IN MARYLAND

Montgomery farm landowners are selling transferable development rights (TDR's) to developers for $4,000 to $5,000 even though TDR's are worth as much as $10,000 to developers. Montgomery County, Maryland, is an urban county. It has a population of 650,000. It's located adjacent to Washington, D.C. About 100,000 acres of the county's 317,000 acres are farmed; the remainder have been developed for urban use.

In response to concern about preserving agricultural land and open space, an innovative and successful approach taken by the county to preserve agricultural land and open space allows the sale or transfer of development rights by farm landowners to developers. The program is receiving substantial attention from officials in other urban areas and some claim it is a model for preserving agricultural land.

The TDR plan was adopted by the county in 1980. So far, 89,000 acres have been designated as an Agricultural Reserve and several urban areas have been designated as places where increased development density will be permitted.

Landowners in the Agricultural Reserve were given one Transfer Development Right (TDR) for every 5 acres. Landowners could, if they wished, sell these TDR's to developers. Under terms of the sale, development of the land is prohibited in perpetuity.

Developers may build one additional housing unit in any area which has been designated for increased density for each TDR they purchase.

As of July 1987, about 10 percent of the TDR's in the Agricultural Reserve have been sold to developers, and another 15 percent are in the process of being transferred. The price of TDR's is determined by negotiations between sellers and buyers.

The price of TDR's has ranged between $4000 and $5000 per TDR or between $800 and $1000 per acre.

The TDR program has several advantages. One is the flexibility farm owners have. They may sell one or all of their TDR's at any time. Further, the sale can usually be completed in less than 6 months, and there is virtually no cost to taxpayers.

The TDR program is not without criticism. One objection is that the program provides a subsidy for developers. It is estimated that a TDR is worth about $10,000 to developers, nearly double what they pay for it. Critics also say the program provides an unnecessary subsidy for some farm landowners. The 89,000 acres in the Agricultural Reserve includes land that is not suitable for either farming or development under current conditions, but this land was included when determining the number of TDR's to be awarded. Neighbors in or adjacent to increased density areas have also objected to the potential impact on them. They do not share in any compensation and may suffer a loss in property values.

Contributed by Earl H. Brown, University of Maryland and Timothy Warman, Agricultural Resources Coordinator for Montgomery County.

IN MASSACHUSETTS

More than 100 municipal wells have been closed because of pollution. Cleanup of these wells is not always possible within a reasonable period of time, and alternative sources are becoming more expensive. For example, in Whately, Massachusetts, $4 million is being spent to develop a new water supply.

The traditionally water abundant Northeastern states are facing water scarcity caused by pollution of surface and groundwater from underground fuel storage leaks, septic systems, lawn fertilizers, landfills, agricultural chemicals, and road salt.

Often an economist's recommendation in polluted well cases is to "just drink the water" since the value of the health risk appears to be less than the cost of developing alternative sources, buying bottled water, or installing filters. This assessment is based on a comparison of expected net benefits from each available option—assigning dollar values extrapolated from market behavior to statistical human lives and nonfatal diseases, and assigning probabilities to uncertain outcomes.

The striking reality is that households and public agencies rarely heed such advice. They choose instead to spend millions of dollars on new water sources in order to escape health hazards "worth" far less.

The behavior of the citizens of Whately, Massachusetts, and their state legislators is a case in point. A total of $4 million is being spent on development of a new water supply to avoid health risks from agricultural pesticides in underground water supplies. In contrast, health risks from continued use of the aquifer were valued at $14,000 by agricultural economists at the University of Massachusetts applying conventional methods of analysis.

Possible explanations include the following: (1) Historical experience (e.g., asbestos, atomic testing) may justify the public inflating some types of official risk estimates severalfold; (2) Individuals may be strongly risk averse with respect to certain types of health effects. Risk aversion may also be higher where risk is involuntary; (3) Anxiety about invisible dangers of unknown magnitude may in itself have a nega-

The preparation of this department was coordinated by Kenneth L. Robinson at Cornell University.
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Advances in agricultural science, technology, and management have increased productivity, but at what cost? keyed to market and regulatory forces, have the effects of agricultural development and agricultural production been beneficial to the land, the people, and the nation? This issue of Choices examines the impact of agricultural development on the people and environment, and the efforts to maintain quality of life. We analyze the potential for agricultural development and examine the variety of issues surrounding farm and rural development.

IN NEW YORK

Agricultural districts encompass fully one-quarter of New York's total land area. Roughly two-thirds of New York's 9 million acre farmland base is enrolled in an agricultural district. A smaller fraction of New York farmland is assessed at use value. About 25 percent of all farm tax parcels receive preferential property tax treatment.

Available evidence suggests that these preferential tax treatment and agricultural district designations facilitate farming but do not necessarily preserve farmland. Reduced property tax bills are rarely pivotal in decisions owners make on the use of their land. Similarly, voluntary enrollment in a district does not restrict owners who decide to convert land to a new use.

The Agricultural District Law was enacted in 1971. Its sweeping provisions combine property tax relief via use-value farmland assessments (a tool now in almost universal use in the U.S.) with the idea of an agricultural district. Districts containing at least 500 acres are proposed by landowners and ratified by county legislative bodies. The features of the law are designed to stabilize the environment for farming and improve the competitive position of farmers.

Several features of this legislation facilitate the continuation of agriculture. They include authority to supersede local ordinances, requirements to consider alternative land parcels before exercising eminent domain to acquire farmland, and directions for state agencies to facilitate continued farming within agricultural districts.

Proposals for state-matching funds for purchases of farmland development rights are now pending in the state legislature. The legislature is also debating a proposal to impose an additional monetary penalty on owners now receiving use-value assessment who convert agricultural land to other uses.

These and other findings are all part of the "Agriculture 2000" project initiated by Governor Cuomo and participated in by agricultural economists at Cornell University.

Contributed by Nelson L. Bills and Kenneth V. Gardner
Cornell University.

IN DELAWARE

In early June, in response to rapid economic development, especially in suburban and resort communities, the Governor of Delaware proposed a comprehensive development plan for the state. The plan calls for stricter land use standards, user and developer fees, and monitoring population growth and its effects. The overall goal of the plan is to help state, county and local officials cope with the rapid economic development that is occurring in parts of the state and to preserve and protect the "quality of life" in the state.

The Governor's plan has four parts. The Quality of Life Act would require each county to adopt and regularly update a comprehensive land use plan. Counties would be prohibited from allowing development that could not be supported by existing roads. The Development Assessment Act would require developers to pay for road construction and improvement generated by the development. Proposed fees range from $19,000 for a sit-down restaurant to $3.2 million for a large shopping center. The Transportation Trust Fund would be used to fund road improvements in the state. Sources of revenue would be the fee paid by developers plus additional user fees.

Finally, the plan would establish the Delaware Advisory Council on Development Impact. This group would predict future population growth in the state and its impact on agriculture, soil erosion, air and water pollution, waste disposal, land use changes, roads and the need for new housing and public services.

Contributed by Steven Hastings
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IN PENNSYLVANIA

Researchers at Penn State University in cooperation with colleagues at the University of Massachusetts are analyzing the responses to a survey of people in the two states in order to answer these kinds of questions:

-What motivates farm families to seek off-farm jobs?
-What is the character of farm families' off-farm job needs?
-What on-farm adjustments need to be made?
-What are the implications for rural development efforts?

The survey yielded usable information from 989 farm families in Pennsylvania and 159 farm families in Massachusetts.

Preliminary results indicate that, for 50 percent of the sample, at least one spouse had an off-farm job, and that, for 15 percent of the sample, both spouses had a part-time job that contributed significantly to total family income. On farms where dairy was the principal enterprise, the operator less frequently had a dual occupation, but the operator's spouse more frequently worked off-farm than was the case on other types of farms.

As expected, there is a negative correlation between off-farm work by the farm family and farm size (as measured by acres or by cash farm sales). Nevertheless, on even the largest farms a significant number of operators and/or spouses work off-farm. Furthermore, as farm size increases there is a slight tendency for the operator's spouse to more frequently work off-farm.

Final analysis of the data is expected to be completed by early fall. A national symposium on part-time farming in North America is also being planned for the purpose of sharing more general results of this and other studies, and for addressing some of the more salient policy issues.

Contributed by M. C. Hallberg
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