Appendix 2—Workshop on the Economics of Sustainable Agriculture

The workshop "Economics of Sustainable Agriculture" was held in Washington, DC, on October 21-22, 1996. USDA's Economic Research Service/Resource Economics Division (ERS/RED) and the Farm Foundation co-sponsored this workshop.

Workshop Goals

The goals of this workshop were:

- to solicit input on the complex issue of sustainable agriculture from a diverse group of individuals including farmers, public interest groups, academic and government economists, and former and current policymakers within the government.

- to present a preliminary draft of the Resource Economics Division's sustainability research report and to invite critical feedback on improving this report.

A broad cross section of stakeholders was invited to this workshop, including farmers (both conventional and sustainable), public interest groups, academic and government economists, and policymakers in government. A list of participants attending this workshop is provided below.

Policy Recommendations

Are existing policy instruments adequate to steer agriculture along a more sustainable path of economic development? The workshop considered this question and sought to identify policies that could effectively steer agriculture in a more sustainable direction.

Some of these ideas are extensions of ideas reflected in the 1996 Farm Bill. For example, the idea of program flexibility was determined to be critical in program implementation. The idea of flexibility is clearly evident in the Environmental Quality Incentives Program (EQIP) and Wildlife Habitat Incentives Program (WHIP). Under EQIP and WHIP, USDA's Natural Resources Conservation Service (NRCS) has leadership for the program. To advise NRCS, local conservation districts will convene local work groups, comprised of the districts, NRCS, USDA's Farm Service Agency (FSA), FSA county committees, USDA's Cooperative State, Research, Education, and Extension Service, tribes, and others interested in natural resource conservation.

Other ideas presented at the workshop include the following:

Policy goals for a more sustainable agriculture must be well articulated. The sustainable agriculture community, and others involved in policy design, must provide well-defined goals to be achieved to move along a more sustainable path of economic development. Achievement of goals should be defined in terms of outputs and not inputs. For example, achievements should be measured in terms of soil erosion reduced or improvements in surface- and groundwater quality, and not be the number of farmers that adopt conservation tillage or IPM.

Flexibility in implementing Federal programs is essential because of the diversity of our natural resource base and the need to target specific issues related to sustainability. For example, for farmers with shallow soils, wind erosion may be a significant obstacle to sustainability in the Northern Plains while sheet and rill erosion pose a more serious threat to sustainability in the Corn Belt. A "one size fits all" approach to sustainability will not work because there is a need to customize programs to match local needs. The 1996 Farm Bill approach, which allowed greater planting flexibility to farmers, is an appropriate model to tailor future sustainability programs. The Swampbuster provisions of the 1996 Farm Bill also made it easier for landowners to mitigate wetland conversions by restoring other wetlands.

In addition to allowing local flexibility in targeting issues related to sustainability, policies must also allow for flexibility in solving problems. There is a role for the government to make more sustainable technologies available, but the government should not prescribe specific technologies to achieve sustainability. Prescribing specific technologies does not provide adequate incentives to develop or adopt less costly alternatives.

Identifying the limits to adoption and implementation of alternative technologies is also critical in implementing policy. It is important to determine if the adoption and implementation of a practice is limited by farm size, labor availability, access to credit, access to information (structure); geography (resource

heterogeneity); economic efficiency (profits, risk); or if the private benefits from implementation are significantly different from the social benefits from implementation (lack of markets).

Market development for more environmentally friendly crops is also a key to moving toward a more sustainable agriculture. The creation of organic standards is an example of market development. By developing markets, especially for high-value products, producers who use sustainable production practices can obtain a premium for choosing to exercise environmental stewardship.

The government should provide insurance as a way to encourage the adoption of sustainable practices. Impeding adoption of more sustainable practices is the risk associated with switching from the time-tested conventional mode of production. Further analysis of the feasibility of providing insurance against such risks is needed.

Access to credit can also impede adoption of sustainable production practices. To encourage adoption, policy can be restructured so that farmers who wish to adopt can finance the costs of switching to a new technology regime.

Rural development policies should focus on mitigating the shock of changing economic and social realities. Rather than attempting to isolate rural communities from change, such policies should ease the pain of rural adjustment due to changing economic and social realities.

Research and development should focus on the problems faced by producers who adopt sustainable technologies. Greater emphasis should be placed on interdisciplinary research and on evaluating the tradeoffs between environmental quality and profitability for both conventional and sustainable technologies. It is also imperative that researchers focus on tightening the definition of "sustainable" technologies.

List of Workshop Participants

Academic Economists:
Darrell Bosch, Virginia Polytechnic Institute and State University
George Frisvold, University of Arizona
Randall Kramer, Duke University
Timothy Phipps, West Virginia University
John Reilly, Massachusetts Institute of Technology
Vernon Ruttan, University of Minnesota
Kathleen Segerson, University of Connecticut
James Shortle, The Pennsylvania State University
David Sunding, University of California
David Zilberman, University of California-Berkeley

Environmental and Non-Profit Organizations:
Norman Berg, Soil and Water Conservation Society
Pierre Crosson, Resources for the Future
David Ervin, Henry Wallace Institute of Alternative Agriculture
Ferd Hoefner, Sustainable Agriculture Coalition
Robbin Marks, Natural Resources Defense Council
Megan Moynihan, W.K. Kellogg Foundation

Industry:
Thomas Gilding, American Crop Protection Association
Janis McFarland, Ciba-Geigy, Inc.

Farmers:
Varel Bailey, Bailey Farms, Inc.
Fred Kirschenman, Kirschenman Farms, Inc.
William Richards, Richards Farms, Inc.
Thomas Trantham, Trantham Farms, Inc.

Government:
Mary Ahearn, USDA/ERS
William Anderson, USDA/ERS
Joe Aldy, Council of Economic Advisors
Margot Anderson, USDA/Office of Chief Economist
Linda Calvin,USDA/ERS
Jorge Fernandez-Cornejo, USDA/ERS
Ralph Heimlich, USDA/ERS
Robert House, USDA/ERS
James Hrubovcak, USDA/ERS
Wen Huang, USDA/ERS
Bengt Hyberg, USDA/Natural Resources Conservation Service
Carol Kramer-LeBlanc, USDA/Center for Nutrition Policy and Promotion
Barbara Meister, USDA/Research, Education, and Economics
Parveen Setia, USDA/Office of Civil Rights
Robbin Shoemaker, USDA/ERS
Utpal Vasavada, USDA/ERS