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AGRICULTURE IN AN UNCERTAIN PUBLIC POLICY ENVIRONMENT

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Mr. Secretary, members of the panel, ladies and gentlemen. For over three decades I've attended, as a listener, the annual USDA Outlook Conference. This time it is an honor to be asked to make a presentation. Uncertain, in contrast to the meaning of certain according to Webster, can mean doubtful, untrustworthy, not clearly identified. Agriculture, as we know from life itself, has been plagued with uncertainty. Also, agriculture since its beginning centuries ago has impacted the Earth's natural environment. Ecosystems were changed when humans first planted seeds for later harvest. Early farmers not only modified natural landscapes, they altered plants and animals through selection for improvement. The conventional tasks of producing food and fiber required removing the trees, cultivating the soil, managing water, killing insects, and adding nutrients to the soil. In the United States agriculture occupies about 900 million acres of the land base and is the largest user of fresh water from both the surface and underground sources. The intensive use of those renewable natural resources to fulfill society's expanding basic needs, food and fiber for clothing and construction materials, requires manipulating millions of acres. One certainty is that humans need food and fiber to survive. However, especially in the last few decades, the conventional methods used by agriculture to produce food and fiber have been subject to questions. This has added to the uncertainties of the weather, and other factors, that have been part of agriculture forever. To help lessen uncertainty agriculture is being challenged by the public to design agricultural policies and production systems capable of nurturing a world's growing population, with minimum destruction to the natural environment. Leaders are recognizing the need for a strategy that will reduce the risk to farm incomes, to the environment, and to future agricultural capability, and to maximize benefits to society.

What are the impacts on the environment from agriculture?

The agricultural sector of our economy has been responding favorably to environmental problems. There is recognition that even though any harm to the environment was unintended, there are public policies that are not in harmony with nature. Within the past few decades the management practices used in a productive agricultural system have led to evidence that attracts attention not only from environmentalists, but from those responsible for agricultural policy. Accelerated topsoil loss, although reduced this past decade, is still a

persistent problem with over 2 billion tons eroded annually. Conversion of wetlands for use by agriculture has slowed, but millions of acres of wildlife habitat has been lost. More attention on nonpoint sources that impair the quality of water, nutrient and pesticides in farm and community wells, and loss of biodiversity in the ecosystem, can be expected. Debate builds on compaction of the soil strata, management of animal wastes, salinization, decertification, residues from chemicals, and whether agriculture itself is sustainable long-term.

Owners of private property question their role and rights in regard to endangered species, leading to conflicting views as to the best use of land and water. The continuing dialogue as to private rights vs. public responsibilities has evolved into revising the Fifth Amendment and potential "takings" without compensation. Historically, a corollary of the right to hold property has been a duty to refrain from using it in a manner that would cause harm or injury to neighboring landowners or the general public. Because the use of land invariably affects neighbors and the community health and welfare, absolute use has never been considered a protected property right. However, the action by technicians called on to identify and delineate the boundaries of soil for designation as highly erodible or as wetland, leads to tensions and uncertainty for agriculture, as well as those professionals long considered as farmer-friendly. Some regions are concerned about the loss of prime land. Clearly the unmet environmental agenda seeks solutions to assure future farm policy that also helps the environment.

What has been available to assist in solving problems?

The voluntary, incentive-based approach has been the primary method used by USDA to encourage private land users to also practice soil, water, and watershed conservation. Research and education, along with the innovative skills inherent in the agricultural sector, has resulted in an agricultural system for production of food as an unequalled achievement for increasing the ability and productivity of U.S. resources. The environmental linkage was established in the Conservation Title(XII) of the Food Security Act of 1985 (P.L. 99-198). The Sodbuster, Swampbuster, and Conservation Compliance provisions led to new rules and regulations setting conditions for the producers participating in the price and income programs. At the same time the Conservation Reserve Program offered those with highly erodible cropland an incentive to convert those acres to grass, trees, wildlife habitat, watershed protection, and water quality improvement by bidding for annual rentals through multi-year contracts with the Secretary. Nearly one-third of U. S. cropland is being impacted by these programs. Both the 1985 and 1990 Farm Bills had conservation Titles. Compliance provisions changed the rules of the game for the agricultural community, including several USDA agencies. Therefore, a social contract between society and agriculture has been tested for a decade. Legislation was enacted asking that those who use land and water for the production of food and fiber, and also participate in "farm programs", to also practice stewardship of the resources they own or manage, or be denied specified federal financial benefits. The balancing of incentives with regulations to achieve

conservation and environmental goals, on the nation's privately owned lands, is being monitored for results to assist decision-makers as they determine future agricultural and conservation policies. The desire of the public to protect and enhance the quality of the nation's natural resources, at the lowest cost to both producers and consumers, will continue to be a challenge. Thus far the achievements have been quite significant and should continue as many are finding soil stewardship rewarding. The widespread support for continuation of a Conservation Reserve Program, with the benefits of reduced soil loss and increased wildlife habitat and certain bird species is gratifying.

What about the future for lessening uncertainty?

The public concern about the quality of the environment has, according to recent polls, not been diminished and did not seem to be a matter deciding election results. In general the urban-suburbanite is concerned about the environment. During the last decade the media has widely covered children's exposure to pesticides used in food production and the quality of water sources for domestic uses. The Contract with America did not directly address environmental issues. However, recent strategy in the Congress, though not flat-out repeal of some environmental laws, may make implementation most difficult. The action on unfunded mandates is widely supported. The move to reform the regulatory process is embodied in H.P. 9. Question: Do Americans want fewer and weaker environmental laws? The 1995 Farm Bill debate will find this to be one of the issues.

Rather than a threat to agriculture an unmet environmental agenda is the foundation of a new social contract for both. *A Better Row to Hoe* released in December, 1994 by the Northwest Area Foundation, reports "American agriculture is trapped in a contradiction i. e. abundant food and deteriorating rural resources and communities. This contradiction is drawing increasing attention from society. Concerns about the environment, especially, play an even larger role in shaping farm policy. The hidden costs of agricultural abundance are increasingly borne by society, either directly, with economic and social programs, or indirectly, with regulation and other forms of government intervention". That report further states that, although farmers often bristle at unfair criticism suggesting they intended these results, many are also concerned about our food system. They want a farm that is not only profitable, but durable. The term sustainable agriculture can lead to debate about definition, but the kind of agriculture that many seek is usually termed sustainable agriculture. The President's Council on Sustainable development has recently created a group to examine this area with Secretary Rominger's help.

In August, 1994 *The Encyclopedia of the Environment* was published by the Houghton-Mifflin Company. The editors were Ruth A. and William R. Eblen, who also serve as Executive Director and President respectively, of The Rene Dubos Center for Human Environments. That awesome work is the first one-volume reference for the general reader to address the full range and complexity of environmental problems and issues. As a member of the advisory Board, I was privileged to suggest topics and authors for issues

related to agriculture and to conservation. In the 846 pages, the document incorporates the Five E's of Environmental Management: Ecology, Economics, Energy, Esthetics, and Ethics promoted by the late Rene Dubos. There are over 550 alphabetically arranged entries and over 60 charts, maps, graphs, and tables covering scientific terms and concepts ranging widely from A (Agriculture) to Z (Zoning). The authors wanted the book's contents written for those seeking answers to complex environmental problems and toward motivating readers to formulate policies for the resolution of environmental conflicts and for the creation of new environmental values. The rationale for citing this document was to assist in the need to understand that agriculture, as an important part of a much larger concern, the environment, has great responsibility for the long-term quality of both. Understanding environments became part of everyday language in the 1960's, compared to understanding agriculture dating to its beginning between 5000 and 9000 B.C. The meaning of the environment is far from clear and is evolving. At first it related to pollution, to depletion of resources, and to the impact of a growing world human population. Today, because of an increase in scientific knowledge, and a change in the mood of the general public, it emphasizes the positive qualities of environments-on those physical and social characteristics that contribute to the quality of life.

What more needs to be done to reduce uncertainty?

Agriculture in 1994 experienced record breaking crop yields in part because of favorable weather and in part because of the continuing advance in agricultural technology. Despite sagging prices USDA forecasts increased net farm income in 1994 of \$47-51 billion compared to \$43 billion in 1993. Farm debt is projected at \$141-145 billion, or only 16 percent of total farm assets, one of the lowest debt/asset ratios in 30 years. A portion of this favorable picture results from federal farm policy and federal funds.

Therefore, the system that supplies, and produces, the nation's food and fiber should accept the challenge that there can be damage to the environment when land and water is subjected to manipulation, even exploitation. Early public concerns were concentrated on accelerated soil erosion. It became an issue of national significance because of the possible loss of farm productivity as topsoil eroded from cultivated fields. Now, in contrast, sediments from erosion relate to water pollution. The effect on water quality, impacting aquatic life, lowering reservoir capacity, and other off-farm damages from soil loss led to non-point source pollution becoming a national issue. Agriculture has been identified as a major contributor to impaired quality of both surface and groundwater. Nutrients and pesticides attached to the eroding soils added to the concern about management practices used for producing crops.

For many decades agriculture was more a way of life than a business. The Jeffersonian ideal was a nation of family farm operators producing food, the most needed product of all. Those on the land were perceived to be God-fearing, the first to be defenders of our democracy, and a stabilizing element in all of society. Major exclusions were granted to agriculture.

Today the agricultural sector is still unique, having caused relatively less government intervention than other industries, wherein pollution has caused a plethora of regulations. However, the future may best be described by Dr. Don Paarlberg. A Purdue student asked Don this question, "What is the most important event that happened in agriculture in your lifetime". His answer, "The most important event is that agriculture is in the process of losing its uniqueness". To some extent this is well underway as the following list of laws enacted by Congress that can affect agriculture's operators is already quite daunting:

1. The Food Security Act of 1995,
2. The Coastal Zone Non-Point Pollution Program,
3. The Clean Air Act of 1990,
4. The Clean Water Act (1972, 1977, and 1989),
5. The National Pollution Discharge Elimination System,
6. The Insecticides, Fungicides, & Rodenticide Act,
7. The Toxic Substance Control Act, and
8. Section 404 of the Clean Water Act.

In addition there are numerous actions by some of the nonfederal governments that can cause more uncertainty. The 104th Congress may act to remove or lessen the impact of environmental regulations. There are those who represent agriculture voicing alarms that traditional voluntary, incentive-driven methods of assisting land users to practice stewardship will be replaced with more regulations to achieve society's environmental goals. As a soil conservationist for over five decades, my advice is to assist in elevating the quality and the health of soils used in agriculture as an issue of equal status with the quality of air and of water. The quality of soil can relate to many of the concerns of environmentalists. Poor water quality can be traced to poor quality of the soil in the contributing watershed. Poor quality soil can threaten a sustainable system for producing food and fiber. A nondegradation policy is needed for soil.

The environmental activists who have helped force recent debate about "greening" of agricultural practices will not be satisfied with land users defending some of the destructive processes driven by agriculture. However, if society expects landowners to be the nation's "Park-Keepers" how should they be rewarded for producing non-marketable benefits?

It may be timely to examine other sectors of the economy. As necessity is the mother of invention, three decades of environmental regulation have birthed and nurtured a huge American environmental industry. This industry's water treatment, air quality control, solid and hazardous waste handling elements now generate \$130 billion in sales annually and provides jobs for more than one million Americans. The farm sector benefits. Agriculture, and the industry that supplies its needs, has led to equipment for reduced tillage and thereby saving soil, toil, and oil. Chemicals are more targeted and the storage and disposal of pesticides has improved. The list is long and it is growing as research continues to assist agriculture to be cost-effective and more sensitive to the environment. Planning to anticipate the need for solutions to problems is available to producers through their local conservation

districts and others. There is a strong need to address agricultural related environmental problems at the local watershed level. Partnerships must be built between local, urban, conservation, and agricultural groups. People must agree they have problems and seek and define realistic solutions.

Gaining favor is Consolidated Farm Management Planning. USDA has a variety of programs that may require up to 15 separate plans. On a priority basis a comprehensive plan that assures a producer that their operations are acceptable, and that the rules will not change, is needed. Agriculture is seeking those to be trusted. In most states, there are locations that are "hot spots" that, unless properly managed, cause serious harm. New types of programs and new federal-state-local and private sector partnerships will be needed to assist agriculture to address environmental quality needs and lessen uncertainty.

An uncertainty that agriculture faces that may be more significant than any other issue, including environmental requirements, will be future federal budgets. Already having an impact on federal technical and financial assistance, the 1995 Farm Bill will debate the level of direct financial support for several sectors of agriculture related to the drive, over the next several years, for a balanced budget. Some will call for an elimination of all programs aimed at supporting farm income. That effort, aimed at having a market driven industry, has several advocates. A ten-year phase out of all federal commodity payments has been proposed. Others are suggesting that in lieu of presently designed programs, land users be rewarded for practicing stewardship of their resources that benefit the public. The greening of farm policy started a decade ago, would be strengthened by "green payments" for managing agricultural land as part of a larger ecosystem.

How best to integrate changing environmental concerns, with the other topics to be addressed by this panel, into a viable agricultural policy is an excellent question. I look forward to comments or questions from Tom Hebert. The other members of this panel will add to the knowledge needed as they examine agriculture's economic prospects through the year 2000.