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Land Use Policy: Implications for
Commercial Agriculture

Lawrence W. Libby

Introduction

Land use policy has evolved in the 70's as one of the most pervasive concerns in American society. Its importance is acknowledged by groups of great diversity, though few agree on its bounds or content. In some sense land use patterns are a physical template of all the pressures inherent in location of people and things in modern society. Debate is focused on land but reflects more basic human motivations and values--stability, privacy, freedom, and income. Specific land use institutions ^{1/} come and go. They aren't spontaneously generated; they evolve from political bargaining among groups perceiving inequity in the existing set of decision rules.

Agriculture, a land intensive industry, has a direct stake in all of this. The particular land use institutions of current interest, however, are less important to the agricultural sector than are the pressures that created them. Further, while the immediate interest here is agriculture, the issues pertain as well to other open land uses. Attention will be focused on the most prominent "new" laws and proposals for comprehensive land use planning and control by state and federal government.

Pressures on Farm Land

The basic pressure underlying land policy concerns the redistribution of rights to "use" land. ^{2/} Individuals or groups with little access to

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land, either because they live in land-poor areas or just don't "own" land, are seeking to pry certain rights loose from the ownership bundle. The basic intent of those espousing various land use proposals is to achieve a "better" distribution of opportunities for use of land, hopefully defined in terms of some community purpose. Those who currently have land rights, including farmers, greet with predictable skepticism these proposals for redistribution.

Land and Environment. Much of the impetus for new land use proposals affecting farm land has a broadly defined "environmental" focus. Beyond the rhetoric of environmentalism, this aspect of land use policy is concerned with an assortment of previously unrecorded benefits and costs of individual land use decisions. Some of these entail clear monetary effects, others relate to prevailing aesthetic standards or to the long run physical and economic viability of the resources.

Application of modern agricultural technology has facilitated release of land from farming to other uses. In that sense, agriculture has contributed a degree of flexibility to land use planning. At the same time, technology has produced side effects that generate costs for communities and individuals. The predictable response by those forced to bear the external cost has been the effort to shift those costs back to the farmer through regulation. Water contamination by pesticides, plant nutrients, and sediment have been of particular concern. Concentration of livestock in intensive agriculture has created effluent problems. Open field burning of crop residues and various types of agricultural processing create costly air pollution. Regulations and quality standards force the external costs back on the producer, clearly raising the costs of farm production [10].

Other costs are less precise though equally important. Farming can produce noise and odors deemed offensive under prevailing standards. These costs may be recorded in declining value of surrounding property, or go unmeasured. Concerns that "ecologically unstable" monoculture crop production may result in net calorie losses and may limit disease resistance inherent in diverse plant communities have also been articulated. [8, p.192-95]. While perhaps not yet a source of major political pressure for revisions of land policy, these and related possibilities should be considered in long run policy.

Farming as a land use also produces certain benefits to users other than the owner, benefits that these users would like to identify and then protect. Agricultural land is increasingly considered a valuable national economic asset. In times of world food shortage, production potential of American farms is clearly a critical national resource, for humanitarian purposes or balance of trade. Wheat for oil, perhaps. Other returns are less economic or at least less directly so. New Jersey, California, Connecticut and other states have undertaken land use programs essentially aimed at the open space character of farm land [21]. The presence of farms apparently contributes favorably to the living environment of a state or region beyond any direct economic activity generated by the business. The contributions might include availability of "farm-fresh" produce, relatively attractive open countryside that is uncluttered and free of air pollution, and in some cases, recreation. Farms are even thought by many to be an essential element of American life--just a nice place to know about. At least people think these benefits exist, and that's the important thing.

Price Pressure. Few land uses return less per unit of land than agriculture and other open land uses. Price of land invariably reflects expected future earnings discounted by some measure of uncertainty. The possibility of higher future earnings is particularly significant for open land. Chances for future development, no matter how remote, can affect the farmer's willingness to invest in the business. Far more land is affected by the possibility of development than can ever actually be used. The frequent result is that much land is prematurely pulled out of farming by unspecified development potential when land allocation relies entirely on a land market replete with misinformation.

Land and Political Boundaries. Another source of pressure for innovation in land management institutions concerns the capacity of small governmental units to effectively internalize the impacts of private decisions on farm land. Their reliance on land taxes for local services is a formidable incentive for the development of open land. Development may in fact be best for everyone involved, but to the extent that retention of farm land or modification in timing and pattern of change generate social benefit, some public action might be useful. Any social benefits would clearly accrue broadly to the state or region. Small units of government--a township or even county--might be unreasonably burdened if asked to bear the direct costs for a program that would produce those benefits.

Obviously, agriculture and open land are not uniformly distributed. There is no reason to expect residents of land-rich localities, whose private use decisions are in some sense precluding opportunities for residents of more populous areas, to unilaterally alter their decisions. They have nothing (or little) to gain from such action, and much to lose.

Policy Response

Proposals for new land planning and control institutions have surfaced at the national level and in many states. Their predecessors have haunted the legislative halls for several years and further revision is likely. Some sort of national program to urge, encourage, or require local and state action for land use planning and control is nearly a certainty in the mid-70's.

National. Attention has been focused on companion proposals introduced by Senator Henry Jackson (S.268) and Representative Morris K. Udall (H.R. 10294). The former was passed by the U.S. Senate on June 21, 1973 by a vote of 64 to 21; the latter was introduced in the House in February, 1973, and on June 12, 1974 was stymied by 7 votes in a rule measure on the House floor. It will be back in some form in the 94th Congress. Roots of the two proposals go back to the Public Land Law Review Commission report of 1970 [24] and the model land use code of the American Law Institute [1]. While their provisions will not be detailed here, [29,31] their basic purpose is to encourage states to undertake planning and land control programs by providing federal dollars for those states meeting federal planning guidelines. Whatever their final form, these guidelines clearly will be aimed at pressure sources identified above--land uses with significant spillover effects. The U.S. Department of Interior will be responsible for a wide range of coordinating activities. These are not the only national proposals, but clearly the most significant.

The political climate surrounding these national initiatives to guide planning and control of private land has been turbulent. Provisions to withhold certain federal funds from states that fail to act have died

painfully in Congressional committee rooms. At issue was Department of Interior oversight of spending programs of other agencies--an untenable situation in a competitive bureaucracy. Support for federal spending in states was predictably strong at first, though perceived "strings" attached and apparent redistribution of rights from state to the national level have caused some second thoughts. While neither proposal mandates state action, the feeling by some is that no state can resist the money. Once the flow of money is established, states would be acting as "agents of the federal government" in complying with minimum planning standards. [6, p.E269]

Economic slowdown in 1973-74 has apparently contributed to a substantial backlash against further environmental legislation, including these national land use proposals. The National Environmental Policy Act, cornerstone of present environmental policy, has been blamed for everything from high food prices to the energy crisis. The major complaint has been that NEPA and these land use proposals are too loosely defined and become an umbrella for all sorts of legal actions to limit development. In arguing before the House Rules Committee for indefinite postponement of H.R. 10294, House Minority leader John Rhodes cited recent court actions delaying the Alaskan pipeline and limiting timber harvest by the Forest Service as examples of environmental extremism that occur with open-ended legislation. A subsequent suit has challenged the entire 1974 budget of the Forest Service, pending investigation of environmental impacts. The underlying concern here is the increasingly vigorous articulation of the social element of individual land use decisions, implying a wholesale redistribution of land use rights from persons with fee ownership to the ill-defined "general public." Markets, where transactions between owners can internalize all kinds of expected

utility from land, are replaced by courts for those "users" damaged or excluded from the market for some reason. Congressman Rarick of Louisiana summed up the opposition to this redistribution of land rights: "We must not allow over-reaction to environmental concerns to overshadow our concern for human rights and basic freedoms including the right of private ownership and control of property." [6, p.E269] Idaho's congressman Steve Symms completed the thought, "...freehold property ownership still forms the basis of human liberty and a republican form of government. Human rights and property rights are inseparable." [29, p.103]

Interests and areas of the country benefitting most from current distribution of land use rights and the set of institutions for land transfer have been most vocal in their opposition. States or regions with plenty of land but relatively poor economic circumstances welcome sale of land that might generate income and jobs. For them the potential social costs of these private transactions are far outweighed by potential advantage.

The American Farm Bureau Federation speaking for over two million member families, argues that major land use discretion should stay with the owner. When governmental action is unavoidable that action should be at county or local level and the private owner should be fully compensated for any loss in land value that results. [30, p.364] Many farmers see national or state land use initiatives as the latest in a series of costly interventions--NEPA, sedimentation controls, federally mandated health and safety standards, and now this. They have opposed state initiatives as vigorously as national. The real concern is not the level of government, but what those governments might do. Farmers apparently anticipate that fewer rights will be transferred from owner to public when a unit of government serving more owners than "public" has decision authority.

Timber interests have been equally skeptical, though seemingly less vocal than agriculture. Because of 187 million acres of public timber, decisions made in Washington strongly affect all forest use policy. National land use programs, requiring particular attention to environmental characteristics of forests, might shift some of that discretion down to the states or laterally from Agriculture to Interior, thus upsetting the fragile set of compromises and understandings that have evolved over the past 50 years or so. Farmers worry about power going up to the states; foresters worry about losing it down to the states; both fear a power redistribution favoring those who experience the secondary effects of private decisions.

State. The real action in public influence over private land decisions is at the state level, rather than the national. Land use planning and control programs affecting agriculture are in operation or under consideration in about 40 states. The degree of state level influence varies considerably among the states. Only Hawaii has state-wide land use zoning. Several -- Florida, Oregon, Michigan, Maine, for example -- have limited initiative to protect specific resources deemed to be of state-wide significance. Included are shorelands, land bordering scenic or natural rivers, wetlands, flood plains, wilderness, power plant sites, and other areas of critical state concern. While care is taken in these laws to protect Constitutional guarantees of due process and just compensation and to provide a significant decision role for local governments, state initiative clearly implies an allocation of land use rights emphasizing the common property components of land benefit. The police power offers the basic legal rationale to protect these rights held in common by all citizens, in trust to the state. The state might prefer that local juris-

dictions enact and enforce the zoning, but retains final authority. In Florida, for example, state land development regulations can override the local rules if deemed to be inadequate to protect "areas of critical state concern." [5] In Michigan, local zoning ordinances to protect shorelands must be approved by the state Natural Resources Commission. [19] All establish a strict permit system to control development in these areas.

Proposals for broad state designation of "critical environmental areas" have been stymied in Maryland, Massachusetts, Washington, and Michigan where interests perceiving loss from the implied redistribution of rights have held the line. Of major concern is the open-ended definition of "critical areas", leaving too much discretion with the planning agencies.

Another group of state land use programs for open land and agriculture implies a greater concentration of use rights in fee simple ownership. That is, private owners are encouraged to use their land in ways that generate broader social benefits. Differential assessment laws in over 30 states attempt to encourage agriculture as a land use by reducing the real estate tax burden on actively farmed land. Some laws involve deferred taxes, others require certain land use compliance from the owners, but basically state land policy objectives are sought through the responses of individual owners to publicly provided incentives. [12] Unique incentive programs exist in New York and Michigan. New York encourages local governments to establish agricultural districts. Michigan's program involves an income tax credit for the amount by which property taxes exceed 7% of a farmer's income. [20]

As of mid-1974, transfer of land use discretion is still very tentative in states like Arizona, Nebraska and Iowa where land remains primarily a

producer's good, and fee ownership is the predominant source of access to land. Nebraska has enacted a Constitutional amendment permitting differential assessment of farm land; Iowa state legislators have investigated the alternatives for preserving agricultural land. Still other states--Oklahoma, Kansas--are almost totally silent on the matter.

Several states are investigating the feasibility of establishing a market for rights to develop land. This approach acknowledges the need for both open space and development and creates a market for the development right that may be transferred from a low density district to a district where greater density is possible. [9] One proposal in Michigan recommends that the state purchase farm development rights at market prices to provide open land with state controlled development potential. [17]

The particular distribution of land use rights implicit in a state land use program is clearly a function of prevailing economic circumstances in that state. Raup suggests that major redistribution of land rights has only come in response to severe and pervasive crisis--threats of blockade or food shortage in Europe, for example, generated support for immediate action. [25] Similarly, the imminence of economic or environmental calamity was essential backdrop for major state initiative in Hawaii, Vermont, and Florida.

Other observers perceive a quiet revolution in the form of gradual though continuous erosion of land use discretion retained by individuals and local governments with subsequent build-up in state and regional government. [3] Impetus and support apparently come from a population whose relationship to land is primarily secondhand--they gain or lose from the actions of other owners, rather than from ownership itself. In any event, real barriers to state action are political and economic, not legal.

Implications for Agriculture

Open land, much of which is farmed, is the central focus of pressure for changes in land management institutions. There is economic pressure to develop, political pressure to preserve, and farmers are caught in the middle. There is an important distinction here between land use controls and those environmental controls more directly related to air, water, or noise pollution. Both entail adjustment in the set of management options available to the farmer; both could increase costs of farm operation. Land use institutions, however, are focused on the quantity and quality of land available for use and sale by agriculture, while other environmental controls seek to alter production practices on the current land supply. A primary goal of new land allocation rules discussed here is to identify specific areas that should stay relatively open, for whatever social benefit might result.

Direct action at the national level to control allocation of farm land into and out of fee simple ownership for environmental objectives is unlikely. The important effect of national legislation will be as a stimulus for state and local action. As noted, action comes first in those jurisdictions where failure to act would entail clear and pervasive cost for many people. Support for general precepts of environmental balance will not translate easily into votes for major state level action. People look for immediate and separable effects. Our political system responds to crisis -- we aren't much good at anticipating things. Even the availability of federal dollars cannot manufacture crisis. Congressman Rarick of Louisiana warned his constituents, "...it must be pointed out that none of this money is to be used in any productive manner or to contribute to our economy. It merely goes to pay the cost of expensive

planning specialists who are supposed to know more about what is best for a community than they themselves or their elected officials. [6 p.E269]

Whether initiated by the state, localities, individual owners, or some combination, designation of open land districts has important implications for agriculture.

State Initiated Open Areas. Highly productive farm land is clearly eligible to be considered an "area of critical state concern" in its own right. In both versions of the National Land Use Planning Act of 1974, areas of critical environmental concern are defined to include "renewable resource lands where uncontrolled or incompatible development could endanger future water, food, and fiber requirements of more than local concern . . . to include agricultural, grazing, and forest lands." In the 1973 Michigan proposal, [18] an area of critical environmental concern could include "soils of USDA classes I-IV or otherwise suitable for agricultural or horticultural purposes." A similar proposal in Maryland included "productive agricultural lands" on a list of characteristics to be considered in designating areas of critical state concern. [16] While neither bill got very far on first outing, the principle has been established.

Florida's critical areas law (Act 380), has quite a different focus. It specifically prohibits regulating highways, utilities, and agriculture on behalf of critical natural areas. Florida's intensive agriculture is viewed by many conservationists as a threat to the delicate fresh water balance of the state. [5,22] Agriculture in Florida has been characterized, probably unfairly, as a holding pattern for development. Further use of the Florida law may treat agriculture differently--the orange groves and intensive vegetable lands are critical to the economy and attractiveness of the state.

Designation of specific farm acres as "critical environmental resources" for the state can have several possible impacts for the farm. If highly productive farm areas are designated, the following types of impacts may be anticipated:

1) Land value will be affected--if the land already carries a value increment anticipating future non-farm use, that increment will be reduced; if it has no such value when the designation is made, future levels will be constrained by the permitted uses. The lid on future land value may affect borrowing capacity for the farmer. Rural bankers in Maryland predicted such an impact from the Maryland proposal. [32] Property taxes will also reflect these use constraints. If the farmer is already paying taxes on development potential, his tax basis will decrease to agricultural value. With less incentive to speculate on future development possibilities, the farmer could concentrate his management energy on his business and investment needs. All of these impacts will be affected by the length of time for which the critical areas designation is made.

2) Market value for nearby farm and open land not in a district could go up substantially, depending on development pressure. Such has been the case following enactment of the Coastal Zone program in California, where developers have scrambled to acquire the few remaining unrestricted areas. In some cases, developers have simply postponed their plans to "wait out" the restrictions. Holding land does entail opportunity costs, though, and some owners have sought variances on the basis of undue hardship. Agriculture will be a poor competitor on these lands--a California farmer/developer estimated that even the most profitable crop mix on his 40 coastal acres would lose \$6,000 a year. [13, p.31-36] In any event, development potential and related

values will be redistributed. If there are significant areas of land both with special designation and without it, in a single taxing jurisdiction, the tax load will be redistributed. If, on the other hand, a local taxing unit loses much of its development potential, future revenue needs will have to be met through a rate increase.

3) Restrictions on farm practices may be encountered when these districts are close to population centers. Given the nature of political support for open space legislation, proximity to non-farm population is likely. There might be strict regulations on pesticide use, construction related to the farm, machinery use and other farm practices that appear to generate social costs. The whole permit approval procedure would focus political attention on farm operation. Burden of proof would be on the individual seeking to change land use in the district, to demonstrate that the change would not compromise the intent of the designation.

A second type of critical areas designation directly affecting agriculture may be aimed more specifically at the aesthetic or environmental character of open land. Farming may be sought essentially as a caretaker for attractive rural scenery. The land involved might be of lower productive quality--hilly or uplands. This land is also less responsive to intensification and more likely to produce run-off problems. To the extent possible, farmers will intensify production on better land and maintain some sort of multiple-use character on poorer land in a critical areas district.

When the primary objective of a critical area designation is preservation of an ecological setting threatened by agriculture, increased costs of farm operation are inevitable. The Big Cypress area in Florida is an example. Proposed regulations, later modified, would have restricted burning, ditching,

filling, dredging, pumping groundwater, and road-building on lands in the 2450 square miles of watershed.

Local Initiative for Open Areas -- the New York Case. The general types of effects on agriculture will hold whether state or local governments initiate action to maintain open land. But the question of whether those effects harm more than they help may be answered differently at different levels of government. In New York, for example, farmers request designation as an agricultural district. Their action is clearly sensitive to needs of the farm business. [7,2] The presumably rational farmer would not apply otherwise. He may respond to social pressure from the surrounding community or try to insulate his business from development pressure for a time, but whatever the motivation, it reflects his own judgment. The declared intent of the New York Agricultural Districts Law is to facilitate active agriculture, rather than to preserve a particular land use pattern.

Application for a district must come from owners controlling at least 10 percent of the land in the proposed district, or 500 acres. Total consensus is not sought. Conceivably, some farmers could find their future options constrained by the actions of their neighbors rather than their government. Once a district is formed, agriculture is clearly designated the primary use. Local or state regulations that might compromise or unreasonably restrict farming in those areas are prohibited. No attempt is made to alter or constrain agriculture for the social benefits it might produce. If commercial agriculture contributes to the aesthetic character of the region, so much the better. The New York program has been termed a "soft, non-authoritarian alternative" to the absolutes of police power implied in direct state action. [7]

This type of program has appeal. It attempts to accomodate rather than confront the self-interest of land owners. Broad support among the urban and suburban poplation of New York confirms that agriculture as agriculture contributes social benefit. Over 1 million acres have been designated for an initial eight year period. The hope is that 5 million of the state's 8 million cultivated acres can be preserved in some way. [2, p.2] The remaining acres may be harder to pin down, however. Agricultural districting does not attempt to address the broad expression of open land benefit implied in "areas of critical state concern." Pressure for other land use institutions, or at least application of the districting concept to other open lands, may be anticipated in New York. The agricultural districting effort has worked within its limitations; by retaining maximum discretion for the farmer it has encouraged agriculture and bought some time; but its long run response to pressure on open land should not be overestimated. Other land programs emphasizing owner initiative have the same limitations. At some point, people will be willing to trade some inconvenience for the farmer, and whatever that may do to supply of open land, for more direct land access.

A Policy Strategy for Agriculture

The basic impact on agriculture of these broad land use programs is apparently to further intensify food production on those lands physically, economically, and politically capable of sustaining production in the long run. Pressure for non-production uses of farm land will continue, but so will demand for food. The prevailing policy challenge is to encourage a rate and pattern of intensification that accommodates all three capability parameters.

Physical capability, including some notion of ecological stability, is perhaps least susceptible to manipulation, though additions to physical supply of farm land have been observed in Florida and parts of the west. [15]

Economic capability imposes prices on physical land characteristics.. It has been the key dimension of resource adjustments in agriculture in the past 30 years, characterized by increasing substitution of capital for labor.

Political capability refers to the willingness of non-production "users" of farms to permit adjustment to economic capability on those acres that can take it. A complementary adjustment would emphasize aesthetic or environmental characteristics of lands that will grow less. This is not a license to ignore social costs of intensive agriculture, but simply to encourage the public to look elsewhere for land qualities not consistent with active farming. Clearly some highly productive acres will be more valuable in some other use. Absolute land scarcity on a macro-scale is unlikely, though local battles on specific acres may be fierce.^{4/} The charge in building a land use program sensitive to agriculture is basically simple:

- 1) Document the characteristics, location, and needs of agriculture as a use of land. Emphasis must be placed on the set of conditions essential to successful agriculture to dispel the notion that preserving land preserves agriculture. Land use policy must respond to broader policy goals for agriculture.

- 2) Initiate land programs that explicitly acknowledge the role of the farm manager in intensive food production. Retaining land is not enough. The economic circumstances that encourage active farming must also exist in those areas. Food production must be increasingly sensitive to

air and water quality needs and may contribute substantially to the aesthetic character of a region but policy should acknowledge that not all farms can provide all the benefits of open land. When the judgment and initiative of the land owner are instrumental in the land program, chances for success in retaining agriculture would seem to be better.

3) Encourage retention of other open land, farmed if possible, with greater emphasis on its environmental character. This may be the uplands, or floodplains, or soils of low productivity, where openness or attractiveness is the essential quality sought. Some direct non-farm use may be possible--fishing, hunting, hiking, and even snowmobiling have been permitted on private farm land without serious disruption.

The challenge for agriculture is to articulate clearly and forcefully the distinction between farming and open land for other uses. With a few exceptions that distinction has not come through in state and national land use policy. If agricultural areas are to be "areas of critical state concern", explicit information about agriculture should be part of the evaluative process. This will require active involvement by specialists who know agriculture. Economist Don Paarlberg has warned that agriculture must be concerned about who controls the agenda for agricultural policy. It's bad enough to lose the control of the agenda, he says, but more critical is to know you have lost control. National and state land use policy has evolved as a "white-hat issue" basically concerned with natural beauty, land stewardship, and other unquestionables. Discussion has centered in the Department of Interior at the national level, and the state counterparts in Departments of Conservation, or Natural Resources. Agriculture has been conspicuous by its absence. The implicit rationale for agriculture's disinterest has been that land use policy is essentially peripheral to

agricultural production and therefore of marginal interest to legitimate professional agriculturists. The obvious problem with this reasoning is that land use policy is responding to demands for land use patterns that directly affect availability of land to farming.

As noted, agricultural interest groups have consistently opposed, studiously ignored, or smugly disregarded the types of national and most state land use initiatives discussed in this paper. Not until Fall of 1973, reports the American Farm Bureau, has land use legislation become a consistent agenda item at state and regional meetings. The essential thrust of most opposing testimony rests on the familiar shibboleths of private property ownership. Any restriction of private discretion, they argue, must receive full indemnification. "Compensatory zoning" is the legal expression gaining considerable favor among many groups. If planning and land use control are absolutely necessary, only the most local government should do it.

A major contention of this paper is that agriculture must deal more directly and substantively with policy choices in land use. The strategy of delay and sloganeering can produce temporary concessions, but may be suicidal in the long run. Abstract discussion of private rights versus public is irrelevant. The question is whose rights count enough to gain "public" status in legislation. Even Constitutional protection of ownership has few absolutes--interpretation is some function of the prevailing balance among competing demands for use. Bosselman, Callies, and Banta vigorously defend the argument that government is capable of considerably more redistribution of rights than accomplished through police power thus far, with virtually no requirement for compensation. [4] In addition,

some communities have experimented with zoning--resulting innovations suggest new life for this traditional technique. [14]

Total reliance on local government as the level most likely to generate land use decisions protecting the discretion of farm owners may also be fallacious. By their very nature, local governments direct their attention, revenues, and powers toward the needs and preferences of the immediate constituency. Perhaps current land ownership and demographic patterns combined with reliance on land taxes for local services does favor owners of open land. But a township or county government answering primarily to non-farm rural or suburban constituents, possibly even freed by tax reform from the yoke of increasing land use intensity, might be increasingly sympathetic to "preserving" the non-production benefits of farmland with little concern for or understanding of the needs of farmers. A moratorium on rezoning for development has been enacted in Fairfax County, Virginia--an understandable reaction to a deteriorating local environment. Similar proposals have arisen elsewhere.

Well conceived state level land use programs, even those sanctioned under a federal land policy, may in fact be more sensitive to the combination of factors necessary for viable commercial farming. We must assume that the farmer is more than just a land value speculator, while acknowledging his reluctance to sacrifice all possibility of buying or selling land consistent with farm operation. The farmer cannot expect unlimited land use discretion in the future. Our changing political environment just will not permit that. The challenge for farmers, farm interest groups and professional agriculturists is to participate actively in building land use institutions that retain the elements of discretion necessary for agriculture. Given the dispersed character of agriculture and the

complexities of understanding and documenting the needs and contributions of agriculture, those institutions may need a state or regional base.

Conclusions - Policy Choices

The essential policy issue that emerges from controversy over land use planning and control is who will pay for the benefits perceived from altering the pace and pattern of land use change. In Coasian terms -- who must (should) buy out whom? The capacity to impose costs on others is an expression of relative political power. Decision institutions formalize these power relationships through the rights of the various interests competing for scarce resources. [27] Pressure for new land use programs has been described here as a push for reallocation of rights to land, and therefore the costs of this institutional change. But allocation of costs affects the outputs of land use institutions. Those who support a certain distribution of the cost burden should be aware of the impacts of those costs on the land use pattern.

Land use controls, particularly those aimed at "open space", seem to generate widely dispersed small increments of benefit. Direct cost of land control, on the other hand, may be highly concentrated--the few owners whose land use options are limited, the local government that loses property tax base, the region that sees limits on its potential for development. Beyond the obvious questions of equity, is the matter of how the qualities sought in land regulation are affected by that cost distribution. To a large extent, perhaps more so than perceived by most groups lobbying for open space programs, the critical environmental resource known as agriculture requires major discretionary action by the person managing that land. Historically land use planning has been concerned primarily with

developing or not developing land. Open land was valued only for its lack of activity, or as a residual for future development, rather than for the combination of factors defined as agriculture.

If land policy is needed to retain agriculture and if positive exercise of management discretion by the owner is necessary for the qualities desired, then those demanding the non-owner rights may have to bear some of the cost of providing them. This may mean compensation for acquired rights, compensation to the local government losing land tax revenue, or emphasis on owner initiative, as in New York. By the same token an increasingly sophisticated voting public will not pay for rights or qualities that it never gets. Open-ended incentive programs--including preferential tax laws for farm land--are probably an unacceptable balance of discretion on the side of the farmer. Support for controls to retain agriculture may be broad, but it is shallow--very sensitive to evidence of windfall gain for the speculator dimension of farm ownership. Restrictions of all kinds are an increasingly familiar fact of life and land owners will not win compensation for controls that still permit significant use rights.

A second major choice in land policy concerns distribution of authority among levels of government. There are few dependable rules to go by in deciding what will be done where; there are distinctions between legality and political acceptability. Charles Haar has written of the ". . . cumulative deterioration of the fit of any set of governmental institutions with the needs and wants of the constituencies subject to their jurisdictions" [11] Increasing evidence of inter-relatedness across local boundaries suggests continuing attention to decision units that can allocate impacts between those who gain and those who lose in the search for consensus.

The smallest local units have important strengths, but retaining agriculture and open space is not one of them. Metropolitan government encompasses open land and concentrations of people, but has not yet achieved sufficient political legitimacy nation-wide to undertake major land controls. The state, with significant Constitutional authority and a well tested system of representative government may be the most appropriate level for directing aware consideration of agriculture. The state departments of agriculture must take the planning process far more seriously than they have thus far. Effective planning can not be done exclusively by one agency or one level of government. There must be a sharing of responsibility and authority.

Care must be taken to avoid insulation of planning from people affected by it. Pressure for local rather than state planning largely reflects a feeling of isolation from big government. Bureaucracy, politicians, and government in general are not high on the credibility list--the more distant the government, the less its credibility. Agriculture has an impressive network of contact with its constituency, through soil conservation districts, cooperative extension, and others. These could help build and maintain a believable planning process.

A third area of public choice concerns the structure of a future agricultural industry. Reports of the demise of the extended family farm and takeover of land by government are at least premature. The role of private management initiative is great and not likely to decrease. Several possible impacts on structure may be identified. Increasing regulation will affect the cost functions of agriculture and will likely increase the economic advantages of further consolidation and substitutions of capital for land. Greater dependence on production technology may in fact contribute

to environmental problems that led to initiation of the program in the first place. Under some conditions, land planning may effectively increase supply of farm land by restricting other uses, thus altering the current trend in farm numbers and keeping land prices down. To the extent, however, that farmers rent from owners holding large amounts of land as a long term hedge against other investments, or for short run capital gain, controls could limit that farm amangement option. Land corporations need favorable expectations of future appreciation in the value of that asset to attract investment funds. Specific knowledge of the land quality and ownership pattern is necessary for accurate prediction of effect of controls on structure in any given area. In general, though, relative impacts of alternative land use controls on the conditions conducive to private disaggregated management should be considered.

A fourth consideration in building land use institutions is the degree to which the most productive farm land of the country may be a major national asset; just as vital to the future economic health of the country as is oil or pure water or a viable real estate industry. There are wide ranging opinions as to how critical the land supply problem for agriculture really is, for the long haul. Some have called for extraordinary measures to "save" farming; others suggest we already have too much land in farms. As is usually the case, there is evidence to support both positions. Agricultural land may have the common property characteristics decribed as the "pool effect" in ground water supply problems--the contribution of each acre or each farm or each farmer to the total industry may be insignificant. It won't be missed, so there is little push to save it. The cumulative effects of land policy that overlooks the social costs of land use decisions based strictly on the marginal costs of individual farm enterprises may lead to serious depletion of an irreplaceable, or at least very costly, national asset.

Footnotes

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1/ "Institutions" as used here refers to "sets of ordered relationships among people which define their rights, exposure to the rights of others, privileges, and responsibilities. [28]

2/ I agree with Raup that the distinction between land as a resource and land as a commodity is irrelevant. Conflicts arise because of differing human perceptions about what land is or should be. Some of these differences may be captured in a price a user will pay, others are more illusive. Without these differences, though, there is no policy. [25, p. 80-92]

3/ Impeachment politics has reportedly lent currency to this argument. On the day before the crucial House vote, Interior Secretary Morton publicly reversed his position and opposed H-10294. Representative Udall blamed Presidential "grandstanding for the right wing."

4/ Otte has estimated that four or five times the amount of land taken for urban uses is shifted to lower intensity agriculture or idled because further cropping is uneconomic. [23]

REFERENCES

- [1] American Law Institute, "A Model Land Development Code", National Land Use Policy, 93rd Congress: An Analysis of Legislative Proposals and State Laws, Washington, D.C.: Senate Committee on Interior and Insular Affairs, April 1973.
- [2] Bensley, W. "Agricultural Districts in New York," Toward An Effective Land Policy for Michigan, Center for Rural Manpower and Public Affairs, Michigan State University, East Lansing, 1973.
- [3] Bosselman, F. and Callies, D., The Quiet Revolution in Land Use Control, Washington, D.C.: Council on Environmental Quality, 1971.
- [4] Bosselman, F., Callies, D., and Banta, J., The Taking Issue: An Analysis of the Constitutional Limits of Land Use Control, Washington, D.C.: Council on Environmental Quality, 1973.
- [5] Carter, Luther, The Florida Experience: Land and Water Policy in a Growth State, Johns Hopkins University Press for Resources for the Future. (forthcoming, 1974)
- [6] Congressional Record, February 14, 1974.
- [7] Conklin, H. and Bryant, W. "Agricultural Districts: A Compromise Approach to Agricultural Preservation", forthcoming in American Journal of Agricultural Economics.
- [8] Cooper, W. and Vlasin, R. "Ecological Concepts and Applications to Planning", Environment: A New Focus for Land Use Planning, Washington, D.C.: National Science Foundation, October, 1973.
- [9] Costonis, J. "Development Rights Transfer: An Exploratory Essay", 83 Yale Law Journal 75 (1973).

- [10] Davis, V., Berry, J., Crosswhite, W. and Dwoskin, P. "U.S. Agriculture--Environmental Controls and Economics", U.S. Department of Agriculture, Economic Research Service. Discussion document for 1973 Outlook Conference.
- [11] Haar, C., "Introduction", Metropolitanization and Public Services, Johns Hopkins University Press for Resources for the Future, 1972.
- [12] Hady and Sibold, State Programs for the Differential Assessment of Farm and Open Space Land, U.S. Department of Agriculture, Economic Research Service, Report 256, 1974.
- [13] Healy, R., "Saving California's Coast: the Coastal Zone Initiative and its Aftermath," 1974, (forthcoming, Coastal Zone Management Journal.)
- [14] Hood, E., "Extension of the Police Power as an Alternative to Meeting Changing Land Use," unpublished technical report for Master of Science, Department of Resource Development, Michigan State University, 1973.
- [15] Krause, O.E., Cropland Trends Since World War II, U.S. Department of Agriculture Economic Research Service, Report 177, April 1970.
- [16] Maryland House of Delegates No. 807, February 4, 1974.
- [17] Michigan Department of Agriculture, "A Concept for Agricultural Land Use", Discussion document, 1973.
- [18] Michigan House Bill No. 5055, July 12, 1973.
- [19] Michigan Public Act 245, 1970.
- [20] Michigan Public Act 116, 1974 "Farmland and Open Space Preservation Act."
- [21] Michigan State University, Center for Rural Manpower and Public Affairs, Department of Agricultural Economics, 1971. Proceedings of the Seminar

on Taxation of Agricultural and Other Open Land.

- [22] Myers, Phyllis, Slow Start in Paradise, Washington, D.C.: The Conservation Foundation, February, 1974.
- [23] Otte, R., "Farming in the City's Shadow", Agricultural Economics Report 250, U.S. Department of Agriculture Economic Research Service, 1974.
- [24] The Public Land Law Review Commission, One Third of the Nation's Land: A Report to the President and to the Congress, June, 1970.
- [25] Raup, P., "Alternative Rules to Insure Land Use in the Public Interest," Increasing Understanding of Public Problems and Policies - 1973, Chicago, Ill.: Farm Foundation, 1974.
- [26] Russell, M., "Land Use Bill is Killed", Washington Post, 12 June, 1974.
- [27] Samuels, W., "Welfare Economics, Power, and Property", Perspectives of Property, Institute for Research on Land and Water Resources, The Pennsylvania State University, 1972.
- [28] Schmid, A. "Analytical Institutional Economics: Challenging Problems in the Economics of Resources for a New Environment," American Journal of Agricultural Economics, Vol. 54, No. 5, December 1972.
- [29] U.S. House of Representatives Committee on Interior and Insular Affairs Report 93-798, February, 1974.
- [30] _____, "Land Use Planning Act of 1974", Hearings before Subcommittee on the Environmental Committee on Interior and Insular Affairs, April 23, 25, 26, 1974.
- [31] U.S. Senate, Committee on Interior and Insular Affairs Report 93-197 June 7, 1973.
- [32] Walsh, E., "Maryland Farmers Try to Block Land Bill," Washington Post, March 26, 1974.