

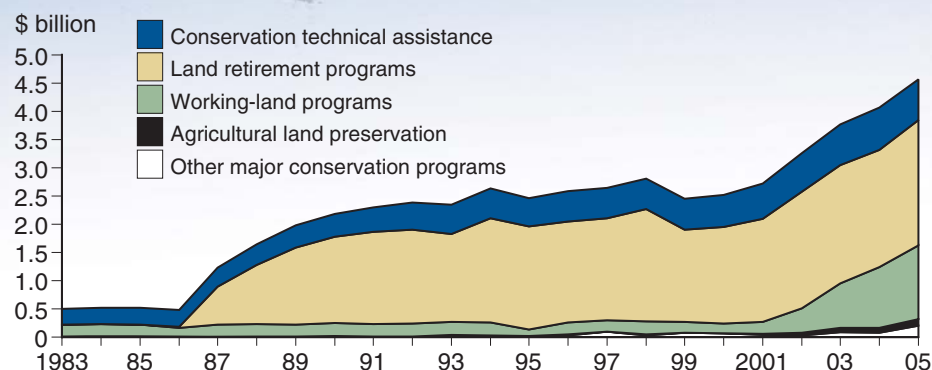
Indicators Highlight Links Between Agricultural Resources and the Environment

Gary Kramer, USDA/NRCS

Agricultural production both depends on and influences a wide range of natural and other resources. These resources include land, water, and genetic material, as well as knowledge, production technologies, and management skills. The links between agricultural resources and the environment depend critically on the decisions made by the diverse operators of the Nation's 2.1 million farms. Farm operators' decisions are shaped in turn by market conditions, public policies, and the specific characteristics of individual farms and households. When making production decisions, farm operators have clear incentives to consider the impacts on their own well-being and that of their households, but weaker incentives to consider impacts that occur off-site or farther away.

The difference in incentives raises ongoing challenges in managing the Nation's agricultural resources and motivates ongoing efforts to balance public and private goals. For example, voluntary programs designed to improve environmental quality often rely on increasing farmers' incentives to adopt practices that have off-site (and often distant) benefits. USDA expenditures on conservation programs have risen nearly tenfold over the past two decades, and their composition and emphases continue to evolve in response to


Trends in USDA conservation expenditures, 1983-2005



Source: Analysis by USDA, Economic Research Service of data from USDA, Office of Budget and Program Analysis.

changing conditions and priorities. Concise and accurate information on agricultural resources and the environment can help public and private decisionmakers better understand the complex interactions between public policies, economic conditions, farming practices, conservation, and the environment.

ERS publishes research reports, databases, and other materials on a variety of specific topics relating to agricultural resource use and the environment. The 2006 edition of *Agricultural Resources and Environmental Indicators* draws on these detailed sources to provide a comprehensive overview of patterns and trends in land, water, biological resources, management skills, and commercial inputs used in

the agricultural sector. *AREI 2006* also describes public policies and programs as well as economic factors that affect resource use, conservation, and environmental quality in agriculture. Twenty-eight chapters synthesize, update, and provide links to more detailed information available in ERS reports, databases, and briefing rooms on the ERS website. 

Keith Wiebe, kdwiebe@ers.usda.gov

This finding is drawn from ...

Agricultural Resources and Environmental Indicators, 2006 Edition, edited by Keith Wiebe and Noel Gollehon, EIB-16, USDA, Economic Research Service, July 2006, available at: www.ers.usda.gov/publications/arei/eib16/