



Rural-Urban Land Use: Explaining Private Land-Owners Decision Making

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In Ohio and across the United States, concern has been expressed over the loss of open space and agricultural land. These lands are being converted to other uses, including residential and commercial development, at what some see as an alarming rate. While this is true in many areas of the country, it is especially true in Ohio. Ohio ranks second in terms of the amount of prime farmland lost, although the state only ranks 22nd in the nation in terms of population growth. Overall, from 1950 to 2000, Ohio lost about 7 million acres of farmland, or one-third of the entire land in agriculture.

Land use is linked to important quality-of-life issues involving scenic, cultural, and historic amenities as well as issues involving community health, employment opportunities, and economic development. Land use also plays a key role in many ecological functions, including wildlife habitat, water quality, soil conditions, and global climate.

Numerous policies affecting land use are being considered to address the loss of farmland and open space while accommodating development demands and private property rights. Since the vast majority of land in this country is privately owned, understanding which policies are likely to be effective requires analysis of private land-owner decisions. Policies that are politically supportable and effective in changing land-owner behavior are most likely to be successful. This study examined and analyzed the complex array of factors affecting individuals' decisions on private land.

A survey was designed and mailed to land owners in three rural Ohio counties facing substantial development pressure. Information was provided from 497 respondents about the types of land-use activities that owners undertake; what factors affect decisions about these activities; what activities have been undertaken in the past few years; and the importance of the various factors in their decision making.

Several trends became evident in the survey data. Soil and topography and previous land use were rated highest in terms of land-use decisions, while other factors rated much lower. The importance of the various influencing factors varied by activity type. For potential development uses, activities that rated the highest were haying, unplanned preservation, soil, and topography. When the land was being considered for potential use for farming and haying, mowing, planned preservation, and timbering activities, then previous land use was the highest rated factor.

Many of the currently proposed policy initiatives to change land-owner behavior rely on participation that is voluntary. However, the survey indicated that there was little interest in participating in any voluntary programs. What little interest there was stemmed from potential financial incentives for participants. Moreover, across a number of currently proposed policies listed in the survey, most respondents predicted that such policies would not change their own land-use behavior. Overall, technical information and assistance with planning was perceived as the most likely to lead to change.

CHALLENGES

As population growth and urban sprawl continue to change land use throughout Ohio and across the nation, governments at all levels are becoming increasingly active in land-use policy. It is critical for policy-makers to understand the likely effects of land-use policies. In order to provide the public and private benefits possible from wise land choices, careful application of a range of policy tools is needed.

ACHIEVEMENTS

The data collected in Ohio indicated that land owners in urban-rural fringe areas, although driven by incentives, are more responsive to technical information and assistance when it comes to preservation and land use. This information should be helpful to policy-makers considering which policy tools are likely to be most successful for influencing land use on private lands.

THE FUTURE

This study has led to successful funding for a broader study of farmers' voluntary participation in government incentive programs. The broader study, funded at \$120,000, is part of an initiative to examine the carbon sequestration potential of agricultural soils as a means to mitigate climate change.



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Photo courtesy Jodi Miller