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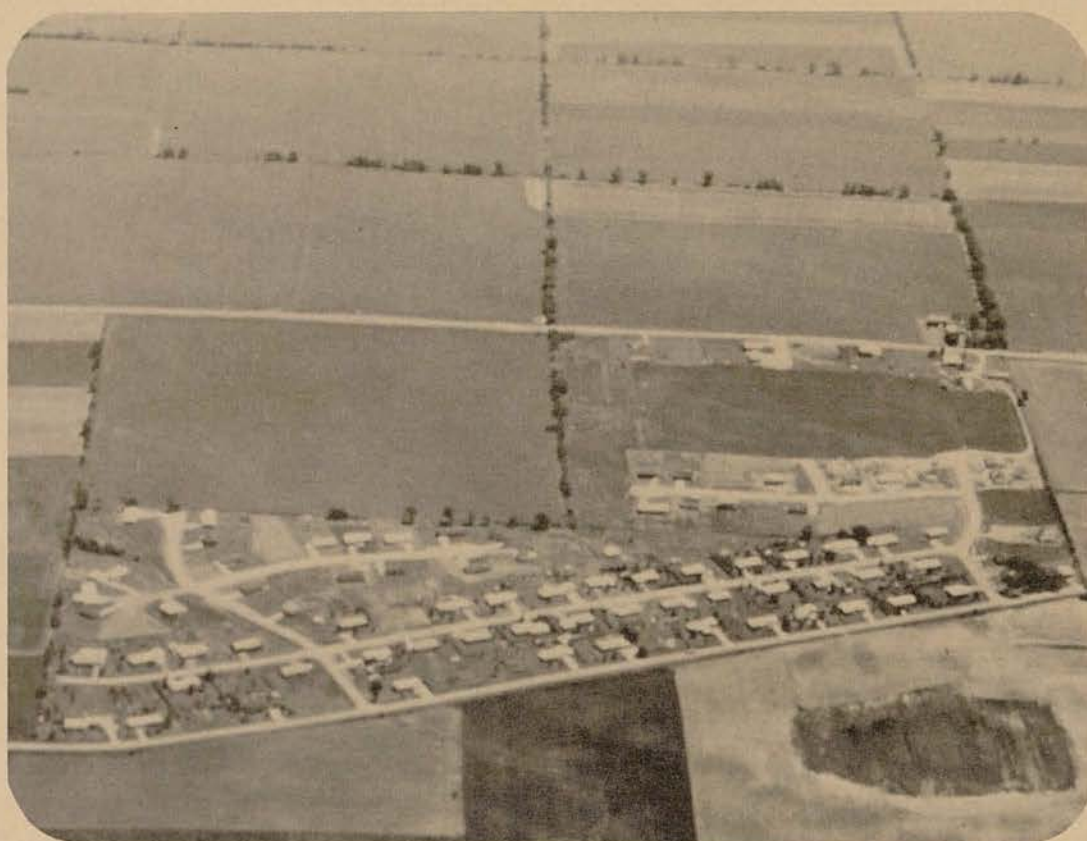
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*Philip H. Raup*  
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# Alternative Policies for Preserving Lands for Agricultural Use



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## PREFACE

(The preservation of land for agricultural use has received increasing attention especially on the rural-urban fringe of growing communities. What policy or policies, if any, should be taken to keep land in agriculture? Who will benefit and who will pay the cost from each approach?

This Extension bulletin puts this public issue into a decision making framework. The purpose of this bulletin is to educate rather than to advocate a particular solution.)

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# Alternative Policies for Preserving Lands for Agricultural Use

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Recently concern has been expressed about the use of agricultural lands for urban uses. Several groups have expressed a need for public policies that would keep land in agriculture or control urban growth. Several counties are considering various policy options to achieve this goal.

The South Dakota Policy Plan for the Future of Agriculture recommends that:<sup>1/</sup>

"the minimization of urban conversion of the best agricultural land in the state should be a goal of the state's resource conservation efforts;

To achieve this goal it is recommended that:

- (1) Local governmental units be informed of the general need, in the exercise of their land use powers, to channel urban development in a manner that will minimize the total amount of agricultural lands retired from production and that will focus the development of the poorest agricultural land.
- (2) Legislation should be adopted allowing local units of government to identify and the state of South Dakota to approve the reserving of agricultural land in the state for agricultural purposes."

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<sup>1/</sup>South Dakota Policy Plan for Agriculture. South Dakota State Planning Bureau, Pierre, November, 1975, p. 82.

Since there are numerous public policies which can be utilized to keep land in agriculture, the public policy question many areas face is:

What public policy instrument should our county, district, or state adopt with respect to keeping land for agriculture?

A number of reasons for the public's concern about the issue have been suggested. These will be examined with respect to South Dakota. Then, the alternative public policies which could be utilized are described. Each policy's impact on landowner's rights and the public purse are also discussed.

## Is There a Problem?

Numerous reasons have been advanced to justify public intervention to control urban growth on agricultural lands. What is the situation in South Dakota? Is there really any problem in South Dakota in the rate and manner in which lands are removed from agriculture? If so, what is the nature of the problem?

Six reasons have been suggested for public concern about the loss of agricultural land. They are:

1. the desire to maintain the land resource for agriculture.
2. the rapidly inflating price of land and the associated higher farmland taxes.
3. the difficulty, especially on the part of young farmers, of purchasing land to get started in agriculture.

4. the conflicts between residential and agricultural uses of land.
5. the possible reductions in farm investments in buildings and land improvements due to speculative pressures.
6. the increase in public expenditures required by leap-frog or strip development.

## Maintaining Land for Agriculture

Agriculture is one of the basic export sectors of South Dakota's economy. Many individuals think agriculture's land base should be protected to maintain this source of income. In addition to the income flowing directly to producers, there is a multiplier effect as agricultural equipment and supplies are purchased.

However, incomes could rise if the land is shifted into another export industry with greater returns per acre. Even residential use of land yields a return and cannot be considered a total loss to the local economy. To determine the net impact on the economy, information would be needed on the quantity of land converted to each type of use and the returns per acre.

Since 1950, there has been a reduction of only one percent in the state's agricultural lands.<sup>2/</sup> Consequently, for the state as a whole, there appears to be little reason

for immediate concern about the direct removal of lands from agriculture. However, casual observation suggests that there continues to be a conversion of agricultural land for non-agricultural uses, particularly in areas adjacent to growing communities.

Due to the noise, dust and odors associated with certain farm operations, strip residential developments surrounding farm lands may lead to rural-urban fringe conflicts. In turn, this may lead to political pressures for measures which restrict the adjacent farmland's full utilization. Through this process of urban scatterization, the productivity is reduced on much more farmland than is actually occupied by urban uses. There is no evidence that this is a wide-spread phenomenon in South Dakota at the present time. However, these patterns can be seen on the fringe of some of the faster growing cities and may be a greater problem in the near future.

## Inflation and Farmland Taxes

The second reason for concern on the urban-rural fringe is farmland taxes. As either second homes or residential developments spread into the urban-rural fringe, the price of land is bid up. This is sometimes accompanied by additional demands for highway maintenance, sewers and water lines, and school bus transportation. Both the higher land values and the additional governmental services lead to higher taxes on adjacent farmland.

Taxes per acre have increased over 259 percent from 1955 to 1973 as Table 1 shows. The rate of increase in farmland value from 1955 to 1973 was 242 percent compared to 594 percent increase in net farm income.<sup>3/</sup> Despite this increase in net farm income, information is needed on the equity of tax payment between farm and nonfarm taxpayers.

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<sup>2/</sup> Gloudemans, Robert J. Use-Value Farmland Assessments: Theory, Practice and Impact. International Association of Assessing Officers, Chicago 1974, p. 11.

<sup>3/</sup> U.S. Department of Agriculture, Economics Research Service, Farm Income State Estimates, 1973.

An increase in taxes on farm-lands may not push farmers out of agriculture unless there is a more profitable use for the land, but it will reduce their net farm income. It is difficult to fairly assess this impact since the net worth of the farmer's land increases even if his net income is reduced.

## Getting Started in Agriculture

High land prices is one factor making it difficult for young families to enter farming. This, coupled with the aging population

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<sup>4/</sup>U.S. Census of Agriculture, South Dakota Section 2, County Data, 1969.

of our farm operators, may lead to larger sizes of farm units. In 1969 the average age of farmers in South Dakota was 49.2 years with two-thirds of the farmers over 45 years old.<sup>4/</sup> This may have adverse effects for the future of the state's agricultural sector.

## Conflicts Between Uses

The fourth concern, conflicts between residential and agricultural uses, has already been mentioned as occasionally reducing agricultural productivity. In a telephone survey of 50 local officials and USDA professionals conducted in the First Planning and Development District of South Dakota, 40 percent of the respondents indicated that concern

TABLE I

VALUE OF FARM REAL ESTATE AND TAXES  
TAXES LEVIED PER ACRE, SOUTH DAKOTA, 1955-73

Year	Net Income Per Acre*	Total Value Per Acre**	Taxes Levied Per Acre
1955	2.74	40.00	.54
1960	4.99	51.00	.69
1965	5.30	62.00	.82
1970	5.69	84.00	1.27
1971	6.08	85.00	1.35
1972	10.28	89.00	1.39
1973	19.02	97.00	1.40

\*The net income per acre includes returns to both management and land.

\*\*Total value of land and buildings.

SOURCE: South Dakota Agricultural Statistics, Crop and Livestock Reporting Service Bulletin, 1974, p. 65 and Farm Income, State Estimates 1949-73, Economic Research Service, USDA, September 1974.

about the trend toward non-farm rural residences and urban uses of agricultural land centered around the question of conflicts between agricultural and residential uses.<sup>5/</sup>

It should be noted that rural residential property values can also be affected adversely if the owners are unaware of these conflicts when they purchase the land.

## Reduction in Farm Investments

Lands purchased by speculators for future development possibilities are usually not immediately developed. In this interim the land is leased back to farmers on short term leases. Due to the uncertainty of these leases, long run investments and land improvements are discouraged. Even capital investments in machinery may be reduced due to this uncertainty.

## Costs of Urban Sprawl

Urban sprawl in the form of strip development and leap frog development is becoming a more common phenomenon around South Dakota's growing cities. Strip development is the development of a single line of homes or businesses along a highway running out of the city. Leap

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<sup>5/</sup>The survey was conducted by Dwight Uhrich, Research Associate, Economics Department, South Dakota State University, February, 1975.

<sup>6/</sup>Real Estate Research Cooperation, Costs of Urban Sprawl: et. al. Costs Analysis, prepared for the Council on Environmental Quality; the Office of Policy Development and Research, Department of Housing and Urban Development; and the Office of Planning and Management, Environmental Protection Agency, Superintendent of Documents, U.S. Government Printing Office, Washington, D.C., April, 1974.

frog development refers to a situation where agricultural land separates the city and new developments. Both of these forms of urban sprawl may lead to increasing costs of providing city services such as streets and roads, public transportation, and sewer and water lines, and other public services.

In a recent study the cost of providing certain governmental services was compared for communities with a "leap frog" pattern of development to those without "leap frog" developments. Both had a similar proportion of five different housing types. The cost of building streets and roads was 120 percent higher in the community with sprawl. The cost of installing sewer and water lines was 116 percent higher. The operation and maintenance costs were very similar for these two development patterns.<sup>6/</sup>

When urban sprawl consisting entirely of single family units was compared to those with 60 percent multiple dwelling units, the cost differential became much larger. Capital costs for transportation and utilities were 140 and 186 percent higher, respectively, in the community with leap frog developments and urban sprawl. In this case the operation and maintenance costs were also greater for the community with leap frog development. The operation and maintenance costs were estimated to be 152 and 128 percent higher for transportation and utilities, respectively.

The extent of sprawl is partially correlated to the population growth in urban areas. Table II shows the rate of growth of thirteen South Dakota cities having moderate to very rapid growth from 1960 to 1970. These are the areas where urban sprawl would most likely be seen. However, even in areas with slow growth or population declines, new building does occur and may result in strip development.

TABLE II  
MODERATE TO RAPIDLY GROWING CITIES IN SOUTH DAKOTA,  
1960 to 1970

	Change in Population	Growth Rate (percent)
<u>Cities with Very Rapid Growth</u>		
Urban Part of Minnehaha County	1,542	138.2
Pine Ridge	2,700	117.0*
Martin	960	75.0*
Vermillion	3,026	49.6**
Brookings	3,159	29.9**
Yankton	2,640	28.5**
Spearfish	979	26.6**
<u>Cities with Fast Growth</u>		
Madison	895	16.5**
Aberdeen	3,403	14.7**
Sioux Falls	7,022	10.7**
<u>Cities with Moderate Growth</u>		
Mitchell	870	6.9**
Milbank	227	6.5
Canton	154	6.1

SOURCES: Riley, Marvin P. and Robert T. Wagner, South Dakota Population and Net Migration 1960-1970, Bulletin 580, February 1971, Agr. Experiment Station, SDSU, Brookings.

\*Gustafson, Neil C. Recent Trends/Future Prospects: A Look At Upper Midwest Population Changes, Minneapolis Upper Midwest Council, January 1973.

\*\*Each of these cities has an institution of higher education. Students residing in communities are counted in the population of the town in which the institution is located rather than their home town.

## The Alternative Policies and Their Consequences

Nine alternative policies can be utilized to control urban growth in agricultural lands: (1) exclusive agricultural zoning, (2) conservation zoning, (3) cluster zoning, (4) development restricted to sewerage lots, (5) use-value assessment of

agricultural lands, (6) agricultural districts, (7) transferable developmental rights, (8) public purchase of development rights, and (9) land bank programs. The manner in which each of these policies operate is described along with their consequences.

## Exclusive Agricultural Zoning

In exclusive agricultural zoning only agricultural uses and closely related agricultural enterprises such as nursery, greenhouses and fur farms are permitted.

The political acceptability of exclusive agricultural zoning to farmland owners depends upon the economic pressures for urban development. At the urban-rural fringe the value of farmland reflects not only its value in agriculture, but what it is worth for urban development. When land is zoned exclusively for agricultural uses, the market value of the land will move toward its value in agriculture since this is the only legally permitted activity.

The taxes on farmland may fall if assessments are based on market values and adjustments are made in the assessments to reflect the lower market value, which will result from the exclusive agriculture zoning. On the other hand, if use-value taxation is utilized, there will be no change in the level of assessments for farmland. Use-value taxation is based on the land's productivity and its income-generating capacity. Consequently, exclusive agricultural zoning would not affect the level of assessments.

The tendency for farmland values to fall would benefit young farmers wanting to become established in farming. The use of exclusive agriculture zoning can also reduce conflicts between urban and rural uses.

On rural-urban fringe where there are pressures for suburban and urban development, both the prospective buyer and the landowner have incentives to seek zoning changes in

order to avoid the economic losses imposed by exclusive agricultural zones. While the agricultural zoning approach has no public costs initially, it is unlikely to survive as a permanent arrangement in the areas which will be experiencing rapid growth.<sup>7/</sup>

## Conservation Zoning

Conservation zones prohibit building on flood plains, steep slopes, along stream banks and in wetlands. Some types of agricultural use may be permitted by the conservation zoning ordinance. While the primary objective of this type of ordinance is not to keep land in agriculture, it may have this secondary impact. One of the primary justifications for conservation zoning is to protect public health by protecting water supplies and restricting development in hazardous areas such as flood plains. This strengthens the legal basis for this type of policy.

Like all forms of zoning, conservation zoning does not compensate the land owners. The stability of this type of zone depends upon the pressures for urban development in these areas. In the case of flood plains and wetlands the difficulty of securing flood insurance helps to reduce the demands for zoning changes.

There appears to be little reason why conservation zoning would reduce land prices if there are few pressures for development on these areas.

## Cluster Zoning

Cluster development requires that a large tract of land be developed at one time with only a fixed percentage of the acreage having buildings. The buildings are clustered on a specified minimum acreage, say 25 percent of the total. The remaining 75 percent must be left in either open space or agricultural use.

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<sup>7/</sup>For a more detailed discussion of exclusive agriculture zoning see Delufons, John, Land-Use Controls in the United States, 2nd edition, Cambridge, 1969.

Unlike other zoning regulations, clustering may not penalize the original landlord. If the open space adds to the attractiveness of the residential development, the cost of maintaining this open space may be passed on to the new homeowners in the form of higher home prices. The degree to which this cost can be shifted from the original landowner to new homeowners depends on the value new homeowners place on open space and also on local market conditions. However, the public costs of utilizing this policy are low.<sup>8/</sup>

### Restrict Development to Sewered Lots

Urban construction can be required to be on a municipal sewer or water line by the city's subdivision

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<sup>8/</sup>See Cluster Development by William H. Whyte, American Conservation Association, 1964.

<sup>9/</sup>For a discussion of South Dakota's subdivision ordinances see: Kelsey, Galen "South Dakota's Planning and Zoning Manual", Econ. Dept., SDSU, 1975, and also Ellingson, William "Differential Assessment and Local Government Controls to Preserve Agricultural Lands" South Dakota Law Review, Vol. 20, Summer 1975, pp. 571-572.

<sup>10/</sup>For a more detailed discussion of use-value assessment see the author's bulletins: Considerations for Rollback Provisions for South Dakota's Use-Value Assessment of Agricultural Lands, South Dakota State University, Experiment Station Bulletin 638, 1975, and Alternative Evaluation Procedures for South Dakota's Use-Value Assessment of Agricultural Lands, South Dakota State University, Experiment Station Bulletin 639, 1975.

regulation. This permits the planning commission to control the degree of concentration of development to avoid strip or leap frog development in agricultural areas. This policy instrument requires considerable planning competence and public support.<sup>9/</sup>

### Use-Value Taxation

Use-value, or differential assessment, has been suggested as a means of holding land in agriculture. Under use-value assessment the land is valued at its agricultural worth rather than its market value. Several alternative arrangements are used with this tax.

Under the preferential arrangement the assessment is based on the land's value in agriculture until the land is converted to non-agricultural uses. Then the assessment is based on market values.

Other arrangements include payment of the differential between these two taxes when land is converted to non-agricultural uses (called rollback taxes) and even penalties for sale prior to an agreed date (called restrictive agreements). The number of years which rollback taxes or restrictive agreements apply varies from state to state.

None of these forms of use-value tax hold land in agriculture, and the preferential use-value tax actually may encourage land speculation.<sup>10/</sup>

### Agricultural Districts

In this section, "agricultural districts" refers to a special institutional arrangement being tried in New York, rather than the commonly used agricultural zoning district. This institutional arrangement would require new state-enabling legislation in South Dakota.

Should enabling legislation be passed which would allow the establishment of agricultural districts?

The agricultural districts' approach is a "soft" flexible form of zoning, which gives the local area some control over state public agencies as well as incorporating a use-value tax. Non-farm buildings are not prohibited, as in the case of exclusive agricultural zoning, but their establishment is discouraged because public agencies cannot advance funds for financing sewer and water services if it is inconsistent with the agricultural district's goals. It appears that this restriction is inconsistent with widespread interest in rural water systems. However, this provision merely permits the members of an agricultural district to ensure that future developments will serve the interests of current local residents without banning all future developments.

The power of eminent domain on the part of state agencies is subject to review by their State Commission on Preservation of Agricultural Lands. The burden of proof that development is necessary within the district is on the state agency. If they cannot provide adequate proof, they are not allowed to use their traditional powers of eminent domain.

Special tax assessments for sewer, water, lights and non-farm drainage cannot be made on farmlands, unless there are direct benefits to the land being assessed. Another feature of the agricultural district is use-value taxation. In New York a farmer receives this form of assessment only if he owns 10 or more acres of land, which were used during the two preceding years for agricultural production and have a gross sales value of \$10,000 or more. Rollback taxes are collected if the farmland is shifted to a non-farm use.

The formation of agricultural districts requires state-enabling legislation which South Dakota currently does not have. Given this enabling legislation, local action is necessary to form an agricultural district. Initially one or more farmers obtain the signature of other farmers and non-farm land-owners in the area requesting that a district be established. A map of the area to be included is prepared. The county planning commission and the county commissioners then consider the proposal and accept it or modify it. It is then referred to a state agency which coordinates the development of districts. This agency reviews the proposal and prepares reports on the nature of farming and urban influences in the area. When the state review process is completed, the proposal is returned to the county commissioners for final action. At this stage another public hearing is held on the proposal. Finally, the county commissioners make a decision to adopt or reject the proposal. Every eight years a public hearing must be held with definite action taken to renew, modify or dissolve the agricultural district.

Proponents of agricultural districts maintain that the process of forming a district encourages farmers to rededicate themselves to farming, reassuring other farmers that they want the community to remain in agriculture. This public declaration of continuing interest in farming, plus the package of policy tools incorporated in the agricultural districts, reduces the uncertainty which farmers face.

Consequently, farmers may be willing to make additional long term investments necessary to keep their operations competitive. Some even feel that "it is possible that special life patterns will gradually emerge

in districts, and that people who prefer farming as a way of life will concentrate in these areas."<sup>11/</sup>

While there is no direct compensation to landlords for holding their land in agriculture, a number of tax concessions are made for those who do so. Farmland is assessed at its use-value rather than at its market value. Special service assessments cannot be placed on farmlands. State agencies are required to modify their administrative regulations and procedures to encourage the maintenance of commercial agriculture.

While there may be modest direct public costs involved in establishing agricultural districts, it is difficult to estimate the additional public expenditures which may result from some of the provisions of this type of policy. The necessity to consider alternative areas before good farmland can be utilized for public projects may increase the cost of building roads or providing other types of public services. At the present, no information is available on the magnitude of these possible cost increases.

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<sup>11/</sup>Conklin, H.E. and W.R. Bryant "Agricultural Districts: A Compromise Approach to Agricultural Preservation" American Journal of Agricultural Economics, August 1974, p. 611.

<sup>12/</sup>Foster, Phillips, Frank Schnidman, and Mark Bailey, Transferable Development Rights, Cooperative Extension Service, University of Maryland, College Park, Maryland, Bulletin 251, 1974 and see Chavoashivan, B. Budd, and Thomas Norman. Transfer of Development Rights: A New Concept in Land Use Management. Rutgers University, New Brunswick, New Jersey, 1973.

## Transferable Development Rights

This proposal has recently caught the attention of those concerned with the distribution of the costs involved in restricting development on agricultural lands. Several of the densely populated east coast states (New Jersey, Maryland and Virginia) have considered legislation which employs transferable development rights (TDR's).

The basic concept of TDR's is that owning land really amounts to owning a bundle of rights. For example, the landowner has the right to use the land for such purposes as agriculture, building or mining mineral deposits. Under the TDR proposals, the county is divided into two zones -- an agricultural zone and a development zone. Each landowner then receives development rights (DR) in proportion to the market value of his land. Selling a DR is similar to selling mineral rights, but not necessarily with the same problems. A developer must own both the land and sufficient DR's. Since farmers in the agricultural zone usually hold excess DR's and developers must obtain additional DR's in order to build in the development zone, farmers may sell their DR's to developers.

This system has a number of attractive features. There is no governmental cost as with easements and no lost revenues as with use-value taxes. Farmers, or other individuals with land in the agricultural zone, receive compensation for their DR and are not penalized by being zoned exclusively agricultural. Conversely, this approach may reduce risks to developers by channelling growth in certain areas. Finally, this procedure may make it possible to keep the comprehensive plan from being undermined by those individuals hurt by traditional zoning.<sup>12/</sup>

Despite these appealing aspects, this tool has not been thoroughly tested. Questions remain about the procedure for estimating the correct number of DR's so that their demand remains stable. Ways of estimating the value of DR's to minimize speculative buyers from taking advantage of individuals without knowledge of their value are needed. This tool will provide a more equitable distribution of the benefits and costs of holding land in agriculture if it works.<sup>13/</sup>

## Public Purchase of Development Rights

Local units of government may act as an intermediary in the transfer of development rights. As with the transferable development rights, the county is divided into two zones - an agricultural zone and a development zone. In the agricultural zone only agricultural activities are permitted.

As with transferable development rights, farmers hold excess development rights (DR). However, excess DR's are sold to the local unit of government rather than private buyers. The local government may then sell the DR's to developers owning land in the development district.

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<sup>13/</sup>Barrows, Richard L. and Bruce A. Prenguber "Transfer of Development Rights: An Analysis of a New Land Use Policy", American Journal of Agricultural Economics, 57-4, November 1975, pp. 549-557.

<sup>14/</sup>For more discussion on this option see: Perspectives on Prime Lands, U.S. Department of Agriculture, July 1975, and "The Loss of Agricultural Land" by Roger Blobaum, A Study Report to the Citizen's Advisory Committee on Environmental Quality, 1700 Pennsylvania Ave., N.W., Washington, D.C. 20006.

Similar to the transferable development rights plan, farmers would receive compensation for being zoned exclusively agricultural. This in turn helps to protect the comprehensive plan and zoning regulations.

While the public purchase of development rights provides some stability to this market, will the local government be able to sell these rights without substantial losses? This approach will require careful estimation of the demand for DR's in the development zone unless the local government is willing to simply hold these rights.<sup>14/</sup>

## Land Bank Program

The Land Bank Program is a means of keeping land in agriculture as well as facilitating the transfer of land from one generation to another. The Province of Saskatchewan, Canada, initiated the Land Bank Program in 1972. The program is administered by a four-member governing board appointed by the Minister of Agriculture. The Bank Commission purchases land at established market values from willing sellers. After purchasing this land, the governmental agency may lease the land back to the original seller who may lease it to one of the seller's children or to the most qualified applicant.

While the primary objectives of this program are to facilitate the entry of young people into agriculture and permit an orderly exit of those wishing to leave agriculture, it may also help keep land in agriculture. The successfulness of keeping land in agriculture depends on the competitiveness of the land bank commission's purchase offer for agricultural lands. If they are able to compete with the current market prices, then this program should be relatively effective in keeping land in agriculture. Since the original landowners receive compensation for their land at total market value, there would not be incentives for

them to convert their land to urban uses. This policy instrument should be a relatively stable means of keeping land in agriculture, if well-accepted by the public.

The public cost of such a system depends on both the conditions of the lease and on the manner in which the initial purchase is financed.

## Summary of Different Policies

Table III summarizes the differences in the nine policy instruments which can be utilized to keep land in agriculture. Column one shows whether the original landowner receives compensation for the restrictions on his rights to use his property in any manner he chooses. Under exclusive agricultural zoning, conservation zoning and development restricted to sewered lots the original landowner receives no compensation. Cluster zoning may provide partial or complete compensation depending on the nature of the housing market. If the landowner can pass along the costs of maintaining open space to new homes, he will receive indirect compensation for not developing this area. Both the use-value assessment of agricultural lands and the New York agricultural districts give farmers tax reductions compared to market value assessments. This partially compensates landowners for the restrictions placed on their use of agricultural lands. The final three policies: transferable development rights, public purchase of development rights, and land bank programs pay farmers for the restrictions put on their land use.

The degree of permanency of each policy alternative depends on many factors. One of the strongest influences is the distribution of the benefits and costs to the property owners whose land use activities are restricted. Landowners adversely affected have been quick to seek changes, e.g. variances in zoning ordinances. Quite frequently these variances have been granted since

the economically injured parties plead their cases with more force than the rest of the community.

While many in the community may benefit from strict adherence to the zoning ordinance, the few which are damaged by the ordinance are granted the variances that they seek. The degree of permanency reflects the degree of compensation provided to landowners whose property rights are restricted.

As column three indicates, four of the nine policies cover only some of the lands in agriculture. If the use-value assessments are voluntary then it too may only cover part of the land.

The public costs of each policy are shown in the fourth column. All three zoning alternatives plus restriction of development to sewered lots have low public costs. This is largely due to the lack of compensation to the landowners whose land use is restricted. Use-value assessment of agricultural lands and the agricultural districts may provide some tax relief to farmers. Consequently local units of government may forego tax revenues. Transferable development rights involve no direct governmental expenditures and no foregone tax revenue so the cost of this option is relatively low even though landowners with restrictions on their land use are compensated. The public costs of public purchase of development rights and land bank programs is difficult to predict. The particular arrangements in each option could result in either net gains to public revenues or substantial public costs.

The use of any of these policies raises many questions. Will efforts to preserve land for agricultural use conflict with, or complement local efforts to attract industry? How will each proposal effect the cost of housing? If development is restricted to poor agricultural lands, how will the cost of construction be affected? Many families look forward to owning acreages in rural areas. Do the benefits of discouraging scattered developments exceed the costs? Or should we relax and enjoy it? In some areas the rational policy may be to use traditional agricultural zoning which allows non-agricultural development.

The final selection of a policy instrument by either a county or the

state will undoubtedly include consideration of the need for any public action, the public costs involved in implementing such a program, the impact upon private landowners and also the degree of effectiveness of the instrument selected. Value judgments about the trade-offs between the public and private costs must be made in selecting the appropriate policy.

The final decision cannot be made by an economist, soil scientist or urban planner. Rather this requires political value judgments by local and state representatives. It's the voter's responsibility to communicate their opinions to their elected representatives.

TABLE III -- ALTERNATIVE PUBLIC POLICY INSTRUMENTS FOR  
KEEPING LAND IN AGRICULTURE

Instrument	Compensates Landowner	Degree of Permanency	Covers All Agri. Land	Public Costs
Exclusive Agricultural Zoning	No	Low	Yes	Low
Conservation Zoning	No	Medium	No	Low
Cluster Zoning	Indirectly	Medium	Yes	Low
Development Restricted to Sewered Lots	No	Medium	No	Low
Use-Value Assessment of Agr. Lands	Partially	High	Yes	Variable
Agricultural Districts	Partially	High	No	Variable
Transferable Development Rights	Yes	Very high	Yes	Low
Public Purchase of Development Rights	Yes	Very high	Yes	Variable
Land Bank Program	Yes	Very high	No	Variable



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