



# Institutional Adaptations to Climate Change

Community Vulnerability Assessment  
of Outlook, Saskatchewan

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# Community Vulnerability Assessment

*Why choose Outlook?...*

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Insights into:

- what irrigation means to a community in the SSRB
- how irrigation limits climatic exposure
- how irrigation affects adaptive capacity
- how institutions facilitate irrigation

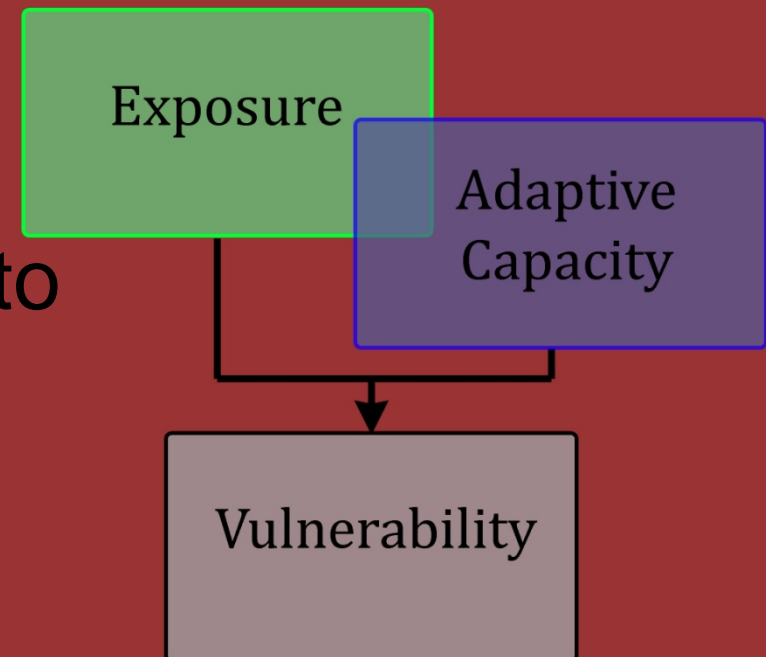
# Community Vulnerability Assessment

## *What we did:*

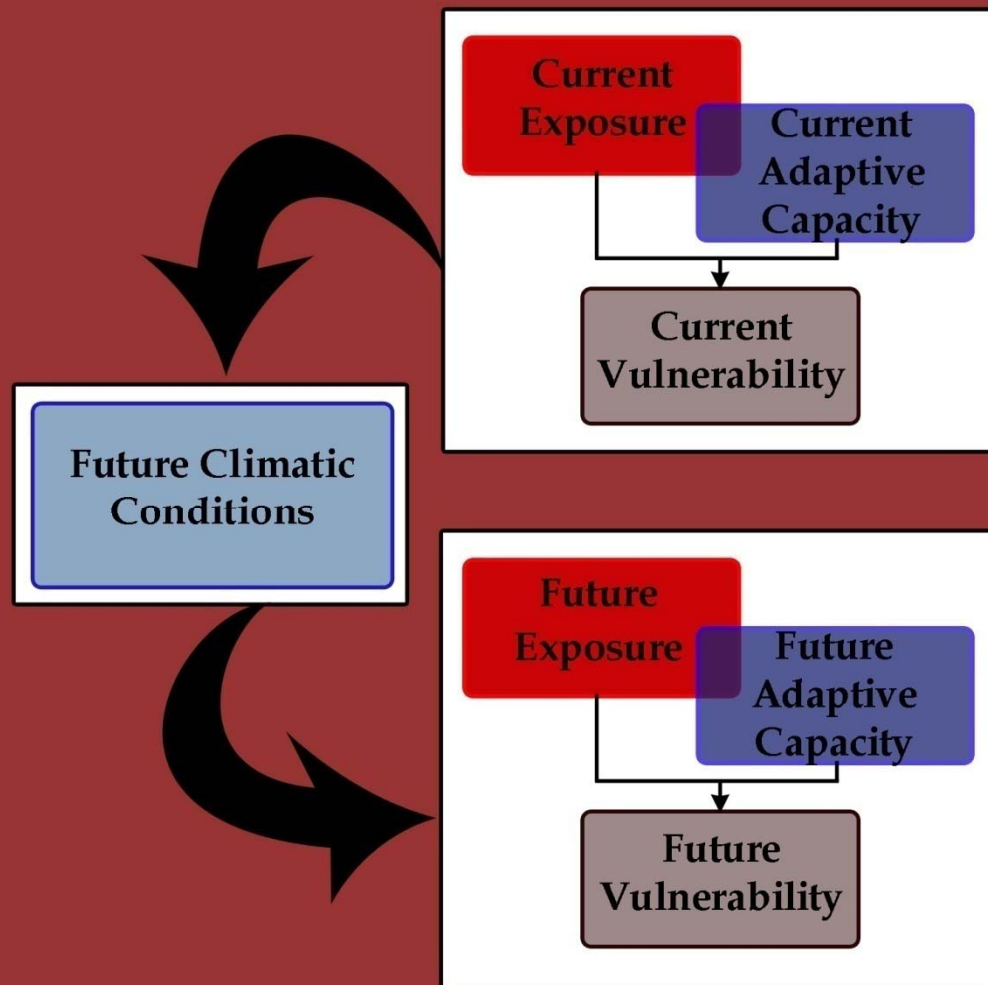
- conducted face to face interviews with community members in order to document first-hand exposures and adaptive strategies
- analyzed the interview data for re-occurring themes related to vulnerability

# The Concept of Vulnerability

- Exposure - conditions that affect the community
- Adaptive Capacity - the ability of the community to cope with different exposures
- Vulnerability - a function of exposure and adaptive capacity



# Vulnerability Approach



# Research Findings – Current Exposures

## *Climatic and Environmental Exposures:*

- Drought (1988, 2001, 2002)
- Frost
- Hail
- High winds
- Disease and pests
- Soil salinity

# Research Findings – Current Exposures

## *Social and Economic Exposures:*

- Loss of younger generation
- Poor commodity prices
- High input costs

# Research Findings – Current Exposures

## *Institutional Exposures:*

- Increasing insurance premiums, yet decreasing coverage
- Removal of Spot-loss hail coverage
- Removal of Crow Rate

# Research Findings – Current Adaptive Strategies

## *Water Management:*

- Conversion from flood to pivot irrigation
- Developing access to multiple water sources (dugouts, wells, etc.)
- Monitoring soil moisture levels to ensure that irrigation water is not over applied

# Research Findings – Current Adaptive Strategies

## *Financial Management:*

- Seeking off the farm jobs or custom farming opportunities
- Increase or decrease farm size
- Commodity diversification

# Research Findings – Current Adaptive Strategies

## *Social:*

- Social support networks
  - Equipment borrowing or renting
  - Help when needed
  - Advice

# Research Findings – Current Adaptive Strategies

## *Institutional:*

- The Provincial Government facilitated the development of irrigation in the area and has done studies into further irrigation development
- RM and Provincial Government put in rural pipelines for drinking water
- Consumptive charges on water use encourage conservation

*Thanks!*



Photo credit: Bonnie Galenzoski