

## Invited Papers

### WAEA Presidential Address

#### **"Grass Roots Collective Action: Agricultural Opportunities." Harry W. Ayer (University of Arizona)**

Agroenvironmental problems (contamination of ground- and surface water, feedlot odors, endangered species, etc.) often involve goods and activities with public goods attributes, and collective action may be needed to provide a more satisfactory level of these goods and activities. Grass roots collective action—in contrast to top-down governmental collective action of taxing, subsidizing, and regulating—provides one alternative to help resolve these problems. Several factors—as shown in the theory of collective choice, empirical studies, and anecdotal evidence—determine the success or failure of grass roots collective action: communication and information, joint products, group size and heterogeneity, transactions costs, and rules and enforcement. Implications for agroenvironmental policy, research, and extension activities are given.

### Keynote Address

#### **"Customs, Culture, and the Commons: Lessons from and for Agriculture." Terry L. Anderson (Montana State University)**

The tragedy of the commons is a basic cause of environmental problems that economists argue can be solved with private property rights that are well defined, enforced, and transferable. This formal solution, however, is often precluded by informal rules known as customs and culture. Implementation of informal conditions depends on six specific conditions: (1) boundaries must be clearly defined so that individuals within the group know from which resources they can harvest and so that individuals from outside know when they are trespassing; (2) customary rules must be linked to time and place specific resource con-

straints so that the resulting rules are efficient, otherwise there will be pressure to change them; (3) group decisions will require collective-choice rules that determine how the groups parcel out the rents from the resources; (4) because there is always the potential for self-gain, resources must be devoted to monitoring and enforcing the rules; (5) where conflicts occur between group members, resolution mechanisms will be necessary; and (6) the rules of the group must not be subject to change by higher levels of government lest rent seeking occurs. These conditions are tested with examples from American Indian history and are applied to modern water rights and grazing rights issues where farmers and ranchers are often unwilling to allow markets to operate. Because these restrictive conditions are difficult to maintain, traditional customs and culture break down and either give way to private property rights or open the door for political reallocation.

### **Session: Population, Production, and Policy: Is a New Day Approaching for the Rural West?**

#### **"Recent Nonmetropolitan Migration Trends in the West." Calvin L. Beale (USDA) and Glenn V. Fuguitt (University of Wisconsin)**

Since 1960 the West has tended to follow national trends in metropolitan-nonmetropolitan migration, with high levels of gain in the 1970s, followed by a downturn in the first half of the 1980s, and a subsequent recovery. But annual migration rates for 1970-94 also revealed unique features, with more western variability over time and across different subregions and by type of dominant economy. Despite cyclical downturns, we believe migration gain will continue to increase in the mountain and Pacific

subregions. The plains, however, should show lower migration growth rates and a much different economic course.

**“What Explains the Growth of Producer Services in Rural America in the 1990s?” William B. Beyers, David P. Lindahl, and Ezra Hamill (University of Washington)**

The producer services—one of the fastest growing sectors in the American economy—is expanding in the rural areas as rapidly as in metropolitan areas. This paper provides needed evidence regarding bases of growth of these businesses, drawing upon 240 interviews distributed nationally among the six Beale codes for nonmetropolitan counties. Reasons for location choices, founder characteristics and motivations, markets, the role of information technologies in the production and delivery of these services, and a detailed set of factors surrounding the demand for and supply of these services are discussed. We also speculate on their importance in the current and future economic base of rural America.

**“Rural Public Policy.” Emery N. Castle (Oregon State University)**

The necessary and sufficient conditions needed to justify a rural public policy are stated. Fundamental characteristics of rural America shaping rural public policy are set forth and the components of a responsive policy are identified. Three alternative approaches—categorical grants, block grants, and nonintervention approach—are discussed briefly. Education and communication issues are given special attention. The paper closes with a discussion of the administration of rural public policy.

**Session: Higher Education in the 21st Century: Organizing Resources for the Task**

**“Industry Needs and Expectations of Universities over the Next Thirty Years.” Bob L. Vice (President, California Farm Bureau Federation)**

California agriculture’s close kinship with the state’s land grant universities has paid tremendous dividends to farmers, ranchers, and the

general public. The result has been higher quality products from fewer acres and at reasonable cost to domestic and foreign consumers. Pressure on universities to continue serving in this role combined with unprecedented demands on the state’s natural resources jeopardize this relationship and its resulting benefits. For agriculture, the challenge is clear. The farming community must multiply its efforts to raise agricultural awareness and understanding to the preservation of the industry for the public good. The challenge for universities is to refocus their efforts and rededicate their mission to contribute new knowledge and new methods to help the industry survive. Also critical is the university training and education of those who will work in agriculture to address agriculture’s complex, myriad problems. In an era of diminishing human and economic resources, universities must maximize efficiencies and resources to work harder and smarter in service to agriculture and the general public.

**“Developing Research and Extension Programs in Land Grant Universities to Meet the Challenges of the Next Century.” Terrell Salmon (Director, Agriculture and Natural Resource Programs, North Region, University of California, Davis)**

Questions are often asked about the relevance of the land grant system in today’s complex society and about whether the current land grant universities are upholding the original concepts established by the federal government when land was first given to start university technical operations. The most important thing for us to remember is that we cannot use our past successes with the land grant system as our sole justification for continued receipt of public funds, or continued support of the land grant university in our state, or continued support for our extension programs in the counties. Despite the need to look for soft or extramural funding to develop and improve programs, AES and CE must not become a “for sale”

organization. AES and CE programs need to be very closely linked with each other and with non-land grant institutions and agencies to address problems of society.

### **Session: Industrialization of Agriculture**

#### **“Industrialization: An Overview.” Michael Boehlje (Purdue University)**

Industrialization of agriculture involves the application of modern industrial manufacturing, production, procurement, distribution, and coordination concepts to the food and industrial product chain. This discussion develops the consequences of this process under seven themes: a systems approach, a manufacturing mentality, separation and realignment, negotiated coordination, risk, power and control, and information.

#### **“Industrialization of the Beef Subsector.” Dillon M. Feuz (South Dakota State University) and Clement E. Ward (Oklahoma State University)**

Industrialization is evident in the beef packing and cattle feeding industries but not in the seedstock, cow-calf, and stocker industries. Research to date, while limited, suggests fed cattle prices may be lower than competitive market prices due to the market power of beef packing firms. Market prices fail to discriminate sufficiently between pens of cattle to carry appropriate marketing signals. Thus, some firms are vertically integrating to capture the true values of their production. Increased profits are likely to be earned by larger, vertically integrated firms. As vertical integration and industrialization proceed, adequacy of market price reporting becomes an increasingly significant issue.

#### **“New Business Arrangements in a Changing Grain Marketing Industry.” Joan Fulton and Carolyn Gray (Colorado State University)**

This paper explores how local grain marketing cooperatives are using strategic alliance and joint venture agreements to meet the challenges of today's changing business environ-

ment. An overview of how changes in grain marketing have resulted in increased concentration is presented. Information obtained from interviews with managers of 20 cooperatives is analyzed with respect to agreements with farmer/members, informal agreements with other businesses, and formal agreements with other businesses. The results suggest that managers see grain marketing contracts with farmers as profitable in the short and long run. In addition, informal and formal agreements between cooperatives is profitable when securing transportation, capturing economies of size, and diversifying.

#### **“Industrialization of the Fruit and Vegetable Sector.” R. Thomas Schotzko (Washington State University)**

Advanced industrialization exists on segments of the sector and is advancing in others. The processing sector has been industrialized since the 1970s. The fresh sector is industrializing, however, the trend is more apparent at the first-handler level. Vertical coordination tends to be by contract in processing. Vertical integration appears to be a trend in the fresh sector and appears to be related as much to marketing strategy as to cost control. The fresh sector appears to be changing more rapidly than processing. This includes farm numbers, farm size, first-handler size, and numbers.

### **Session: Is Sustainable Agriculture Economically Viable?**

#### **“Is Sustainable Agriculture Economically Viable? Findings of a Major Study Supported by the Northwest Area Foundation.” Thomas L. Dobbs (South Dakota State University)**

Results of sustainable agriculture studies in the western corn belt, northern great plains, and Pacific Northwest that were supported by the Northwest Area Foundation have recently been published in book form. Economic findings of a survey indicated that, except for the top “sustainable” farms,

“conventional” farms were more profitable in three of the four states surveyed. Experiment station and case farm studies in several states indicated that sustainable farms were more competitive with conventional farms in wheat areas than in corn-soybean areas. Both additional research and changes in public policies could enhance the competitiveness of sustainable farms.

**“Implications for Research, Extension, and Public Policy.”** Douglas L. Young (Washington State University), Karen M. Klonsky (University of California, Davis), and Fred L. Kirschenmann (Producer, Windsor, North Dakota)

The 25-slides presentation contrasted the prospects for agricultural policy reform to solve environmental and economic problems in the Pacific Northwest Palouse and the North Carolina coastal plain. Green payments and other new policies improved environmental and economic results most in North Carolina because more environmentally sound cropping options were available there.

## Symposium

**“Natural Resource Management in the Northern Plains: Issues, Conflicts, and Prospects.”** David Fischbach (Rancher from Faith, SD), Rod Baumberger (USDA/NRCS), John Rupe (USDA/Forest Service), and Martin Beutler (South Dakota State University)

Differing perspectives of natural resource management issues in the northern plains were discussed by panel members including a rancher, range conservationist, federal agency forest planner, and an agricultural economist. The effects of federal farm and environmental policies on private and public land use decisions and on issues involved in managing public lands for multiple uses and sustainable ecosystem were the main focus of discussion. The roles and limitations of Coordinated Resource Management (CRM) decision-making process in resolving land use conflicts on private and public lands were highlighted.