



Evaluating Alternative Low-Water-Use Crops

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Situation: Producers are Under Pressure to Reduce Water Use

- Hydrologic cycles have changed in the last 50 years and water is increasingly scarce
- Populations in Western US are growing
- The resulting urban and commercial water demands increases competition for available water supplies



Objective: Economic Solvency

Producers in the Great Basin are facing the challenge of sustaining the economic viability of their enterprises with less water. Alternative low-water-use crops may be an option.

- This program addressed the following needs:
- 1) the economic, political and environmental benefits of reducing water use in agriculture
 - 2) the basic agronomics of alternative crops available to producers in the Great Basin
 - 3) the components of evaluating the economic feasibility of low-water-use crops

Professional Development Seminars Used Train-The Trainer Methodology

The audience was composed of rural Extension educators, tribal staff, Department of Agriculture personnel, NRCS employees, county staff, conservation district staff, FSA personnel and other agribusiness professionals.

The all-day seminars funded by Western SARE included informational sessions and a hands-on utilization of program tools.

Program Tools Include a Curricula & CD

Curricula:

- Five separate modules: water issues, agronomics, marketing, crop selection and implementation assistance
- Each module includes a rationale, set of objectives, central topic, worksheets and hands-on activities
- A user manual for WATER-ACIS, a spreadsheet tool developed in Nevada to assist producers in determining the amount of water use and application timing for optimal economic benefits on low water use crops

CD:

- Copies of all PowerPoint presentations
- WATER-ACIS spreadsheet
- Word document with clickable links to all online resources



Ninety-seven percent of workshop attendees would attend future workshops on agricultural water management and/or alternative crops.

Pre/Post Testing Shows Knowledge Gain

Of the 86 participants, 77 completed evaluations. On a scale of 1 to 5, the average rating for curriculum content was 3.84. The average increase in knowledge gained over all curriculum subjects was 44 percent.



Participants Are Assisting Producers With Implementation

45% have introduced workshop curriculum and other SARE resources into producer programming

35% have worked one-on-one with producers to evaluate the economic feasibility of alternative low-water-use crops on their farm/ranch

30% assisted agricultural producers in implementing low-water-use crops on their farm/ranch

30% assisted producers with the measurement of changes in water use and resulting environmental improvements such as water and soil quality

35% assisted producers with the measurement of changes in profitability and economic sustainability of alternative crop use

(n=20) responding to the six month follow-up survey