Is there any Hope for Agriculture in California's Rapid Growth Areas?

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Abstract: The experience of San Diego County, California, indicates that none of the commonly used legislative methods of preserving valuable agricultural land (large lot zoning, differential taxation, purchase or transfer of development rights, creation of exclusive agricultural districts) may be successful in very rapidly urbanizing metropolitan areas. Unless a local municipality can purchase the land outright, the profits to be made from selling greatly appreciated suburban land for development will tempt even the most dedicated farmer to sell and seek out less vulnerable land elsewhere. Steps such as large lot zoning need to be taken early to keep large blocks of agricultural land intact, the retention of these lands must be made part of a mandatory rather than a voluntary program in order to be successful, and the local jurisdictions must be sure that adequate economic incentives are available for those persons who do wish to continue farming the land.

One of the most common complaints levied against the American practice of natural resource management relates to the sizable annual loss of prime agricultural land to the advance of urbanization. This has been estimated to be as high as 300,000 hectares annually (Vining 1977). The American Farmland Trust estimates that California alone lost 1.36 million total ha of agricultural land during the 1970s. It is easy (and appropriate) to cry out against this loss, and many strategies have been devised to help minimize it. These strategies can often work in areas where urban expansion is occurring at a slow or even moderate pace, but where urbanization is expanding rapidly, as it is in the vicinity of most major California cities, even these innovative approaches may be ineffective. San Diego County, California, is examined as an example of a mixed urban-rural region where preserving traditional agriculture is proving to be extremely difficult, despite official concern that such a goal is highly desirable. The complex experiences of San Diego County might provide useful background information for other rapidly developing metropolitan areas desirous of preserving their agricultural hinterlands.

San Diego County is a very large county in land area but is sparsely populated over most of its territory. It has an area of 11,200 km² and a 1980 population of 1.8 million persons. The vast majority of these people live in the third of the county nearest the coast. Only about 22,000 persons, or a little more than 1% of the total, live in the eastern and northern 8,000 km² of the county (Fig I). Significantly, almost all local row crops are also grown in the coastal third of the county.

Topographically, the county consists of a dissected marine terrace along the coast, inland from which is a region of foothills and broad valleys, followed by rocky mountain ranges extending up to almost 2000 m in height. East of the mountains lies the extremely arid Borrego desert. Much of the mountains and desert consists of publicly (federal and state) owned lands, as well as 17 small Indian reservations.

Climatically, the county is arid steppe near the coast, just barely meeting the definitional requirements for Mediterranean climate in the foothills, and becoming arid desert in the eastern third. Rainfall averages about 250 mm annually near the coast, 400 mm in the foothills, 700–800 mm above 1500 m elevation, and less than 100 mm in the driest portions of the desert. This rainfall is both seasonal (about 85% falling between October and April) and...
annually quite variable. For all field crops, irrigation is essential. Thus, one of San Diego’s greatest problems is the availability of water. Until 1947, the entire county was dependent on local water resources. The population of the county was then only 300,000, but the postwar population boom was well underway. In 1947 the first aqueduct bringing water from the Colorado River reached San Diego. Today 98% of the population is served by imported water from the Colorado River and from the Feather River in Northern California. Local sources account for only 10% of total regional consumption. The eastern two-thirds of the county, however, is not accessible to imported water and must depend on groundwater. Further, because of limitations on future imported supplies, there is virtually no possibility of large amounts of additional water being available.

Agriculture in the county is a US $400,000,000 business annually. Of the total value harvested, the leading products are: nursery, flower, and landscaping plants (22%), avocados (16%), tomatoes (15%), eggs (14%), milk (7%), valencia oranges (6%), other fruit (7%), other vegetables (6%), and livestock (4%). The nursery plants, vegetables, and oranges tend to be grown near the coast, the avocados, milk, eggs, and livestock further inland in the foothills-and-valleys region (the mountains and desert regions have limited agricultural use at present). The total amount of land in crops (which excludes eggs, milk, and livestock products) is 31,800 ha (1980).

There are several important or unique aspects to agriculture in San Diego County. The two leading products are: a specialty crop (avocados) and nursery stock, which consists of another specialty crop (cut flowers, much of them grown in hothouses) and landscaping plants which meet a demand created by urbanization itself. Another important regional consideration is the high cost of importing and treating the water which is used for irrigation. A third factor is the high degree of parcelization in the county; in 1979 a Farm Bureau spokesman estimated that half of the agricultural products (by value) in the county were produced on ownership parcels of two hectares in size or less. Finally, one of the county’s prime agricultural assets is the coastal frost-free zone in which crops can be grown year round. As noted above, this is also where the urbanization is occurring. In a real sense, people and crops are competing for frost-free land, regardless of the quality of the soil on it.

Recent Approaches to Preserving Agricultural Lands

In the United States, the individual states have been active in trying to preserve agricultural lands, and by 1976 a total of forty-two states had adopted some type of legislation aimed at perpetuating farming on lands under pressure of development. The federal government, despite the failure of attempts to pass national land use legislation, managed to retain language preserving agricultural lands in the 1977 strip mining law. The states’ approaches have been the most important, in large part because the US Supreme Court tends to leave land use planning matters up to the states and to the state supreme courts for resolution. Some of the most common agricultural lands protection measures that various states have available to them include:

1. purchase in fee simple of the land that is to be preserved
2. very large lot agricultural zoning
3. purchase (or transfer) of development rights
4. differential (“preferential”) taxation
5. local general plans containing agricultural districts or land use categories.

Because these approaches have already been reviewed extensively by Coughlin (1977), Furuseth (1979), Healy (1976), Platt (1981), Toner (1978), and others, only a brief summary of them will be included here. Purchase of agricultural land outright (“in fee simple”) by a governmental agency is clearly the most effective way of preserving it. Usually, the land will be leased back to farmers by the jurisdiction, often with some sort of usufuct fee in lieu of property taxes. This approach has been used to a limited degree in San Diego County. Its main drawback, of course, is that it is expensive.

Very large lot agricultural zoning (often up to 70 ha or more minimum) is applicable only in major agricultural regions where large ownerships are the norm, and where there is little development pressure. It might not survive court challenges in areas of varied relief where prime agricultural soils occur in broken patterns. By itself, large lot zoning would obviously be inadequate in rapidly urbanizing areas, for it is usually not difficult to change such zoning at some future date when discretionary bodies may view things differently. These problems will also exist even in the presence of weak general plans, that is, if it is as easy to change the plan as it is to change the zoning.

The option of purchasing the rights to develop a parcel of land, rather than buying the land itself, has been widely advocated but is often prohibitively costly. The acquisition of development rights is not unduly expensive where there is little subdivision pressure, but in rapidly urbanizing areas the cost may approach that of actually acquiring the land in fee simple. In one area where this idea was tried (Suffolk County, New York), the cost of purchasing the development rights of 3,420 ha of farmland was cited by the Council on Environmental Quality (1975) as being 60 million dollars. Even at that, only about 20% of the remaining open farmland would be preserved by these means at a cost of $11,400/ha (1975 dollars). The state of New Jersey has similarly set aside five million dollars to purchase farmers’ development rights, and Massachusetts and Washington are also embarking on this approach.