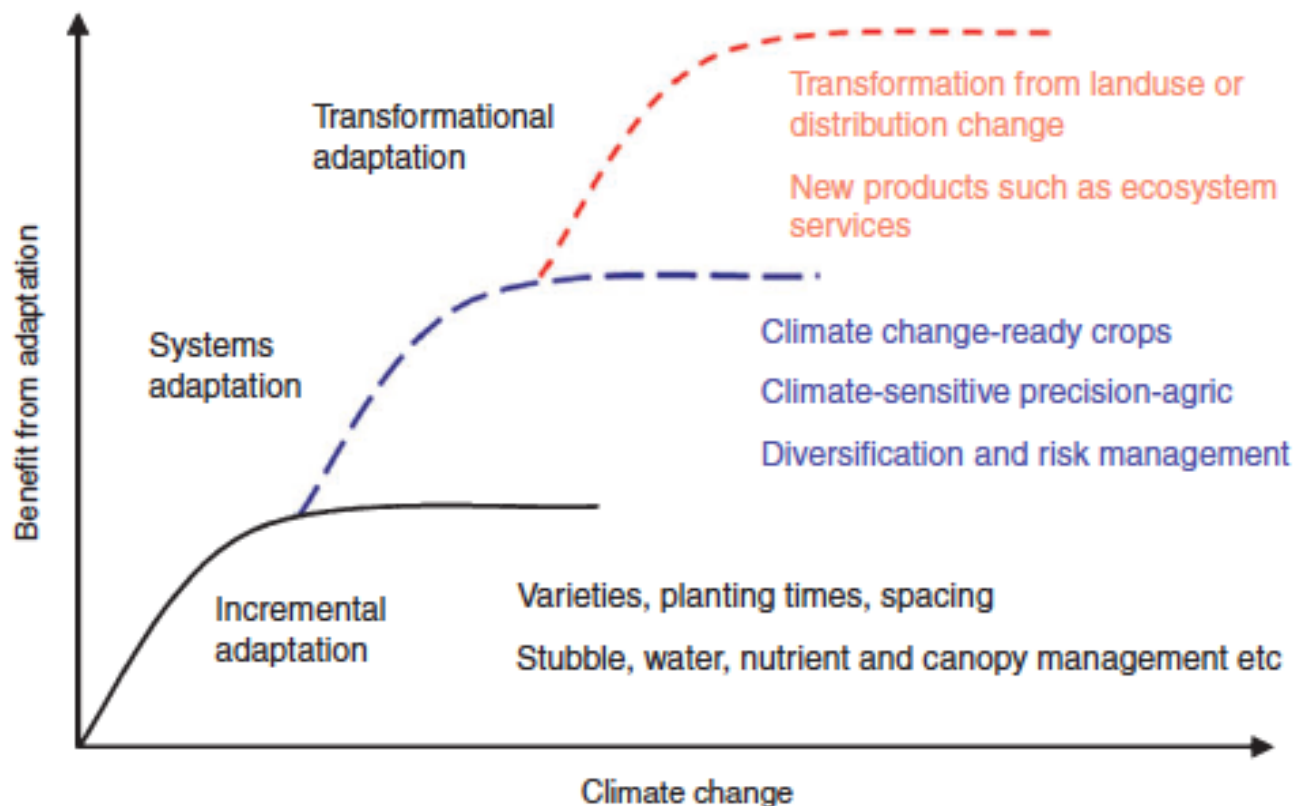








Fig. 1. Levels of adaptation in relation to benefits from adaptation actions and degree of climate change, with illustrative examples (from Howden *et al.* 2010).

Climate Impacts Worksheet

| Observed changes | What this means for ecosystems and people | What this means for your work |
|--|--|---|
|  <p>Less predictable monsoons</p> | <p>Hard to know when to plant; crops may fail</p> | <p>Promoting specific crops and planting times may increase vulnerability to crop failure</p> |
|  <p>Sea level rise</p> | | |
|  <p>Drought</p> | | |
|  <p>Flood</p> | | |
|  <p>Higher temperatures</p> | | |
|  <p>Salinization</p> | | |