



TECHNICAL NOTE

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NATURAL RESOURCES CONSERVATION SERVICE

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CONSERVATION: PROVIDING AN ECONOMIC EDGE FOR AGRICULTURAL PRODUCERS

This coversheet transmits an economics fact sheet originally released by the NRCS Resource Economics and Social Sciences Division on March 23, 1999.

The fact sheet contains information on how conservation can provide economic benefits to agricultural producers. It may be useful in handling questions or making presentations on how conservation assistance may impact the economic viability of producer under the current economic conditions.



United States
Department of
Agriculture

Natural
Resources
Conservation
Service

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SUBJECT: ECN - Economic Advantages for Producers from Conservation

TO: Regional Conservationists
State Conservationists
Directors, Caribbean and Pacific Basin Areas
NHQ Division Directors and Above

File Code: 200

Attached is an economics fact sheet, "Conservation: Providing an Economic Edge for Agricultural Producers," containing information on how conservation can provide economic benefits to agricultural producers. This material may be useful in handling questions or making presentations on how conservation assistance may impact the economic viability of producers under the current economic conditions. The first page of the fact sheet includes examples of conservation benefits, economic advantages of conservation for producers, and comments on how the Department of Agriculture's assistance can help achieve them. Examples are provided on the second page.

While conservation is not a panacea for economic stress, it may be an important way to avoid losses related to natural hazards, minimize outlays for off-farm inputs, reduce other cost burdens, and help move toward enterprise diversification.

We hope that you find this information useful.

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Attachment

Conservation: Providing an Economic Edge for Agricultural Producers

Resource conservation provides agricultural producers economic advantages through reduced yield variability, input cost savings and long term sustainability.

Conservation Benefits: Conservation applied by agricultural producers helps to:

- ◆ reduce soil erosion from wind and water;
- ◆ improve soil quality through accumulation of organic matter and reduced soil compaction;
- ◆ protect surface and ground water quality from sediments, nutrients, and pesticides;
- ◆ enhance habitat for aquatic and terrestrial wildlife;
- ◆ improve water use efficiency;
- ◆ enhance woodland productivity and sustainability;
- ◆ protect and restore grazing lands; and
- ◆ reduce risk of damage to air quality from agricultural activity.

Economic Advantages for Producers: Conservation enables agricultural producers to:

- achieve cost savings through reduced reliance on purchased inputs and more effective use of on-farm inputs;
- enhance long term sustainability and potential for increased income and enterprise diversification through reduced soil erosion, water quality protection, wildlife habitat restoration, and better management of woodlands and grazing lands;
- reduce severity of economic losses due to weather and its impact on crop and livestock production through water conservation and management;
- learn how to best implement cost reducing conservation methods suitable for the land;
- attain higher economic use of land that is better protected from natural hazards like drought and flooding;
- reduce costs of satisfying certain environmental requirements under state and local laws;
- maintain eligibility for USDA assistance programs by satisfying highly erodible land and wetland conservation provisions for their operations; and
- attain conservation goals for their operation while maintaining farm productivity and income.

USDA Assistance: Financial, technical and educational assistance from USDA helps producers capture these economic advantages. USDA assistance is often complemented with state, local and other resources to obtain these conservation benefits while allowing economic use of agricultural land and water resources¹. Financial assistance provides cost sharing and incentive payments to producers under long term contracts for conservation. USDA technical assistance and resource information for producers includes:

- * help in developing conservation plans suitable for the site and the farming operation;
- * layout assistance in applying conservation practices on the land;
- * technical guidance materials for resource decision making that benefits both producers and society;
- * technical standards for conservation practices applied to insure effectiveness;
- * soil surveys and maps to improve land use decisions by land users;
- * water supply forecasts from snow surveys to help in cropping decisions in western states; and
- * seeds and seedlings through market outlets for improved plant species developed for conservation.

End Result: Investments in resource conservation help agricultural producers remain economically viable through cost reduction plus long term income sustainability while providing environmental benefits to society.

¹ Other USDA programs like CRP and WRP provide payments to producers under term contracts or easements in exchange for dedicated environmental use of a portion of the producer's land.

Examples of Economic Gains to Producers through Conservation Programs

Wildlife Habitat Incentives Program (WHIP) and Enterprise Diversification

In *Wyoming*, thirty landowners in one county entered into WHIP agreements for land surrounding two state wildlife management areas. The State's wildlife areas are rich in water and wetlands, yet lacked upland bird habitat and nesting cover which restricted overall wildlife benefits. The land enrolled in WHIP provides the missing habitat for pintail ducks, mallards, pheasants and sharptail grouse as well as neotropical migratory birds. In addition, the participants plan to lease their land during hunting season as a source of additional income and enterprise diversification. This, in turn, benefits the local economy.

Environmental Quality Incentives Program (EQIP) and Economic Returns

In northwest *Iowa's* Plymouth County, EQIP has provided assistance to producers for handling animal waste and related field application using nutrient management practices. By following the nutrient management plan as called for in the EQIP contract, some producers have lowered out-of-pocket costs by reducing use of commercial nitrogen up to 110 lbs per acre and up to 100 lbs of phosphorus and potash due to nutrients available in the manure. A savings in field application cost also occurred for those producers where use of commercial fertilizer was eliminated entirely. In one case, EQIP educational and technical assistance enabled a producer to do his own pest scouting, saving the \$6 per acre he had been paying to a commercial source, plus he became much more sensitive to the areas in the field where application of pesticides could be reduced for added cost savings.

The Passamaquoddy Tribe in *Maine* is using EQIP for forest and wildlife habitat conservation and management purposes that will ultimately improve their income from these lands. They are also establishing integrated crop and pest management techniques with EQIP assistance that reduce reliance on costly agrochemicals while maintaining yields on their blueberry lands.

The economic stresses stemming from adverse market conditions can often impact small, limited resource, and minority farmers more severely than larger operations with more capital. Limited resource farmers in *Mississippi* were found to have a higher percentage of their forest lands being inadequately managed or not reforested after harvesting because they had to invest their limited funds in farm operations with a quicker income return. EQIP has provided financial assistance to these limited resource producers for reforestation purposes that will primarily improve the local natural resources while helping longer-term economic returns.

Conservation Technical Assistance (CTA) and Weather Variability and Land Capability

NRCS conservation technical assistance is provided nationwide to farmers and ranchers to install a range of conservation practices that reduce the income losses associated with weather variability. These practices increase water infiltration and buffer the effects of droughts and excess precipitation. Practices that provide such benefits include crop residue management, terraces, grass waterways, and contour strips. In addition, soils based recommendations on the land's capability can help farmers select crops and land uses that are best suited to the farm, which reduces the risk of income losses on marginal land or excessive input costs on all types of land.

Conservation Contributes to Sustainable Communities. A healthy landscape results from applied conservation. Conservation enables farmers to take advantage of the fact that their land produces wildlife and clean water and scenic beauty as well as crops and livestock forage. When farmers apply conservation on their land they are helping in a very real way to provide both the environmental and economic safety net for their neighbors and their community.