

Integrating Agriculture and Other Land Use Statistics: the U.S. Experience
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Land use changes have important economic and environmental implications for a host of policy issues, including commodity production and trade, soil and water conservation, open space and other issues. A first step in the study of land use changes is developing consistent sets of land use statistics over time. Also, emerging data requirements related to global warming, biofuel production and other issues require that land use statistics from all major land uses within a country – including agriculture, forestry, urban and other uses – be systematically collected and reported over time. Yet typically, federal agencies develop statistics that tend to focus on a single type of land use to meet own-agency needs. This agency-specific estimates can be based on different collection criteria and widely varying definitions of land use. The result is that individual agencies may develop land use statistics for particular sectors that collectively, do not sum to the total land in the U.S.

The U.S. Department of Agriculture’s Economic Research Service (ERS) has served as a source of major land-use estimates in the United States for over 50 years. The major land use series is the only consistent accounting of all major uses of land in the U.S., including both publicly held and privately held land. These land use statistics are used in a number of official US Government Reports, including the Economic Report of the President and the Statistical Abstract of the US. They are also used in analyses examining trends in land, water and biological resources and in reports on the condition of natural resources in the agricultural sector. They also are source data for a variety of economic analyses, including those that examine evidence on the relationship between agricultural land-use changes, soil productivity, and indicators of environmental sensitivity, and in studies explaining the forces driving changes in land use patterns.

This paper explains the various sources of data ERS uses to develop agricultural and other sectors’ statistics, and describes the methods ERS uses in developing its major land use estimates. The challenges faced in using different data sources on agricultural land use to develop these statistics, as well as challenges in reconciling data from different survey agencies, are described. Strategies for addressing those challenges are also identified.

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