Improving Public Policy Surrounding Land Use Changes

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It is critical for U.S. policy makers to have sound information on how their policy decisions affect land use changes (Goetz 2007) and how urbanization interacts with agricultural production. This is true even as the current economic decline coupled with recent spikes in crude oil prices may have temporarily dampened enthusiasm for urban expansion (e.g., Cortright 2008). Further, access to food remains an issue not only in the United States, but worldwide. Recent experiences make it clear that low and stable food prices cannot be taken for granted indefinitely. Land use policy directly affects one of the most critical issues to be addressed in meeting growing demands for food, feed and fuels.

This theme issue features public policy–related papers on the subject of land use changes prepared by leading experts in the area. The topics include economic, social and environmental impacts of land use changes and their implications for policymakers; methods for valuing the multiple functions and amenities provided by farmland, and what these mean for land preservation programs; the impact of urbanization on agriculture and the policies available to mitigate such impacts; and the application of market–based mechanisms to address water quality problems resulting from land use changes.

In the first paper, JunJie Wu examines the effects of recent reductions in total natural land areas associated with urbanization across the United States. Wu distinguishes among economic, social and environmental consequences of land use change, and he points out that environmental costs or “externalities” are often excluded from benefit–cost calculations. This leads to market failures, which in turn justify public sector intervention. A key conclusion of this paper is that the stakes involved are very high, and that land use regulators must walk a fine line between balancing the public interest with private property rights.

Joshua Duke, in the second paper, picks up on some of the issues identified by Wu and examines specifically the types of environmental amenities that are provided by one important category of land use—that of farmland—but that are not normally included in benefit–cost analyses. This is also a form of market failure. Two contributions of Duke’s paper are that he presents estimated per acre values of farmland amenities and that he outlines how policymakers should use such values. In particular, he cautions that amenity values should not be viewed as “indisputably objective” even though they are sometimes presented as such. Any decision to use such values should include input from local stakeholders and political bodies.

Building on these first two papers, Lori Lynch outlines the host of public policy instruments that are available in a community to influence land use changes. These range from outright regulatory techniques such as agricultural protection zoning (APZ) and right–to–farm laws to incentive–based techniques such as impact fees, use–value assessments and circuit breaker taxes. Another set of instruments involves participatory techniques such as fee simple purchase and purchase of development right (PDR) programs.

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A final category consists of hybrids of these instruments. Lynch concludes her paper by drawing policy implications for agriculture and future urbanization.

In the fourth paper, Charles Abdalla examines a problem that knowledgeable observers believe will become even more important in the future, namely that of water quality as impacted by alternative land uses. He describes how market-based incentives can be used to address specific water quality problems, and presents selected examples from Oregon which are contrasted with the situation in the Northeast United States.

For More Information


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