
What Price Conservation and Who's Paying?

Liu-Hsiung Chuang, agricultural economist, Evaluation and Analysis Division; Roy M. Gray, special assistant to chief for legislative affairs, Soil Conservation Service; James R. McMullen, director, Conservation and Environmental Protection Division; and Otis N. Thompson, chief, Field Service Branch, Information Division, Agricultural Stabilization and Conservation Service

Soil conservation districts were authorized by the Standard State Soil Conservation Districts Laws in 1937. Today there are 2,934 conservation districts in the Nation. Together with the Agricultural Stabilization and Conservation Service (ASCS) county committees as well as other State and local agencies, they play a key role in delivering technical and financial assistance to land users. The conservation districts are responsible for setting priorities and directing conservation work at the local level. The joint Federal, State, local, and private partnership has been the motivating power in the progress of the soil and water conservation movement.

Federal Funding

The Soil Conservation Service (SCS), principal agency in the U.S. Department of Agriculture (USDA) to deal with soil and water conservation, receives annual congressional appropriations, but State and local govern-

ments, private organizations, and land users also contribute significantly to the Nation's conservation work.

USDA Funding

Appropriated funds (expressed in 1982 dollars)¹ for SCS operations, which mainly pay for technical assistance to land users, averaged \$275 million annually for the past 50 years. Funds for flood control and prevention activities, mainly for small watershed measures, averaged \$157 million annually. Overall, SCS funding averaged \$465 million annually. The overall SCS funding for conservation activities peaked at \$832 million in 1978, then gradually declined to \$575 million in 1985.

The amount spent annually through ASCS conservation programs averaged \$247 million in the 1980's. The ASCS Soil and Water Conservation Program expenditures declined from \$2,038

¹All budget figures in this article were calculated in terms of 1982 dollars to facilitate comparisons.

million annually in 1944 to \$168 million annually in 1985.

States, Local Government, and Other Funding

State, local government, and organization contributions averaged \$269 million a year and have been increasing since 1963. Since 1973, the local share has risen faster than the State and private contributions. In 1985, some 46 States had completed multi-year long-range conservation plans. Today all the States appropriate funds specifically for conservation.

Land Users' Share

The land users' share of conservation costs ranged between 40 to 53 percent throughout the past 50 years with their peak investment taking place in the late 1940's.

USDA Contributions

Funding for technical assistance has remained relatively stable since 1969. Direct cost sharing, however, declined by 77 percent between 1969 and 1985. Funds for watershed construction and conservation practice installations also declined. Emergency program funding and loans fluctuated widely. Program support increased up to 1979 and then gradually declined.

Research and technology investment (without including the resources from the Extension Service, the Agricultural Research Service (ARS), and the Cooperative State Research Service (CSRS)) was stable. Resources allocated by Extension, ARS, and CSRS for conser-

vation education, research, and technology amounted to 9 percent of the total USDA conservation contribution in 1982, the most recent year for which figures are available.

The total annual Federal conservation funding through USDA agencies has fluctuated between 0.9 and 1.7 billion dollars since 1969, with a declining trend beginning in the late 1970's.

Total U.S. Commitment

USDA funding represents the largest allocation for conservation while contributions by State, local, and other organizations, though averaging about \$267 million a year, have been increasing since 1963 and averaged close to \$300 million annually in the 1980's. The gross private share in investment in conservation capital has declined since the peak of 1946-50 to about \$482 million in the 1980's. The annual total resources invested in soil and water conservation ranged between \$1.5 billion and \$2.5 billion between 1969-85, about 0.8 to 0.5 percent of the total U.S. Federal expenditure.

Achievements

The last National Resources Inventory (NRI) in 1982 shows that 55 percent of cropland, 47 percent of pastureland, 64 percent of rangeland, 15 percent of forest land, and 7 percent of other land, benefit from conservation practices. Nationwide, 44 percent of non-Federal rural land has conservation practices installed on it. Land areas

protected annually by new conservation practices exceeded 54.6 million acres in 1985.²

A total of 649 small watershed projects have been completed since 1954, and 417 are under construction. About 20.6 million acres have been protected with structures for sedimentation, pollution abatement, or flood control.

Some 2.6 million water impoundment reservoirs were constructed to reduce erosion, improve grazing management, conserve vegetative cover and wildlife and provide fire protection over the past 50 years. Terraces were constructed on 39 million acres of cropland to reduce erosion, conserve water, or prevent or abate pollution. Stripcropping systems were established on nearly 116 million acres of cropland to reduce water or wind erosion or to prevent pollution.

Mission Incomplete

Soil and water conservation investment has adequately protected about 38.8 percent of non-Federal rural land since the soil conservation program began. Another 57.2 percent of the non-Federal rural land still needs conservation for erosion control, drainage, irrigation management, and improvement or establishment of vegetative cover. It is not feasible to apply conservation practices on about 4 percent of the land, such as quarries.

²U.S. Department of Agriculture, *Agricultural Statistics, 1986*, Washington, U.S. Govt. Print. Off., 1986.

Because of the declining annual gross Federal investment and private investment in the conservation effort, the total annual investment in soil and water conservation has declined significantly. Coupled with the increasing rate of depreciation on installed measures and practices, the net annual investment rate in conservation has been negative since the late 1950's. Although recent investments are being made in new technologies such as conservation tillage and the increased efficiency may be somewhat offsetting, greater national commitment in conservation investment is still needed to maintain what has been achieved over the past 50 years.

Today's Focus

Since 1981, SCS has been investing more resources to treat highly erodible land in the United States. The Food Security Act of 1985 further defined and expanded that policy. Its subtitle on conservation authorizes the Secretary to conserve and improve the soil and water resources through the reduction of agricultural commodities production on highly erodible land with the implementation of the four key measures: a "conservation reserve" to retire highly erodible cultivated cropland; a "conservation compliance" program to discourage cultivating highly erodible farmland without installing acceptable conservation practices; a "sodbuster" provision to discourage plowing additional highly erodible land without acceptable conservation measures; and a "swampbuster" provision to discour-

age wetland conversion for commodity production.

Today, the U.S. farm economy makes the land users' investment for soil and water conservation even more

difficult. The time has come again for the joint partnership of public agencies and private land users to act on conservation.