

INTERPRETIVE SUMMARY

MAY 2002

URBAN AND AGRICULTURAL COMMUNITIES: OPPORTUNITIES FOR COMMON GROUND

Agriculture is an integral part of urban growth and population change. This fact is frequently unrecognized by the general public, mainstream agricultural interests, and political leaders. In many people's minds, there is the perception of a rural-urban split that results in competition for resources, separate policies, and inaccurate stereotypes. A critical need exists to gain a better understanding of our current agricultural situation and to coalesce the interests and goals of rural and urban areas. Agriculture is one way to meet this need.

This report focuses on the role that agriculture can play in serving as a common denominator between rural and urban sectors. The intent is two-fold: to move our thinking beyond agriculture's traditional production and rural roots focus, and to identify components of contemporary agriculture that can be a resource for civic leaders and planners who are challenged by issues of sprawl, vacant city lots, public desire for safe local food, and community livability.

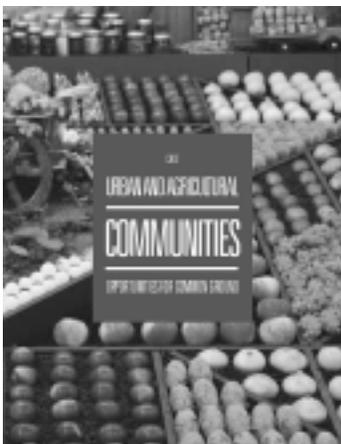
The objectives of this report are to

- broaden understanding of agriculture in an urbanizing society;
- identify opportunities for urban and agricultural constituencies to work cooperatively toward common goals;
- document agriculture's contributions and/or services to both rural and urban sectors;
- stimulate broad debate and discussion about program and policy directions and priorities pertaining to agriculture in an urbanizing society; and
- propose ways in which contemporary agriculture, with other partners, can help meet the challenges associated with urbanization.

AGRICULTURE'S CONTRIBUTIONS TO URBANIZATION

This report presents an extensive discussion of the ways in which agriculture contributes to urban communities. The following topics are considered.

- **Restoration and Remediation:** storm water management, water remediation and waste water reclamation, waste recycling, carbon sequestration, and remediation of brownfields
- **Planning and Revitalization:** growth management, landscape and energy modification, indoor-outdoor air quality, insect and wildlife management, and revitalization of land areas
- **Business and Economic Benefits:** environmental horticulture and the green industry; nursery and greenhouse production; retail garden centers; landscape and interiorscape design, installation, and maintenance; turfgrass production and management; companion animal industry; aquaculture; and the equine industry
- **Individual Health and Well-Being:** human/animal relationships, plants and planted landscapes
- **Community Health and Well-Being:** community food systems such as entrepreneurial gardens and farms, farmers' markets, community supported agriculture, and farm-to-table programs



- **Recreation and Leisure:** gardening, golf, hiking, equestrian activities, wildlife and bird watching, public parks, arboreta, botanical gardens, and entertainment farms

POLICY AND INSTITUTIONAL DIMENSIONS

Population growth and a desire for country living have fueled public interest in land management issues. According to the USDA *National Resources Inventory*, between 1982 and 1992, 29% of U. S. agricultural land converted to urban use was prime agricultural land. During 1992 to 1997, the rate of land conversion reached 2.2 million acres annually, not counting land used for transportation routes. This was 1.2 times the

conversion that occurred in the previous decade.

A number of tools are in place to protect farmland. The best programs combine regulatory and incentive-based strategies, such as the following.

- **Regulatory Programs:** agricultural protection zoning and comprehensive planning
- **Incentive Programs:** agriculture tax programs, right-to-farm laws, agricultural districts, purchase of development rights, transfer of development rights (or purchase of agricultural conservation easement programs), and private land trusts

NEW VISIONS FOR URBAN AGRICULTURE

This report proposes initiatives that the agricultural system, higher education, and governments must undertake jointly to remain relevant to society. Each of the initiatives has research, extension, and educational opportunities that are addressed in the report.

1. Comprehensive Planning Initiatives

- Build public understanding of the rural-urban agroecosystem
- Integrate agriculture into long-term, rural-urban comprehensive planning
- Promote knowledge of community food systems to achieve desired local/regional goals
- Use urban agriculture as a tool for improving public education and community livability
- Identify financial incentives and revenue sources for entrepreneurial urban agricultural activities
- Draw on existing resources for science-based information

2. Public Policy Initiatives

- Study agricultural land use; analyze alternative policy instruments; document land conversion and decision-making behavior; implement spatial models of land use for policy design; and identify roles for levels of government in policy and development
- Strengthen understanding of local/regional food systems; encourage policies that improve food access; promote food system sustainability; establish food policy councils; establish local mechanisms for food production, distribution, and use; and monitor consumption patterns of disadvantaged populations

- Develop policies to ensure a new generation of farmers who can interact successfully with the urbanizing society

3. Higher Education Initiatives

- Establish curricula in urban agriculture and the rural-urban agroecosystem
- Form rural-urban outreach and extension teams that include urban leaders and planners
- Monitor and analyze community food systems; educate about nutrition and diet, community gardens, food-related employment, farmer-consumer linkages, sustainable production and management systems, and food security strategies
- Facilitate public understanding of changes in the status of agricultural land, natural resources, and open space; provide outreach education on farmland protection tools and policies while maintaining neutrality and promoting diverse stakeholder participation; document successful farmer adaptations
- Identify common ground and promote bridge-building activities and policies between urban and rural constituents
- Encourage professional development on urban agriculture issues and the rural-urban agroecosystem
- Foster internal planning to share resources, identify funding sources, and build new partnerships

4. Research Initiatives

- Pursue research on urban agricultural topics in plant adaptability and production systems, urban soils, water management, and pest management
- Encourage research on entrepreneurial products, farmland preservation, and social and economic dimensions of the rural-urban agroecosystem

5. Partnerships and Collaboration Initiatives

- Broaden the mix of partners (higher education, government agencies, nonprofit organizations, private sector)
- Foster partnerships between farmers or rural people and urban planners and urban-oriented interest groups on community food systems, community greening, sustaining and remediating natural resources, wildlife and recreation issues, and watershed protection

- Encourage higher education faculty collaboration with urban agriculture partners to address urban agriculture problems and issues
- Expand cooperative extension’s role in urban agriculture issues, using a team approach to address rural-urban agroecosystem issues, coalition building, land protection tools, and policies; offer urban agriculture professional development
- Initiate urban agriculture experiential learning to engage K–12 educators, undergraduates, and graduate students in public and private colleges and universities
- Develop creative funding strategies to support an expanded rural-urban agriculture agenda; cooperate with state and federal agencies to stimulate dialogue and planning on the rural-urban agroecosystem; engage legislators, planners, business and industry leaders, and nonprofit organizations in joint proposals; create profit-sharing entrepreneurial models

CONCLUSIONS

Agriculture must be redefined in the context of urbanization. The wealth of knowledge associated with the agricultural sciences can be put to valuable use in helping to meet the challenges of urbanization. Together, rural and urban communities have the potential to create a situation beneficial to both, based on their unique resources and experiences. This situation will come about only with proactive leadership, shared resources, creative policy options, and a willingness to work together. Land-grant universities, industry, traditional agricultural interest groups and urban partners—such as metropolitan educational institutions, city leaders, and urban planners—will need to work together to embrace change and promote a new and exciting future for everyone.

Urban and Agricultural Communities: Opportunities for Common Ground was written by a task force of 12 scientists cochaired by Dr. Lorna Michael Butler, Iowa State University, Ames, and Dr. Dale M. Maronek, Oklahoma State University, Stillwater. The 124-page publication, Report 138, is available for \$50.00 plus \$3.00 shipping from CAST. Individual, retired, and student members of CAST may request a free copy; please include \$3.00 postage and handling. Linda M. Chimenti, Managing Scientific Editor. World Wide Web: <http://www.cast-science.org>.

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