

The World's Largest Open Access Agricultural & Applied Economics Digital Library

This document is discoverable and free to researchers across the globe due to the work of AgEcon Search.

Help ensure our sustainability.

Give to AgEcon Search

AgEcon Search
http://ageconsearch.umn.edu
aesearch@umn.edu

Papers downloaded from **AgEcon Search** may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C.

ALBANIA SERIES

September 1997

Agricultural Land Protection Policy for Albania: Lessons from Western Europe, North America, and Japan

Harvey M. Jacobs



AN INSTITUTE FOR

RESEARCH AND EDUCATION

ON SOCIAL STRUCTURE,

RURAL INSTITUTIONS,

RESOURCE USE,

AND DEVELOPMENT

UNIVERSITY OF WISCONSIN —

MADISON

AGRICULTURAL LAND PROTECTION POLICY FOR ALBANIA: LESSONS FROM WESTERN EUROPE, NORTH AMERICA, AND JAPAN

by

Harvey M. Jacobs

WORKING PAPER, NO. 6

ALBANIA SERIES

Land Tenure Center
University of Wisconsin–Madison

September 1997

This paper is an output of the Land Market Action Plan in Albania, implemented by the Project Management Unit of the Immovable Property Registration System and the Coordinative Working Group (Tirana, Albania), with support from the Government of Albania; from the Land Tenure Center, University of Wisconsin–Madison (financed by the U.S. Agency for International Development, contract no. EUR-0049-A-00-4031-00); from the European Union's PHARE; and from the Terra Institute (financed by the World Bank's Agricultural Sector Adjustment Credit project with the Albania Ministry of Agriculture and Food).

Prepared for

PROJECT MANAGEMENT UNIT, IMMOVABLE PROPERTY REGISTRATION SYSTEM, TIRANA, ALBANIA

by

LAND TENURE CENTER, UNIVERSITY OF WISCONSIN-MADISON, USA

in

MARCH 1995

All views, interpretations, recommendations, and conclusions expressed in this paper are those of the authors and not necessarily those of the supporting or cooperating institutions.

Copyright © 1997 by Harvey M. Jacobs. All rights reserved.

Readers may make verbatim copies of this document for noncommercial purposes by any means, provided that this copyright notice appears on all such copies.

CONTENTS

			Page		
1.	Introdu	ction and overview	1		
2.	Country	y profiles	4		
	-	he Netherlands	4		
	2.2 S	weden	5		
	2.3 F	rance	6		
	2.4 T	he United Kingdom	8		
		Canada - Ontario	8		
	2.6 C	Canada - British Columbia	9		
		Canada - Quebec	10		
		anada - Prince Edward Island	11		
		J.S.A the context	12		
		J.S.A Wisconsin	14		
		J.S.A New York	16		
		J.S.A Oregon	17		
	2.13 J	apan	19		
3.	Country summaries				
	Table 3.	1 Cross-country comparison	20		
Re	eference	s	23		

AGRICULTURAL LAND PROTECTION POLICY FOR ALBANIA:

LESSONS FROM WESTERN EUROPE, NORTH AMERICA, AND JAPAN

by

Harvey M. Jacobs

Associate Professor
Department of Urban and Regional Planning
and Institute for Environmental Studies
University of Wisconsin–Madison

1. Introduction and overview

Only about 20 percent of the land base in Albania is arable (approximately .2 hectare per person). Because much of the country is composed of steep mountainous regions much of the arable land is adjacent to the country's cities. Three phenomena threaten the integrity of this land. One is migration from the countryside to the cities. Migrants have settled illegal housing on former state farms creating a condition of extensive settlements at the cities edges. Two is migration out of the city to the edges, by urban dwellers seeking higher quality housing. These settlers also are building illegal housing. Three, new private owners of land are settling on, converting and speculating with their land.

There is concern about the conversion of this agricultural land in Albania for at least three reasons. One, the loss of any of this land (when it is not substituted by technological and/or managerial innovation) can represent a threat to the food security of the nation, especially during a fragile period of economic transition. Two, illegal development on agricultural land at the urban fringe imbeds assumed costs for physical (water, sewer, road, and electricity) and social (schools and the like.) infrastructure. Provision of such infrastructure in response to unplanned for conversion is always expensive, and especially so during times of fiscal stress and uncertain public revenue flows. Three, agricultural land which is illegally (and thus often improperly) converted is likely to contribute to environmental degradation—that is, soil erosion, contamination of groundwater and surface water, loss of wildlife habitat, threat to unique/protected ecological areas, as well as the degradation of areas with future tourism, and thus economic development, potential.

^{*} Research assistance for this report was provided by William Craig and Eve C. Yanda.

As one effort to assist the Albania government formulate a policy approach appropriate to the conditions and culture of their country this report has been prepared. It is part of a larger effort being undertaken by the Albanian Ministry of Agriculture and Food. This larger effort is being coordinated by the Project Management Unit for the Immovable Property Registration System of Albania, as part of the Land Market Action Plan in Albania, a collaborative venture of the Land Tenure Center, University of Wisconsin-Madison, USA, and Terra Institute, Ltd, USA, under funding from the U.S. Agency of International Development and the World Bank. The goal of this report is to examine the approach to agricultural land protection in other parts of the world, for the lessons they can provide to Albania.

It turns out that preparing a cross-country comparison of agricultural land protection policy is a difficult undertaking. There are at least two reasons for this. First, many of the sources which describe the details of planning and policy systems do so in such broad terms that it is difficult to extract enough sufficient detail (see, for example, the comparative discussion in OECD 1979). Second, since various authors undertake their research for different purposes there is often omitted mention of important laws or policy structures which end up having significant affect upon a country's land use system [or these laws or structures are downplayed; see, for example, Matsumoto's (1986) discussion of Japan, and the related discussion in this report].

A further issue for this report, however, turned out to be that there is little recent literature on the subject of agricultural land protection policies. Most of the articles found in the English-language literature are six to ten years old, and in turn often rely on other sources that are several years older still. Thus, this survey should be viewed as a somewhat dated catalog of policy approaches which have been used at various times in the respective jurisdictions rather than as a statement of the current policy structure of a particular jurisdiction.

Having offered up these caveats, several preliminary conclusions can be offered based on the research which has been conducted so far. The most important is that agricultural land protection policy can be successfully designed and implemented.

Among the countries, provinces, and states which were studied, the places which have been the most successful at protecting agricultural lands from conversion are the western European countries which suffered food shortages during World War II: The Netherlands, Sweden, and the United Kingdom. The Canadian province of Prince Edward Island, and the U.S. State of Oregon are also among the group of places which has been most successful at protecting agricultural land.

For the most part, the policies of the most successful western European countries were put in place shortly after the War and have been in place for nearly fifty years. The main point of these policies was to encourage agricultural production and thus to avoid future dependence on food imports and future food shortages. The policy program of the Canadian province of Prince Edward Island was established to stifle the influence of non-residents on the land market, so agriculture could continue on the Island. The program in the U.S. state of Oregon was established because of the threat of urban sprawl to the state's agricultural lands. All of these places have been very successful at preserving agricultural land and encouraging agricultural production.

Other countries, provinces, and states have also been successful, though to a lesser degree. For example, France's policy is more recent, having been developed in the 1960s. The emphasis in France seems to have been a political desire to preserve farming rather than a need to encourage agricultural production.

In the other Canadian provinces and U.S. states in North America there has not been a similar concern with food shortages and there has been a more mixed degree of public or political interest in preserving agricultural land. Some of the exceptions are the Canadian provinces and U.S. states profiled in this report. For example, in Canada both British Columbia and Quebec adopted agricultural land protection laws in the 1970s. Both provinces are immense in area, but in both provinces arable land makes up only about four percent of the total land area. Consequently, the possibility of diminishing food production due to development in agricultural land areas was a real concern. In Quebec, the possibility of formal separation from Canada to become a new country has been another impetus to agricultural land protection.

The actual approaches used by the most "successful" countries, provinces and states varies. The Netherlands and Sweden both use a planning system that combines (1) required comprehensive planning by local governments, (2) public purchase of agricultural land which is threatened with conversion, where the landowner is required to sell to the government, (3) a purchase price for agricultural land that reflects its value as food production land, not as if it were put to use for housing or non-agricultural businesses, (4) a system of strict land use regulation (zoning). Both the United Kingdom and the U.S. State of Oregon have (1) required comprehensive planning by local governments, combined with (2) a strict system of planning permission (regulation). The key to the success of the British system is the fact that the landowner does not "own" the right to develop land; this right must be given to them by the government. And the Canadian province of Prince Edward Island has a public land purchase (land banking) program that provides keeps land in agricultural use throughout the province.

Among the places that are successful at protecting agricultural land (though somewhat less so that the others discussed immediately above), the approach used also varies. In France, the central approach is a system of regional-government land purchase organizations. Like in the Netherlands and Sweden these organizations can require landowners to sell their land, and the price paid to landowners is the agricultural use price. The Canadian provinces of British Columbia and Quebec use (1) required comprehensive planning by local governments, combined with (2) a strict system of land use regulation (zoning).

There is strong similarity to the approaches used by these "successful" countries, provinces, and states. In general, it includes required comprehensive planning by local governments, a system of strict land use regulation, and a way to purchase agricultural land threatened with conversion. However, an overview of the information in the full report shows that these places have been successful in preserving agricultural land primarily not because they used a particular policy approach. Instead, they choose to use a particular approach to policy because they had a strong social consensus about the need to protect agricultural land, and the political will to act upon this consensus.

The common factor of a successful system does not appear to be the actual approaches used, but instead how those approaches are used in a political-policy environment which wants them to succeed.

What does this portend for Albania? The situation in Albania for the protection of agricultural land is difficult. Since the change, people have acquired the freedom to move about the country without permission. This is an important symbolic freedom. In addition, since the change the state is seeking to foster individual initiative. The initiation of illegal housing of all types represents both the freedom of individuals to move about, *and* the freedom of the individual to exercise initiative. In addition, an important program in Albania is the establishment of title to private property, and a system of private property rights. Any attempt to control illegal housing, via planning and "regulatory" authority, "smacks" of the former centralized control of the state, *and* requires a body of administrative personnel able to implement such authority. Right now the state, regional and local governments are (a) short of personnel because of their fiscal crises, (b) short of administrative legitimacy to exercise control over land, and (c) untrained in the options appropriate to the conditions in Albania for such control.

Recent, related work in other areas of eastern Europe does not offer a great deal of hope. For example Grava (1993, p. 25) observes, with regard to Riga, Latvia, that "as the switch to a market economy takes place and private ownership becomes the rule there is little to suggest that the local government will be any more successful in controlling sprawl than we have been in the West. Indeed, the inexperience and mounting pressures may soon result in even worse consequences." In a similar vein, Maier (1994, p. 264) ponders what the Czech Republic can learn from the western experience. His conclusion: "now it is the central opinion that none of the planning models as they have evolved in developed countries, with mixed market, post-affluent societies can be passively transferred to the turbulent under-affluent environment of a post-communist country."

2. COUNTRY PROFILES

There is no doubt that Albania needs to invent its own approach to agricultural land protection policy. But does it mean it has nothing to learn from the experience elsewhere? No. What it does mean is that Albania should not expect to find the answer to its problems outside of its own borders. What other countries have to offer is a wealth of experience which needs to be reshaped by Albanians to the reality and needs of Albania as it moves toward the twenty-first century.

2.1 THE NETHERLANDS

The Netherlands has a three-tiered system of government: national, provincial, and municipal. Their planning system parallels the government system. Each lower level of government draws up its own plan. However, the plan of each governmental unit must be consistent with the plan drawn up by the next higher governmental level. There is not a specific farmland preservation program but it is integrated into the overall land use planning structure.

The part of the planning process which most affects property owners is the local-level "allocation plan." A building permit is granted only if a proposed project is in conformance with an adopted allocation plan. An allocation plan once adopted is a relatively permanent policy; it is difficult to change the allocation plan (Steiner 1984).

In the Netherlands, landowners can not assume that they own the right to covert land out of agricultural use. Land zoned for agriculture is intended to stay in agriculture. If it is slated for conversion and the public agencies find the conversion undesirable, they are able to use public funds to purchase it (Alterman 1994). Conversion of land for building can occur only in urban areas, and urban areas can only be created or expanded when a municipality buys land to add to the municipality or to create a new town (Steiner 1984; Lucas and van Oort 1991). Nearly 95 percent of sales to local governments are voluntary, but the farmer does not usually initiate the transaction. Expropriation is also possible, in which case the sale price is the agricultural use value of the property. One consequence of this structure is that there is almost no land speculation in the Netherlands.

An interesting feature of the Dutch compensation law is that a farmer (including both owner-farmers and tenant-farmers) whose land is acquired by a municipality, is entitled to both compensation for loss of the physical land and buildings, and compensation for loss of income. "These compensations [for loss of income] can amount to payments equaling the income over a period of up to a maximum of 12 years in case of total abandonment of the farm operation. For tenant farmers, compensation for the loss of income is the sole indemnification they are entitled to..." (Lucas and van Oort 1991, p. 98).

As Lapping (1980) points out, the rationale and root of the Dutch approach to agricultural land protection goes back to serious food shortages suffered during both World Wars. Thus a primary goal of national-level agricultural land protection policy is to make the country self-sufficient in food production. Lapping says that the Netherlands has "aggressively" supported its agricultural sector. Restraining the spread of urban areas has been only one part of broadbase policy approach. All aspects of this policy program appear to enjoy widespread public support.

Interestingly, in spite of the measures taken to prevent sprawl, in the 1960s Dutch agriculture lost 4.3 percent of its agricultural land to urban expansion, while in the United Kingdom this figure was only 1.8 percent (Lucas and van Oort 1991). Of course, these percentages do not reveal the actual amount of arable land lost to urban expansion in the respective countries, nor do they reveal the pressures which population increases may have put on the existing supply of urban land.

2.2 SWEDEN

Sweden, like the Netherlands, resolved after World War II to be self-sufficient in agriculture. One means of accomplishing this was maintaining high prices for agricultural products and by encouraging more efficient farming. This latter goal was accomplished by state facilitated land consolidation in order to permit more capital-intensive, efficient farming.

However, in Sweden, as in other countries (such as Japan), policies other than purely agricultural policies affected the course of agricultural land protection. From the 1940s until

the late 1960s, "Sweden's labor market policy probably had greater influence on land tenure than did farm policy. By maintaining full employment and facilitating workers' movement from low to high productivity jobs, [the government] encouraged a massive exodus from farming. This in turn released land for expansion of the remaining farms" (Vail 1986, pp. 25f).

The main structure of Sweden's agricultural land policy is as follows:

1947: Resolution on Agricultural Policy provided for:

- Domestic price supports
- Import duties on agricultural products
- Farm rationalization through technological innovation, land consolidation, commodity specialization, and managerial sophistication

1967: (another) Resolution on Agricultural Policy:

• created special fund to buy farms from older farmers in return for a pension—assisted in land consolidation

1969: Agricultural Land Care Act

 required approval of County Agricultural Board for a farmer to make any prohibited change in land use. Apparently prohibited changes (without permission) including removing land from cultivation, reducing intensity of production, or allowing fertility to deteriorate. Rarely applied and effect unknown.

1979: Land Acquisition Act

• empowered County Agricultural Boards to buy agricultural land and sell it to start-up farmers at easy mortgage terms

In Sweden, the locally based County Agricultural Boards have a substantial amount of power in the area of agricultural land protection. "County Agricultural Boards include farm organization representatives, agricultural agency staff, and local public officials. They thus exemplify the Swedish tendency to decentralize the detailed design and enacting of policies, within parameters set by national legislation. Executive authority is often vested in institutions which function through bargaining and compromise among the representatives of the state, relevant vested interests, and the public" (Vail 1986, fn. 6).

One result of Sweden's agricultural policy has been continual crop surpluses, leading to two different proposals in the mid-1980s to plant trees on cropland.

Like the Netherlands, Sweden also has a program for land purchase through public land organizations for the purpose of actively preventing urban sprawl and managing the growth of the country's cities.

2.3 FRANCE

France presents an interesting case. It went from a situation of virtually no policy to a series of strict laws in the space of only a few years.

The first city planning act was passed by the national parliament in 1909, but there was no compulsion to make a plan and, worse, the plans when made and published (which is one of

the ways that laws and decrees are made officially binding in France) were not legally binding. In 1958 planning, including zoning regulations, were made compulsory for any city above 10,000 in population. "More than 300 city plans were drawn in the following decade, but this period has been characterized by the ease in which planning regulations could be avoided (for example in the matter of density and height)" (Chaline 1986, p. 286).

By 1962, France had enacted planning laws which gave the prefect of a department (analogous to the governor of a province) the power to designate an area as a deferred development zone (ZAD) at the request of a municipality or a public agency. A ZAD declaration lasts for 14 years and can be renewed. In a ZAD, the municipal authority or public agency has the right to pre-empt any proposed purchase at the contract price and also has the right to acquire the property by eminent domain at the fair market value in effect one year before the ZAD declaration. This provision was intended to apply to public undertakings such as new towns, industrial zones, and new airports. In France more than 4,000 ZADs were created between 1962 and 1983 (Chaline 1986, p. 288).

At about the same time as the concept of deferred development zones was introduced, France also authorized the creation of agricultural land purchase organizations, agricultural land banks, *sociétés d'aménagement foncier et d'établissement rural* (SAFER) which have powers of preemption for agricultural land. It is estimated that about 60 percent of agricultural land is subject to a SAFER right of preemption. (Little 1984, p. 138).

The SAFER sells most of its land to farmers. The objective is not to sell to the highest bidder, but to sell to the person who will benefit most as a farmer. Favored purchasers are farmers with too little land, farmers willing to change their land for more efficient holdings, farmers whose land has been condemned for a public purpose, and young farmers needing capital. After purchase from a SAFER, the land must be farmed for fifteen years, except in extraordinary circumstances and with approval from the SAFER.

During the period from 1964 to 1974, SAFERs purchased 2.1 million acres of land and sold 1.7 million. They buy about 12 percent of the agricultural land which comes on the market, but it appears that the right of preemption gives them an influence which is much greater than that percentage would indicate.

Another policy which targets farmland involves the pulling together of fragmented farmland lots so that small holdings can be merged into larger, economically viable properties. This procedure is still widely used and is known in English as readjustment and in the French as *remembrement* (Alterman 1994).

Government decentralization in the 1980s gave local authorities discretion over how they wish the future development in their areas to move; this could prove dangerous in the area of agricultural land preservation (Alterman 1994). At present however, the combination of ZADs and SAFERs seems to be successful at controlling speculation and protecting agricultural production.

2.4 THE UNITED KINGDOM¹

The UK's system for land use planning (for all types of land) was created by the Town and Country Planning Act of 1947. The law has been refined but its basic structure and principles remain in place. The essential principle is that the Act gives all planning responsibility to local authorities (that is, local governments) which are given the power to control all development, whether or not there is an approved plan in place. Planning permission is required for all land conversion (development); the Act defines development as "the carrying out of building, engineering, mining and other operations in, on, over or under land, or the making of a material change in the use of any buildings or other land." In addition, the Act states that no compensation will be paid if planning permission is denied for development. So, the right to convert land is defined as a public good, and owners are not allowed to presume any inherent right for land conversion.

The responsibility for planning is put on the local authorities, which are elected locally. There is a substantial opportunity for public participation in the creation of official plans. However, there appears to be substantial discretion given to the local planning official to decide whether or not to approve a particular land conversion.

The powers of the central government are not clear. For example, there does not appear to be any national law regarding greenbelts, but many do exist. The British also have a mechanism at the national level involving Government Circulars. The Department of the Environment provides these "guidelines" to the local planning authorities who take them quite seriously. The Circulars have proven to be a very effective mode of policy implementation (Alterman 1994).

The UK planning system has no special provisions for preserving agricultural land. Instead, it is part of their comprehensive approach to land management. Overall, the approach seems to have been successful in curtailing farmland conversion.

2.5 CANADA - ONTARIO

In the Canadian Province of Ontario the basic tool for agricultural land protection is the "Food Land Guidelines." This is not a law passed by the provincial legislature, but rather a directive created at the Cabinet level by the Ministry of Municipal Affairs and Housing in 1978.

The guidelines are implemented by zoning, together with a system of hierarchical relationships which are supposed to ensure that actual land use patterns conform to the Food Land Guidelines. Local zoning and land subdivision regulations must conform to the applicable local plan; local plans must conform to regional plans; and both local and regional plans must be sent to the Minister of Municipal Affairs and Housing for Approval (Glenn 1985, p. 666).²

¹ More precisely, England and Wales; Scotland and Northern Ireland are separate jurisdictions and not necessarily covered by the same legislative framework.

² Landowners may appeal proposed categories in the plans to the Ontario Municipal Board.

Under the Food Land Guidelines, high priority agricultural land is supposed to be identified (and zoned) for agricultural use. Urban land use such as expansion of towns or rural residential growth must be placed in a separate category.

High priority agricultural lands include the following:

- 1. All lands which have a high capability for the production of crops due to special soils or climate.
- 2. All lands where soils Classes 1, 2, 3, and 4 predominate as defined in the Canada Land Inventory of Soil Capability for Agriculture.
- 3. Additional areas where farms exhibit characteristics of ongoing viable agriculture.
- 4. Additional areas where local market conditions ensure agricultural viability where it might not exist otherwise.

If a municipality chooses to protect less agricultural land than the Guidelines would call for, it must explain and justify its decision (Smith 1986, p. 152).

The structure for agricultural land protection in Ontario builds on the pre-existing planning system by adding supplementary land evaluation criteria. In theory, then, Provincial policy to protect agricultural lands is enforced through the requirements of zoning consistent with local plans, after local plans have been approved by the Minister. In actual practice agricultural land protection works somewhat differently. As one case study points out "…examination of a local municipality in the Toronto urban fringe reveals policies which appear to preserve agricultural land. However, in the implementation of these policies, agricultural designations tend to be used as holding categories for future development…" (Bunce 1991, p. 113).

2.6 CANADA - BRITISH COLUMBIA

The supply of agricultural land is small in British Columbia, where only about 4 percent of the land area is suitable for agriculture. Perhaps for this reason, the measures taken to preserve agricultural land appear more rigorous than those in Ontario.

In December 1972 and January 1973 the province imposed a moratorium on any change in use in agricultural land over two acres. The affected land was land used in farming, land zoned for agriculture, land classified as agricultural land for taxation, and land in classes 1-4 of the Canadian Land Inventory (CLI) system of classification (which is much the same as the U.S. system of soil classification).

Then new legislation, the Provincial Land Commission Act, took effect in February 1973 which substantially revised the planning system for agricultural land. Under that Act, a five member board called the Land Commission is created which is charged with the duty of establishing agricultural land reserves (ALR). Within the 28 regions of the province the moratorium would apply until the ALRs were designated. In an ALR, only farming was permitted unless by special exemption of the Land Commission, or as permitted under the Act.

Basically, ALRs were to include all land in CLI classes 1-4.³ In addition, land in classes lower than Classes 1-4 were also to be included in ALRs where there was evidence that it could be used successfully with better agricultural land, and even Class 7 land would be included if not to do so would result in nonagricultural use of an otherwise agricultural area. The provincial government maintained review and veto power over ALRs designated by the regional districts (Bray 1984).

While the British Columbia system of newly created ALRs monitored at the provincial level is obviously different from the Ontario system, the criteria for designating protected areas are much the same.

How well did approach to agricultural land protection work out? Early studies (1978) indicate that it had prevented land conversion within ALR boundaries (Bray 1984). However, there do not appear to be any long term studies of its implementation.

2.7 CANADA - QUEBEC

In 1978 Quebec passed the Agricultural Lands Protection Act (ALPA), which operates separately from the Quebec Planning Act. ALPA created the Commission de Protection du Territoire Agricole du Quebec (CPTAQ), which has the power to create agricultural zones, which are known as *zone vertes*, or green zones; everything else is referred to as white zones.

The act limits the area for urban expansion. It defines the agricultural zone and leaves the residual area for urban expansion. The CPTAQ has ultimate authority within the green zones, and indeed, permission is required to use a parcel for any purpose other than agriculture (Glenn 1985, p. 669). In addition, the CPTAQ can issue orders to stop land conversion and can require land to be restored to its former status (Perks 1986). The Canadian constitution distinctly states that the regulation of property is noncompensable (Alterman 1994).

One writer has praised the Quebec system, pointing out that among its positive effects is the change in land values. Within five years, speculative land prices around Quebec's cities and towns dropped to levels more closely reflecting agricultural productivity (Perks 1986). Another writer has noted anecdotal evidence that agricultural land is better protected in Quebec than in Ontario, but at the same time commented that the system seems administratively burdensome since it involves parallel bureaucratic structures, one under the agricultural protection law and a separate structure under the general planning law. Other analysts have noted that after introduction of the Quebec ALPA there was an independently caused decline in the rate of population growth in the Montreal area. The conclusion is that Quebec has been reasonably effective both in halting the conversion of agricultural land and in returning vacant land to agricultural use (Reid and Yeates 1991).

These same analysts make an interesting point which few others have commented upon. "The effectiveness of the [Quebec] legislation is...related to political will. The legislation was implemented as part of the agenda of the Parti Quebecois—an aspect of agricultural policy

³ Unless these land had been irreversibly developed as of 21 December 1972, or had been in continuous use for a non-agricultural purpose for 6 months prior to 21 December 1972.

directed toward maintaining a level of agricultural self-sufficiency for the Province..." (Reid and Yeates 1991, p. 308). In a similar vein, another writer commented that "[t]he success of agricultural zoning in preserving high quality agricultural land from non-agricultural uses is likely to be proportional to the weight of political support..." (Smith 1986, p. 89).

2.8 CANADA - PRINCE EDWARD ISLAND

Prince Edward Island (PEI) is the smallest province in Canada. It is located on the eastern coast of the country. Seventy percent of the province's land is classified as agricultural. The economy of the island is dependent upon agriculture, as well as other resource-based industries, such as fishing. Tourism is the island's third important economic sector (Lapping and Forster 1984). There has always been tensions between the economic sectors on the Island. Resident farmers need the agricultural land for viable farm operations. Non-residents, attracted by the beauty of the Island, offer prices for agricultural land that far exceeds its agricultural value.

Foreign ownership and absent landlords have been problems in PEI since the 1760s (Lapping and Forster 1984). Vacation homes along the island's shores along with land speculation by non-resident owners have long clashed with the agricultural sector. In more recent times, the lack of regulation over the location of recreations areas and uncontrolled land subdivision of the shorefront has been destroying the island's natural areas and standing in the way of agricultural productivity and efficiency. In the last thirty years, high demand for land by non-residents has caused land values to become so high that many residents can not afford land when it comes onto the market (Lapping and Forster 1984).

PEI has been trying to manage these difficult land issues since the middle of the 19th century. In 1859 the provincial legislature limited to 10 acres the acreage non-residents could purchase. In 1972 the provincial legislature tightened the laws governing non-PEI residents land ownership. Since then, non-residents have to get permission from a Government Council to own land. Now these legal and non-resident owner issues are managed through the a provincial Land Use Commission (Lapping and Forster 1984).

Contemporary land policy related to the protection of agricultural land is based on the provincial creation of a public Land Development Corporation (LDC). It was established in 1969 to assist farmers through counter-cyclical buying and resale of land to farmers (Lapping and Forster 1984). The LDC acts as a form of public land bank. It is available to purchase land from agricultural land owners. It also holds land, and makes land available for resale, with preference given to the original owner. The goal of the program is to keep farmers from having to sell off their agricultural land base during periods of bad market conditions. Through the purchase procedure of the Corporation, the farmer can keep an option on their land, and receive capital to invest in the farm operation. Through its programs, the Corporation is able to facilitation consolidation and enlargement of inefficient farm units so that they can become more productive. The program also allows marginally productive agricultural land to be shifted to uses such as forestry, fish and wildlife habitat, recreation areas, and watershed protection.

The overall goals of the PEI approach to land policy are three: to keep agricultural land in production, to keep the agricultural industry of the Island healthy, and to facilitate more

effective use of land. The PEI program was established because of historic problems with absent owners, the lack of a public land base, the economic importance of agriculture, and the influx of demand of vacation properties.

The PEI approach to the protection of agricultural land is quite successful. Other provinces in Canada have studied it closely as they consider their own agricultural land protection policies. The problem with the PEI approach, as with all public land bank programs, is that it requires substantial capital to purchase agricultural land. In addition it requires a strong public consensus to support the program, and a well trained administrative staff to manage it. These latter two conditions are made easier for PEI because it is a small island province.

2.9 U.S.A. - THE CONTEXT

In the United States, approaches to the protection of agricultural land are affected by four significant factors: a tradition of local control, a deep respect for private property, a federal constitutional limit on extensively public law can infringe on private property, and the use of relatively weak approaches to land use control. These four factors interact to create the varied strategies taken by individual states. The state strategies are affected by their own history, the political and social composition of the state, and the ways states learn from each others experiences.

Local control. The constitutional history of the United States gives the majority of power to control land use to state governments. When the country was formed over 200 years ago, and the federal constitution was written, the states pre-existed the new nation. At the time, given the people's bad experience with rule by a distant centralized power (Britain over the American colonies), it was decided to write the constitution so the new federal government had only as much power as it needed to run the new nation. Any authority not expressly needed to administer the nation, was left with the states.

While in practice the national government has grown much stronger over the centuries, and especially since the 1930s, this principle of local control continues to be a strong cultural value of the American people. In general, Americans distrust centralized power and administrative authority. So, wherever possible, attempts are made to push administrative power as close to the people as possible. In the area of land use, this has traditionally meant giving power to sub-state, local governments -- counties, cities, and villages. In the early part of this century when cities began to grow very quickly, all of the U.S. states passed laws which gave their cities, and then all their local governments the authority to manage land use change.

In the 1960s this began to change a little. Some states, such as Oregon, felt that local governments were not using their local authority to make land use decisions in the best interest of the citizens as a whole. So, they passed laws reducing sub-state local control, and bringing authority back to the state level. There are now 13 states (out of 50) with such laws. However even in these states, some sort of local participation is an important component of the state program.

Private property. Some social commentators would say that individual ownership and control of land is a major defining characteristic of the American democratic experience.

Private property, like local control, is a strong cultural value of the American people. It is linked to America's concept of a market society and democracy. As with local control, this value has deep historical roots.

Many of the original immigrants to the American colonies in the 17th and 18th centuries came because of the opportunity to secure ownership of land. Given the land structure of European nations at the time, it was difficult, if not impossible, for a common person to obtain private property. The new nation held the promise of private ownership and control of land. And with this ownership an opportunity to achieve economic and political independence.

Among the founders of the United States, Thomas Jefferson articulated a position on private property which has endured through the centuries. He argued that private property was an essential element of a democratic society. Only when someone owned their property would they be free enough to make independent political judgments. Jefferson referred specifically to the freedom of farmers who were able to produce food and fuel for themselves. Because of farmers economical independence, which is itself dependent on ownership of private property, they could also be politically independent.

Jefferson's idea of the political centrality of private property was joined with ideas about its economic centrality. At the same time in history, it could be seen that the feudal, centralized landholding structure of Europe was making it difficult for European nations to respond to the emergence of a market society. Freehold property, or private property, facilitated market processes. Individual owners, free of feudal obligations, could buy and sell land as it made most economic sense.

So, efforts to protect agricultural land must contend with a general social attitude that land is best owned and managed privately, that private ownership best facilitates a democratic and market society, and that controls on land ownership, including land use, hinder efficient market processes and may threaten democratic institutions.

Federal constitutional limit on public law. These ideas about the importance of private property found expression in the U.S. Constitution. Sections of the Bill of Rights provide specific protection for private property. These sections prevent government from taking private property without appropriate legal procedures. Further, these sections guarantee that even under proper procedures private property can only be taken when the proposed use to which it will be put is for the public good, and the land owner is paid a fair price for the land.

The existence of these specific sections provide a guidepost against which all proposed public policy which affects land is measured. If a landowner, or group of landowners, believe a law violates their constitutionally guaranteed rights, they have a basis for challenging the law.

In practice, the courts in the United States have generally allowed laws passed by state and local governments to stand—that is, to be considered valid. Traditionally, the legal rule is that as long as landowners affected by a land use law can continue to use their land in some economically reasonable way, a law or regulation adopted by a state or local government will be considered legitimate.

But, what is perhaps most important about the federal constitutional limit is the way it affects people's perception about the what government may do with regard to land. Most people do not understand the subtleties of the law. Instead, they believe that the federal

constitution protects their right to do what they want with their land. This perception creates a political climate where state and local governments feel constrained from adopting laws which severely limit what private land owners can do with their land.

Weak approaches to land use control. Together, the above factors—a tradition of local control, a deep respect for private property, and federal constitutional limits on public law (which people believe to be stronger than it actually is)—create a situation where most state and local governments adopt weak approaches to the protection of agricultural land. State and local governments tend to rely on either (a) voluntary approaches or (b) weak regulatory approaches.

Voluntary approaches are programs where individual land owners can choose to participate. They provide incentives to land owners. It is hoped that these incentives will be strong enough to encourage their participation in the program. Generally, these incentives rely on granting landowners reductions on their land taxes. Regulatory approaches are most commonly some form of zoning. Under zoning, areas of agricultural land use are mapped. For these areas a set of rules are written to monitor land owners use of land, and to try to prevent land owners from converting land to non-farm use. Landowners are required to obey the rules. However, usually zoning is weak. That is, it rarely prevents a land owner from converting land. Instead, land conversion is strongly discouraged.

2.10 U.S.A. - WISCONSIN

Wisconsin is in the north-middle of the United States. It adjoins two of the Great Lakes and is just north of Chicago. For many decades, Wisconsin has been known as America's dairy land; the state produced more milk and cheese than any other state in the country. In addition, it produces substantial amounts of other agricultural products.

Like the other U.S. states profiled, Wisconsin's concern with protecting agricultural land emerged as a result of urban sprawl into the countryside. Throughout the 1960s and 1970s, Wisconsin's cities experienced out-migration, and new migrants came to the state. For a number of reasons, new migrants and city residents moved to the urban edge and even further out. This migration proved to be a problem for agriculture. Often new migrants settled on the most productive land, and always they could offer more money for land than could farmers. State policy makers became worried about having adequate land for agriculture in the future. In addition, they were concerned about the land tax burden of new urban-style growth on the remaining farms in the state. As was true throughout the United States, environmentalists were troubled by the loss of agricultural land because it affected the amount of green, open land.

Wisconsin approaches the protection of agricultural land through a voluntary participation program. The program was first put in place in 1977. The central component of this program is incentives for reduced land taxes to individual agricultural land owners. However, the program is more than just tax incentives to individual agricultural land owners. It also includes incentives to local governments to: (1) prepare plans for the coordinated and comprehensive protection of agricultural land in their jurisdiction, (2) put in place a mechanism to regulate agricultural land use so as to keep agricultural land from being converted to non-farm uses, and (3) specific procedures to encourage agricultural land owners to farm in such a way as to

conserve soil and water resources (Johnson 1984; Coughlin and Keene 1981). One of the strengths of the program is that these elements are linked together.

The Wisconsin program makes available reduced land taxes to agricultural land owners. However, agricultural land owners can only receive these reduced taxes if the community in which they live adopts as official local policy a plan to protect agricultural land and/or adopt a agricultural land protection zoning regulation (Coughlin and Keene 1981). By linking these elements, the program facilitates a bottom-up planning process. Local agricultural land owners come together and petition their local governments to prepare and adopt a agricultural land protection plan and/or agricultural land protection zoning regulation. To help this process along, the state provides small amounts of money (not enough to cover the whole cost) to local governments to map agricultural lands and prepare their plan. This acts as a further incentive. Once a agricultural land protection plan and/or zoning regulation is prepared by a local government it is reviewed by the state Department of Agriculture. The review makes certain that all local plans meet minimum criteria.

Among the criteria that the Department of Agriculture looks for in a county plan is a clear statement of local policies. These policies must address the protection of agricultural lands, the management of urban growth, the provision of public facilities (water, sewer, roads, and the like), and the protection of significant natural resources, open space and scenic, historic or architectural areas (Johnson 1984).

Not all agricultural land owners may participate in the program, even if a local plan is prepared and adopted. To be eligible for the program, a agricultural land owner must be a legal resident of the state, own a minimum amount of acreage, and the farm must have made a minimum level of income in the previous year. The current standard for participation is ownership of 35 or more acres in active farm use, and a farm which produces gross farm profits of at least \$6,000 in the previous year.

If the local government has prepared an approved plan, and the agricultural landowner meets the requirements of legal residency and minimum acreage, then the landowner can choose whether or not to participate in the program. The benefits of reduced land taxes are arranged directly between the land owner and the state Department of Agriculture through an application procedure.

As part of the landowner's application for reduced land taxes, they must agree to keep their land in farm use for at least 10 years. If the agricultural land owner takes the land out of farm use, by converting it to urban use, or selling it for urban use, the owner stops receiving the reduced land tax benefit, and can be made to pay back the benefits they have already received.

In addition to the local plan, the county can choose to also prepare and adopt agricultural land zoning. Agricultural land zoning limits the use of land to farm uses and uses that are compatible with farming. The Wisconsin program is structured so that a agricultural land owner receives one level of reduced tax benefit if their county adopts a plan, and a higher level of benefit if their county adopts a plan and zoning regulation (Johnson 1984).

Conclusion. In many ways the Wisconsin approach seems quite successful. Since the program began in 1977 every eligible county in the state has adopted a agricultural land

protection plan (70 counties). And there are thousands of agricultural landowners who have entered into agricultural land protection agreements and are receiving the benefits of reduced land taxes. But, it is not clear that the approach has prevented the conversion of agricultural land to urban uses, when the agricultural land is close to cities. Agricultural land owners who are close to cities often choose to not enter into agreements because the incentive they receive is not enough compared to the amount of money they can make selling their land for nonfarm use. Currently, the state legislature is reviewing the program to decide if it should make major changes in the approach which is used.

2.11 U.S.A. - NEW YORK

New York State is located on the east coast of the United States. It is best well known as the "home" of New York City. But New York State is a large state, with significant amounts of farm and forest lands.

In the 1960s policymakers in New York became concerned about the protection of the state's agricultural land. Urban sprawl from New York City and the state's other cities was causing a significant amount of conversion of agricultural land. Agricultural land was being converted to scattered, low density urban uses. As is true in other states, policy makers were concerned that continued agricultural land conversion would prove to be a threat to the agricultural economy of the state. In addition, environmental advocates were concerned that agricultural land conversion would decrease the amount of green open land near cities.

New York developed its approach to agricultural land protection in 1971. It is a very different approach than that used in most other states. It is an approach which relies heavily on incentives and bottom-up organization by agricultural land owners. New York's approach to agricultural land protection is know as agricultural districting. New York's agricultural districting program has three main components: the grouping of participating agricultural land owners into agricultural districts, lower land taxes for agricultural land in agricultural districts, and a so-called right-to-farm law for farmers (Klein 1982; Coughlin and Keene 1981).

Agricultural districts. The key to the New York approach is the concept of agricultural districts. The idea behind agricultural districts is to encourage agricultural land owners to voluntarily band together and make a commitment to keeping agricultural land from being converted. Under the state's agricultural district law, owners of 500 acres or more of agricultural land may propose to have their lands designated as an agricultural district. The petition by agricultural land owners is to the local, county government. A petition for an agricultural district results in a set of public hearings, so other land owners can comment on the proposal. If it is approved locally, it is reviewed for approval at the state level by Department of Agriculture and Markets. Once a set of lands are designated as an agricultural district, they must be reviewed every 8 years to determine that a district still makes economic and land use sense.

There are several benefits to agricultural land owners from organizing into a formally approved agricultural district. One is the opportunity for reduced land taxes (discussed in detail below). A second is that both the state government and the local government must give preference to agricultural land uses in their planning. So, for example, except under

extraordinary circumstances highways can not be expanded or built on lands in an agricultural district. Also, owners of agricultural land in an agricultural district are exempt from having to pay special taxes for the development of water and sewer services on or near their land.

Reduced land taxes. The most immediate benefit to a agricultural land owner in an agricultural district is the chance to have their land taxes reduced. The law states that the owner of a minimum of 10 acres can apply for use value taxation, where land is taxed based on its value as agricultural land and not as potentially developed urban-style land. The actual tax amount is determined based on the quality of the soil (based on productivity), climatic factors, the presence of minerals, and so forth. If the land owner converts the land to urban uses during the time it is part of an agricultural district, the owner must pay back the tax amount they saved while in the district. And from that time forward, they must pay their regular, nonreduced land tax. (Klein 1982).

Right-to-farm law. Finally, the agricultural district law provides protection to farmers against local government laws which would interfere with the normal business of farming. Throughout the United States, farmers have had the problem of city residents coming to live in farm areas, and then complaining about normal farm practices. In some places, these city residents have passed laws to make normal farming difficult. Right-to-farm laws recognize the importance of farming, and prevent non-farmers from interfering with it. In New York State, right-to-farm laws can be adopted only within recognized agricultural districts.

Conclusion. New York State's approach to agricultural land protection is unique in that it seeks to facilitate bottom-up organization by agricultural land owners into agricultural districts. It does not mandate the creation of these districts. Instead, it provides incentives to agricultural land owners who would be within a recognized district. It is hoped that these incentives are strong enough to entice agricultural land owners to form districts, and then that these districts will slow down and/or prevent the conversion of agricultural land to non-farm uses.

New York State's agricultural district approach has both succeeded and failed. It has succeeded in creating a large number of agricultural districts throughout the state. Agricultural land owners are enticed by the incentives offered under the program. However, the approach has failed to slow down the rate of agricultural land conversion. The incentives offered by the program are not as strong as the price a agricultural land owner can receive for their property if it is to be converted to urban-style use. So, while many districts exist, agricultural land conversion continues largely unaffected by the program.

2.12 U.S.A. - OREGON

The State of Oregon is located in the northwest corner of the United States; it's southern border is the State of California, it's eastern border is the Pacific Ocean, and it's northern border is the northwestern-most state in the United States, Washington, which abuts the Canadian province of British Columbia. In the 1960s Oregon began to experience substantial urban growth. This growth had two causes, outmigration from Oregon's cities to the urban edge, and migration into Oregon from other states, often to the urban edge. As a result of this growth, a consensus developed that (a) certain critical natural resources were being threatened

by growth, including agricultural land near cities, and (b) the existing, long-standing system of local control for land use planning was insufficient for the new circumstances. Concern for the loss of agricultural land had to do with keeping Oregon's agricultural economy healthy, and maintaining sufficient green spaces around and near cities.

In response to this situation Oregon developed a state-level, comprehensive system for growth management. This system encompasses both the protection of agricultural land and the containment of urban growth (Howe 1993; Coughlin and Keene 1981). It is one of the oldest such systems in the United States, dating to the early 1970s. The Oregon approach to the protection of agricultural land is widely considered to be one of the most effective in the U.S. (Nelson 1992; Daniels and Nelson 1986; Eber 1984). What is unique about it is the tight integration and combination of state level goals with local level land use planning and implementation (Eber 1984; Coughlin and Keene 1981).

In 1973, the Oregon state legislature passed the Oregon Land Use Act. It outlines ten broad state goals for land use policy and planning. Cities and counties are required to address these goals in their local planning. Through this mechanism the state establishes a strong role for itself in land use planning. However, the actual planning for land use occurs locally. Thus, land use planning in Oregon is a joint responsibility shared between the state and local governments (Howe 1993).

The state land use planning law also created a statewide commission to administer the law, and be certain that its goals were achieved. This commission is composed of seven members who are appointed by the governor of the state. The commission is the policy body for land use planning in Oregon, and oversees the entire land use planning system in the state. Under the law, one of its most important functions is to certify that plans prepared by local governments take up the ten goals established in the law (Coughlin and Keene 1981; Howe 1993).

The law requires that all local governments prepare land use plans that take up the state goals, and that are coordinated and comprehensive. Local plans are reviewed by the state commission for both internal consistency (agreement between state goals and objectives of local plans) and consistency with other locally developed plans. The state commission also reviews proposed changes to plans. Additionally, local plans are subject to periodic review to make sure that they continue to comply in light of changing local circumstances and/or state policies.

Many local governments are resentful of the power the law gives the centralized government. So, to encourage local governments to comply with the law, the state commission has developed a series of incentives. The major incentive is that once a local plan is approved by the commission, local governments can manage review of land use change on their own without any further state interference. This allows local governments to continue in a long tradition of local control (Howe 1993).

Another part of the Oregon approach to land use planning is the establishment of a special land use court, the Land Use Board of Appeals (LUBA). This special court reviews individual land use cases.

Oregon uses three tools to protect agricultural land: (1) required local plans, which must take up state goals, and be consistent with the plans of their neighboring local governments; (2) zoning; and (3) urban growth boundaries. Required local plans help protect agricultural land, because agricultural land protection is one of the state goals. Therefore every local plan must map agricultural land and say what will be done to protect it from being converted to non-farm uses (Eber 1984). Zoning is the primary mechanism used to protect agricultural land identified in the local plan. A zoning regulation is adopted as local law, and it establishes the specific rules for the use of agricultural land, and under what conditions such land may be converted to non-farm use (if at all). Urban growth boundaries are lines which clearly show the limit of legal urban development. All cities are required to project urban development twenty years into the future, and then draw a line around the city beyond which urban development may not occur (Howe 1993).

Conclusion. These approaches work together to protect agricultural land. Urban growth boundaries keep urban land uses confined with defined limits. This results in reduced urban-based market pressure on agricultural land. So, urban growth boundaries indirectly protect agricultural land. Local plans and zoning directly protect agricultural land. They identify where agricultural land is located, and put in place the administrative rules to keep that land in farm use.

The Oregon approach to agricultural land protection is much admired throughout the United States and is widely considered effective (Nelson 1992; Daniels and Nelson 1986). However, it has been difficult for other states in the United States to copy the Oregon approach, largely because it relies on centralized authority.

2.13 JAPAN

Japan achieves the protection of agricultural land through a variety of direct and indirect means. Traditionally, perhaps the most prominent of its indirect methods has been through the restriction of rice imports. This maintains a high price for locally produced rice, and results in a high value for land used in rice production. Yet even though this is true, the planning system is interesting for a couple of features which are unusual, if not unique.

Japan had a long history of planning, starting with the City Planning Act of 1919. However, no measures prevented urban sprawl or rapid inflation in land prices during the period of economic boom which started in the 1950s. Between 1955 and 1970 land prices rose fourteenfold, with an average increase of 19.2 percent a year, and reached a high of 42.5 percent per year in 1960 and 1961. During the earlier years, urban land appreciated at faster rate than agricultural land, but since 1966, prices of agricultural land have risen almost the same as urban land (Matsumoto 1986). Starting in the early 1960s, a series of new laws was enacted to alleviate the situation, which seem to have been effective. These are the Real Estate Appraisal Act of 1963, a new City Planning Act in 1968, the Land Price Publication Act of 1969, and the National Land Use Planning Act of 1974.

"Currently...land speculation is virtually nonexistent because speculative investment in land is less profitable today, abnormal increases in land prices are restrained by the National Land Use Planning Act, and a heavy tax is imposed on profits from the sale of land" (Matsumoto 1986, p. 58).

 TABLE 3.1
 Cross-country comparison

	PLANNING SYSTEM?	PRIMARY TOOL FOR PROTECTION?	IS PUBLIC PURCHASE COMPULSORY?	DOES LAND VALUE=USE VALUE?	COMPENSATION FOR LOST INCOME AND ASSETS?	WHY PROTECT AGRICULTURE?	IMPLEMENTA- TION: AT WHAT LEVEL OF GOVT?	ADMINISTRA- TIVE STRUCTURE?	SUCCESS OVER LONG TERM?
Canada: British Columbia	Comprehensive	Zoning, Agricultural Land Reserves (ALR)	It does not seem so	It does not seem so	Yes. ALR also involves income support and pensions for agricultural workers	Food production and aesthetics	Integrated provincial/ local zoning and review	Zoning by local governments; reviewed for provincial consistency	No long-term studies. Short- term reports indicate success
Canada: Ontario	Comprehensive	Zoning	No	Not applicable	Not applicable	Food land conservation	Local with appeals to provincial level possible	Highly decentralized zoning	Insubstantial
Canada: PEI	Stand-alone agricultural protection	Public land purchase	No	No	It does not seem so	Protect agricultural industry	Provincial	Provincial corporation	Quite successful
Canada: Quebec	Stand-alone agricultural protection	Exclusive agricultural zoning	It does not seem so	Not applicable	Not applicable	Food self- sufficiency	Regional/ provincial	Independent provincial agricultural commission	Yes, both in controlling rural development and in preventing speculation
France	Several seemingly independent systems	Agricultural land banks coupled with Deferred Development Zoning	Yes	Yes	It does not seem so	To preserve a French system of agricultural production	Regional	Complex [see country profile]	Seems successful in controlling speculation and in protecting farmland
Japan	Comprehensive	Import restrictions (keep prices of farmland high)	Not reported	Not applicable	Not applicable	Food self- sufficiency	National import policy, but main control is regional	Three-tier structure in theory; main power at regional level	Seems successful in promoting agriculture; not clear if it controls urban sprawl

Netherlands	Comprehensive	Zoning and municipal land banking	Yes	Yes	Yes	Food self- sufficiency	National policy but major enforcement power local and regional levels	Three-tier national/ regional/ local; power from top down	Very successful in protecting agricultural land and encouraging production
Sweden	Comprehensive	Zoning and municipal land banking	Yes	Yes	It does not seem so	Originally food self- sufficiency, more recently aesthetics	Regional	Three-tier; majority of power at middle level (county)	Very successful at protecting agricultural land and encouraging food production
United Kingdom	Comprehensive	Building and development permits, at planning officers' discretion	No	Not applicable	Not applicable	Food self- sufficiency, and preserve rural landscape	Local	Guidelines from the top, but most power with local planning officials	Very successful
USA: New York	Stand-alone agricultural protection	Bottom-up, agricultural districts	No	Not applicable	Not applicable	Concern over urban sprawl	Local level	Agricultural districts	Mixed results
USA: Oregon	Comprehensive	State goals + local planning	No	Not applicable	Not applicable	Concern over urban sprawl	Partnership	State commission + local plans	Very successful
USA: Wisconsin	Stand-alone agricultural protection	Land tax benefit	No	Not applicable	Not applicable	Retain farms and slow urban sprawl	State incentives; local planning	State incentives	Little impact on land conversion

Nine-question criteria:

- 1. Does the country employ comprehensive planning or a stand-alone agricultural planning system for its agricultural land protection?

 2. What are the primary tools used for agricultural land protection?
- 3. Does legislation mandate compulsory public purchase for agricultural purposes?
 4. Is compensation for land limited to agricultural use value?
- 5. Does compensation include loss of income in addition to compensation for assets purchased?6. Why protect agriculture?
- 7. At what level of government is the agricultural land policy implemented, local, or regional, or through some other mechanism?
- 8. What is the administrative structure of the agricultural protection programs or policies?
- 9. Have the programs been shown to be successful over the long term?

The question is how does the National Land Use Planning Act affect land prices? The Act appears mainly to call for plans at the national, prefectural, and municipal level. The answer lies in the "chilling" effect of the threat of using an available power. In the Netherlands municipalities have the power to condemn land and pay the existing use value, so landowners rarely put up a legal battle over the forced sale of their property. In Japan, two features of the National Land Use Planning Act seem to produce a similar "voluntary" compliance with official requests. One is the registration system which applies to land transactions larger than a certain size (the triggering size is not stated). "The prefectural governor is notified of the predetermined price and purpose for which the land is to be used. If the price or the purpose is judged inadequate, the governor may take measures such as recommending the cancellation of the contract."

This registration section does not say that the governor has the power to cancel the contract, but another section of the Act, relating to a permission system of controls in emergencies, gives the governor another power, which could put a lot of force behind the governor's request. Under the permission system, if the governor perceives that emergencies such as "skyrocketing land prices and speculative land transactions" exist, the governor may designate a control area. In the control area, only transactions which fulfill one of the purposes stated in the land use plan are permitted. In addition, the price must conform to the "standard price." The standard price for land is set every year and published under the Land Price Publication Act of 1969.

Interestingly, the permission system has never been used (Matsumoto 1986, p. 52). Apparently, the threat of having a control area designated is enough to control prices, which effectively means that the government can set land prices and perhaps also prevent unwanted development.

3. COUNTRY SUMMARIES

For the countries, provinces, and states discussed in this report, the following nine questions summarize their approaches in terms of a standard set of criteria (see table 3.1):

- ◆ Is the protection of agricultural land accomplished through a system of *comprehensive* planning or a stand-alone agricultural planning system?
- ◆ What is the primary policy tool for agricultural land protection?
- Is there a provision for *compulsory public purchase for agricultural purposes?*
- ◆ *Is compensation for land limited to its agricultural use value?*
- ◆ Is there a provision for *compensation for loss of income in addition to compensation for assets purchased?*
- What are the goals of agricultural land protection; why protect agriculture?
- ◆ Is *implementation* of agricultural land protection policy *local*, *regional* or through some other mechanism?
- ◆ What is the *administrative structure?*
- Is there success over the long term?

REFERENCES

- Alterman, Rachelle. 1994. "Can Farmland Preservation Work? Lessons for the U.S.A. from a Six-Nation Comparative Perspective." Paper presented at Association of Collegiate Schools of Planning Conference, Phoenix, Arizona, 3–6 November 1994.
- Bray, C.E. 1984. "Canadian Provincial Farmland Protection." In *Protecting Farmlands*, edited by Frederick R. Steiner and John E. Theilacker, pp. 243–261. Westport, Conn.: AVI Publishing Company, Inc.
- Bunce, Michael F. 1991. "Local Planning and the Role of Rural Land in Metropolitan Regions: The Example of the Toronto Area." In *Limits to Rural Land Use*, Proceedings of an international conference organized by the Commission on Changing Rural Systems of the International Geographical Union (IGU), Amsterdam, Netherlands, 21–25 August 1989, edited by G.M.R.A. van Oort et al., pp. 113–122. Wageningen, Netherlands: Centre for Agricultural Publishing and Documentation (Pudoc).
- Chaline, Claude Henri. 1986. "France." In *International Handbook on Land Use Planning*, edited by Nicholas N. Patricios, pp. 283–294. New York: Greenwood Press.
- Coughlin, Robert E., and John C. Keene. 1981. *The Protection of Farmland: A Reference Guidebook for State and Local Governments*. Washington, D.C.: U.S. Government Printing Office.
- Daniels, Thomas L., and Arthur C. Nelson. 1986. "Is Oregon's Farmland Preservation Program Working?" *Journal of the American Planning Association* 52(1): 22–32.
- DeGrove, John M., with the assistance of Deborah A. Miness. 1992. *The New Frontier for Land Policy: Planning and Growth Management in the States*. Cambridge, Mass.: Lincoln Institute of Land Policy.
- Eber, Ronald. 1984. "Oregon's Agricultural Land Protection Program." In *Protecting Farmlands*, edited by Frederick R. Steiner and John E. Theilacker, pp. 161–171. Westport, Conn.: AVI Publishing Company, Inc.
- Enders, Michael J. 1986. "The Problem of Land Banking: A French Solution." *Environment and Planning C: Government and Policy* 4(1): 1-17.
- Davies, H.W.E. 1986. "England and Wales." In *International Handbook on Land Use Planning*, edited by Nicholas N. Patricios, pp. 295–332. New York: Greenwood Press.
- Glenn, Jane Matthews. 1985. "Approaches to the Protection of Agricultural Land in Quebec and Ontario: Highways and Byways." *Canadian Public Policy* 11(4): 665–676.
- Grava, Sigurd. 1993. "The Urban Heritage of the Soviet Regime: The Case of Riga, Latvia." *Journal of the American Planning Association* 59(1): 9–30.
- Howe, Deborah A. 1993. "Growth Management in Oregon." In *Growth Management: The Planning Challenge of the 1990s*, edited by Jay M. Stein, pp. 61–75. Newbury Park, Calif.: Sage Publications.
- Johnson, James A. 1984. "Wisconsin's Farmland Preservation Program." In *Protecting Farmlands*, edited by Frederick R. Steiner and John E. Theilacker, pp. 147–159. Westport, Conn.: AVI Publishing Company, Inc.

- Klein, Susan B. 1982. Agricultural Land Preservation:, A Review of State Programs and their Natural Resource Data Requirements. Denver, Colo.: National Conference of State Legislatures.
- Lapping, Mark B. 1980. "Agricultural Land Retention: Responses, American and Foreign." In *The Farm and the City, Rivals or Allies*, edited by Archibald M. Woodruff, pp. 145–178. Englewood Cliffs, N.J.: Prentice Hall, Inc.
- Lapping, Mark B., and V. Dale Forster. 1984. "From Insurgency to Policy: Land Reform in Prince Edward Island." In *Land Reform American Style*, edited by Charles C. Geisler and Frank J. Popper, pp. 245–270. Totowa, N.J.: Rowman and Allanheld.
- Little, Charles E. 1984. "Farmland Conservancies: A Middleground Approach." In *Protecting Farmlands*, edited by Frederick R. Steiner and John E. Theilacker, pp. 131–145. Westport, Conn.: AVI Publishing Company, Inc.
- Lucas, Peter, and G. van Oort. 1991. "Response of Farmers to the Loss of Land Caused by Urban Pressure." In *Limits to Rural Land Use*, Proceedings of an international conference organized by the Commission on Changing Rural Systems of the International Geographical Union (IGU), Amsterdam, Netherlands, 21–25 August 1989, edited by G.M.R.A. van Oort et al., pp. 96–104. Wageningen, Netherlands: Centre for Agricultural Publishing and Documentation (Pudoc).
- Maier, Karel. 1994. "Planning and an Education in Planning in the Czech Republic." *Journal of Planning Education and Research* 13(3): 263–269.
- Matsumoto, Hiroshi. 1986. "Japan." In *International Handbook on Land Use Planning*, edited by Nicholas N. Patricios, pp. 39–60. New York: Greenwood Press.
- Nelson, Arthur C. 1992. "Preserving Prime Farmland in the Face of Urbanization: Lessons from Oregon." *Journal of the American Planning Association* 58(4): 467–488.
- OECD (Organisation for Economic Co-operation and Development). 1979. Agriculture in the Planning and Management of Peri-Urban Areas. Vol. 1, Synthesis. Vol. 2, Case Studies. Paris: OECD.
- Perks, William T. 1986. "Canada." In *International Handbook on Land Use Planning*, edited by Nicholas N. Patricios, pp. 447–498. New York: Greenwood Press.
- Reid, Evelyne Power, and Maurice Yeates. 1991. "Bill 90—An Act to Protect Agricultural Land: An Assessment of its Success in LaPrairie County, Quebec." *Urban Geography* 12(4): 295–309.
- Smith, Robert J. 1986. "Planning to Preserve Agricultural Land." Wye College, Occasional Paper, no. 15. London: Department of Environmental Studies and Countryside Planning, Wye College, University of London, May.
- Steiner, Frederick R. 1984. "Farmland Protection in the Netherlands." In *Protecting Farmlands*, edited by Frederick R. Steiner and John E. Theilacker, pp. 275–290. Westport, Conn.: AVI Publishing Company, Inc.
- Vail, David. 1986. "Crisis in Swedish Farmland Preservation Strategy." Agriculture and Human Values 3(4): 24–31.