

# Characterizing Participation in Conservation Programs

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Policy Modeling and Analysis  
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# Motivation

- “To increase adoption of conservation practices, the Administration proposes reserving 10 percent of farm bill conservation assistance for beginning farmers [and] socially disadvantaged producers...”
  - USDA 2007 Farm Bill Proposals, p. 57

# Motivation

- Examining beginning and socially-disadvantaged producer participation
  - How many enrolled
  - Geographic distribution
  - Types of practices
  - Resource concerns addressed
  - Cost of contracts

# EQIP and “Socially-Disadvantaged” producers

- Focus on EQIP cost-share funding for structural practices
- Who are “socially-disadvantaged” producers?
  - Initially use Limited-Resource Producers
- Primary data resources:
  - Protracts
  - ARMS

# The Data Environment

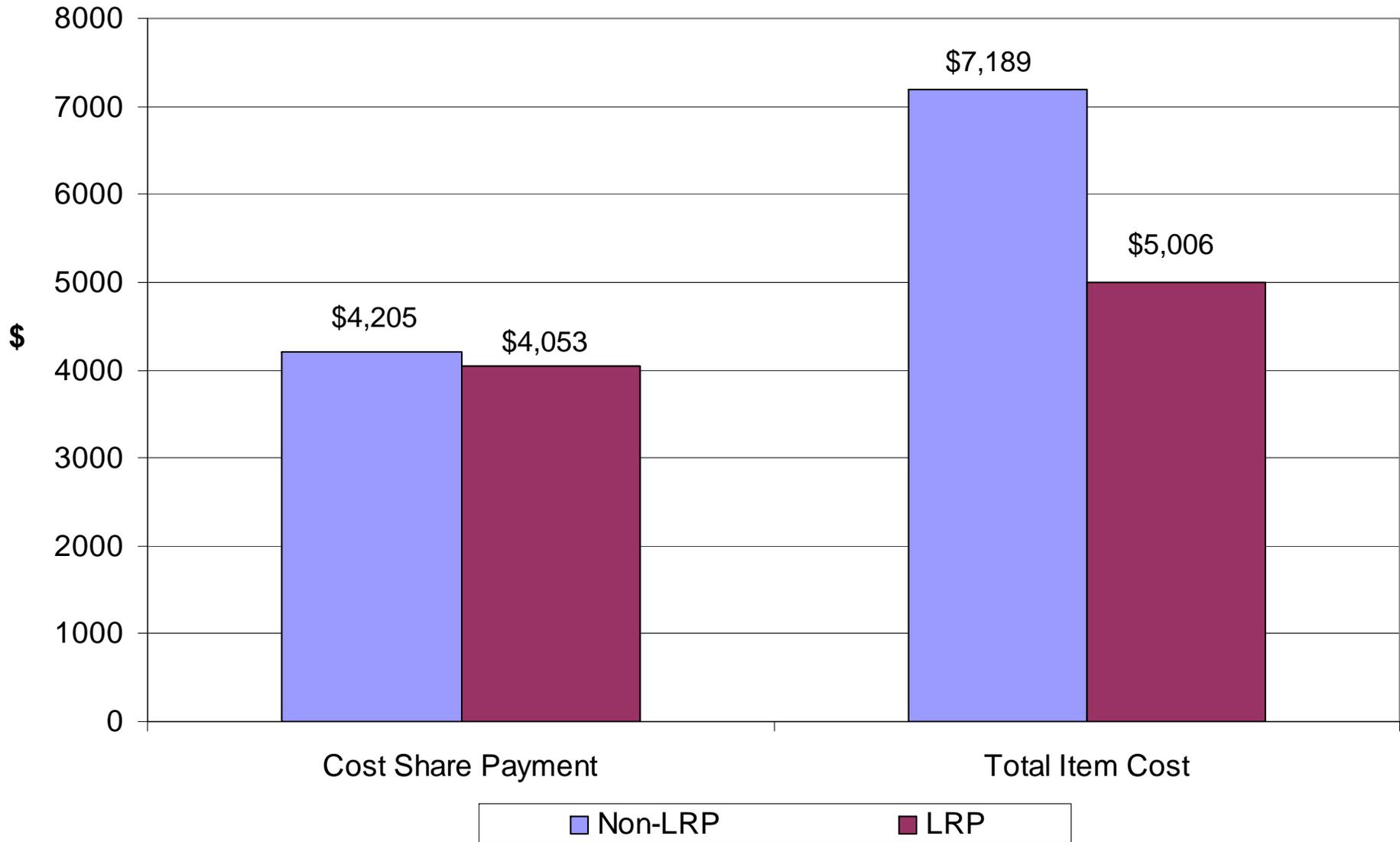
- Protracts:
  - Detailed EQIP contract data
  - Description of practices and resource concerns
  - Contract cost information
  - Includes BF and LRP designation
  - No other household/individual information
- ARMS
  - Producer survey, regardless of participation
  - Detailed production and household information
  - Limited information about conservation programs

# Highlights of Results

- LRP appear to be underrepresented in EQIP:\*
  - 4.0% of EQIP contracts are LRP
  - 9.9% of surveyed farms (ARMS) are LRP

\* Source: ERS calculations from Protracts database of EQIP contracts (2006) and ARMS database (2006).

### Average cost share payment and total cost of practices in 2006, by Limited Resource Producer status



Source: ERS calculations from Protracts database of EQIP contracts (2006).

### Frequency of Resource Concerns, by Producer Type

	Resource Concern			
	Plant Condition	Soil Erosion	Domestic Animals	Water Quality
LRP	27.6	17.4	21.7	13.0
Non-LRP	24.1	18.7	17.6	17.4

Source: ERS calculations from Protracts database of EQIP contracts (2006) and ARMS database (2006).

# Highlights of Results

- LRP appear to be underrepresented in EQIP
- Average cost share amounts similar, but average practice costs lower for LRP
- LRP address slightly different resource concerns

# Taking Stock

- What we have:
  - Relative participation of LRP
  - Geographic distribution of participants
  - Comparison of costs between LRP and other producers
  - Conservation practices
- What we do not have
  - Within-group comparisons: are participants and non-participants different?
  - Household and individual characteristics
  - Farm, production, and field characteristics

# Filling in the Gaps

- Individual and household characteristics to assess differences between participants and non-participants
  - Education
  - Race and Hispanic origin
  - Employment status

# Filling in the Gaps

- Why do we need individual characteristics?
  - Filling in the “cells”: A hypothetical scenario

	Non-Participants	Participants
LRP	High-school education	College education
Non-LRP	College education	College education

# Filling in the Gaps

- Farm and field characteristics in Protracts
  - Size of operation
  - Acres benefiting from conservation practice
  - Link to underlying resource conditions

# Filling in the Gaps

- Why do we need farm/field characteristics?
  - Scaling of costs: Another hypothetical

Producer Type	Avg. Item Cost	Avg. Acres Benefit	Cost per Acre Benefit
LRP	\$5,006	50	\$100.12
Non-LRP	\$7,189	60	\$119.82

# Conclusions

- Summary:
  - Need for basic individual, household, and farm level characteristics linked to contract info
- What else can we do with this information?
  - Modeling participation