

THE DUTCH SYSTEM OF LAND USE PLANNING

By

Niesko Dubbelboer

September 1978

No. 78-24

It is the policy of Cornell University actively to support equality of educational and employment opportunity. No person shall be denied admission to any educational program or activity or be denied employment on the basis of any legally prohibited discrimination involving, but not limited to, such factors as race, color, creed, religion, national or ethnic origin, sex, age or handicap. The University is committed to the maintenance of affirmative action programs which will assure the continuation of such equality of opportunity.



## THE DUTCH SYSTEM OF LAND USE PLANNING

By: Niesko Dubbelboer

In the Netherlands we have three levels of government that are involved in land use planning. These three levels are the national, the provincial and the municipal government.

### Land Use Planning by the National Government

The goal of land use planning by the federal government is to achieve a coherent planning policy. These policies are formulated in the memoranda on the Physical Planning in the Netherlands. These memoranda are published by the State Planning Committee every six to eight years and give broad guidelines on where the different kinds of land use should be located. In addition, these memoranda include matters that deserve special attention such as the preservation and development of national park areas and the cognate relationship between agriculture and nature conservancy. They indicate the location of new highways, waterways, and railways in connection with areas of industrial and residential growth. They also determine areas with agriculture as the main land use and areas where agriculture must be more in balance with nature.

### The Provincial Level

On the provincial level these rather abstract memoranda are applied specifically to parts of municipalities or several municipalities. The purpose of this regional planning is so that the municipal land use plans of several different municipalities in the same area will not contain conflicting zoning plans and ordinances.

The provincial planning proposals are prepared by the Provincial Planning Committee and must be approved by the provincial council and the Crown (national government). Neither national nor provincial plans are binding upon the general public.

### The Municipal Level

The municipalities have the duty to make specific land use plans and zoning ordinances for the entire municipality. These plans must comply with the regional planning by the provincial government and must also be approved by the provincial government.

These zoning plans not only locate areas for residential, commercial or industrial use, but also for agricultural use and nature conservancy.

These zoning plans and ordinances are binding upon property owners.

In addition to a zoning plan, municipalities also must develop a municipal master plan, which is intended to indicate the general lines along which the municipality is expected to develop in the future. This master plan is not binding upon property owners.

The impacts of zoning ordinances on private property is quite strong in the Netherlands. For instance, one would not be allowed to build a house for residential or other non-agricultural purposes in areas that are strictly designated for agricultural use. Every municipality also has a board that must approve the changes that one intends to make to the shape of houses or other buildings and the blueprints of houses to be built. The purpose of this is so that buildings will harmonize with the surrounding buildings or the countryside.

The advantage of this land use planning system is, above your system, that there is more coordination of zoning ordinances of local governments, and in this way we have a better control on the negative external effects of certain kinds of land use. However, it is true that the owner of private property is more restricted in what he is allowed to do with that property.

#### Land Consolidation

One of the most important instruments for land utilization is land consolidation, which involves over 40,000 hectares a year (about 100,000 acres). This instrument was formerly used only for the achievement of a sound structure for:

1. rational farm management, and
2. socially acceptable working and living climate for farmers.

However, in the early sixties, rural areas were considered more and more not only to fulfill a purely agricultural function, but also to fulfill the interest of other groups of people than those in agriculture. Included in the land consolidation projects were the protection of the countryside and of nature, conservation of environment, and the creation of features for recreational uses. Since then, these consolidation projects are also used to achieve:

1. the highest possible degree of shared use of rural areas by the whole non-agricultural population
2. the maintenance of a natural environment which is as varied as possible.

In these reallocation and consolidation projects, the local zoning plans are strongly considered in the planning of the project.

For areas which are to retain an agricultural function in the future, it is of vital importance to create suitable conditions for the modernization of agriculture and this leads to conflicts in land use.

### Conflicts in Land Use

The Dutch countryside is largely man-made. Of the available space the larger part (78%) is used for agriculture and forestry of which 8% is occupied by woodland, over 13% is taken up by open country and water, while urban areas occupies the rest (about 9%). Gradual changes do take place; however, the rate of change is relatively slow.

The expanding population of the late 19th and 20th century made it necessary to reclaim land from the sea (as the Dutch have already been doing for 700 years) and to protect the reclaimed land from the dangers of the sea. (50% of the Netherlands on which 60% of the population lives would be under water if we had no dikes and dunes.) It was also to reclaim land from nature and to develop it into agricultural land. From 1880 to 1960 we have developed about 800,000 hectares (about 2,000,000 acres) of natural areas and waste land into agricultural land. In the mid-sixties, however, this development was stopped for two reasons:

1. concern about the few remaining refuges of wildlife that would have been entirely destroyed if this process would have been continued;
2. the world market for agricultural products was glutted at that time, and as a result, prices were very low so that the cost of development would have exceeded the benefits.

The older agricultural land had not been changed much until the early fifties although some gradual changes took place through the introduction of fertilizers and other modern techniques. This meant that until then the land was used rather extensively and in relation to the natural circumstances. Before the fifties one could say that the laws of nature were stronger than the human techniques and that the use of land depended on soils, climate, hydrology, and, of course, the existing technology.

This human management of wildlife created special habitats for wildlife in which species could and still do live that wouldn't have existed otherwise.

The introduction of large-scale techniques in agriculture in the early fifties and the economic necessity of introducing them meant a trade-off involving interference with these man-made habitats. To use these large-scale techniques it was necessary to lower ground water levels, to make several small parcels divided by rows of trees or ditches into one bigger parcel and to use more fertilizers and pesticides. This meant a drastic change in the habitats and made it impossible for the species living in these habitats to adjust to the quickly changing environment.

The proper instrument to change the environment in favor of agriculture quickly were the land consolidation projects.

As it had done with the natural areas and waste lands that were developed into agricultural lands, the public also showed its concern with the impact of agriculture on the wildlife areas and the man-made habitats.

On the other hand, farmers will have to continue to adopt these large-scale techniques to be compatible with the rest of the world and to keep their farms economically viable.

The main conflict in land use in Holland is between agriculture and wildlife, although there are also conflicts between agriculture and residential, transportation, and recreation and between residential, transportation and recreation on one hand and wildlife on the other.

#### Agriculture in Holland

Of the cultivated land 55% is used for dairy farming, 40% is used for arable farming, and 5% is used for horticulture.

Our main agricultural products are milk, different kinds of meat, potatoes, sugar beets and all kinds of horticulture products of which flowers, plants, and flower bulbs are rapidly expanding products.

To give an impression of change in agricultural products, the following table is included. This table shows the importance of animal husbandry and the growing importance of flowers and bulbs in agriculture.

Table 1 Production Value (in millions of guilders\*) of Various Agricultural Products

	1960	1970	1976
Milk	1478	3103	5651
Beef, Veal and Pork	1542	3589	5930
Potatoes	118	348	973
Sugar Beets	230	327	613
Wheat and Barley	252	328	434
Flowers and Plants	122	498	1516
Flower Bulbs	186	284	395
Tomatoes	151	363	503

Source: Dutch Agriculture in facts and figures; published by Ministry of Agriculture and Fisheries, 1977, The Hague.

\*Nowadays one dollar is equivalent to 2.2 Dutch guilders.

The importance of agriculture to the Dutch economy is shown by the following table.

Table 2 Foreign Agricultural Trade.

	1960	1970	1976
Share of the agricultural exports in the total exports (in %)	30.7	27	24
Trade balance of agricultural production in millions of guilders	+1770	+4240	+8700

Source: Dutch Agriculture in facts and figures; published by Ministry of Agriculture and Fisheries; 1977, The Hague.

These figures should be considered in view of the fact that only 6.3% of the working population is directly involved in agriculture. In addition to this, we are self-supporting in terms of food calories. That is to say, we import the same amount of food calories as we export.

The average size of farms in the Netherlands is about 30 acres, which is rather small compared to farms in the United States. As a result, more than 75% of our farmers earn an hourly wage that is lower than the Dutch minimum wage.

About 50% of the agricultural land is rented land. In our country the leasees of land are strongly protected. The reason for this strong protection is the failure of the market system for land renting and land selling in the thirties. As the prices of agricultural products increased after the depression of the thirties, it was not the leasees (the farmers) that collected the benefits, but the landowners. This was considered not in the public interest of the farmers. Therefore the law on renting of land was passed with the following content:

- the annual rent would be determined by a tenancy tribunal;
- the land is rented for a period of six years, and after this period, the leasee has the option to rent it for at least another six years;
- when the owner sells the land, the leasee has the first option to buy for an estimated amount of money, which is determined by the tenancy tribunal;
- the leasee keeps the right to rent the land even if the owner sells it to a third party.

Nowadays the rent is about \$80 to \$120 per acre per year, depending on the quality of the soil. This, in comparison with the price of land, is a very low rent. The price of land is about \$10,000 to \$12,000 per acre. As a result of this big difference, more and more owners of land are preferring to sell their land rather than rent it, and so the percentage of rented land has been decreasing over the last 20 years.

### Summary

The conflict in land use in the Netherlands is mainly a conflict between agriculture and the preservation of wildlife areas, although there are also conflicts occurring in other areas. The conflicts are amplified by the importance of agriculture to the Dutch economy since about 25% of our export value is made up by agricultural products.

To solve the land use problems we have a coherent land use planning system in which national, provincial and municipal governments are involved. The planning policy is in fact made at the lowest governmental level, the municipality; however, this policy must be approved at the provincial and national level.

An important instrument in rural land use planning, which also helps to improve the circumstances for agriculture, are land consolidation and land reallocation projects. These projects are necessary to keep Dutch agriculture compatible with agriculture in the rest of the world.