

“DUTCH SPATIAL PLANNING MODEL” FOR SUSTAINABLE URBAN DEVELOPMENT

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1. Introduction

The Netherlands, like many other countries, has faced a number of serious problems of both common to all and specific to the country itself after the Second World War as a result of the economic growth since 70s. However, as Netherlands has always been aware of the spatial development issues, they have proved to be rather well organized and planned society. Its schemes of spatial planning; policies and instruments all together known as “Dutch Model” have always attracted the experts, as many agree that the spatial planning produced successful outcomes. Since then in spatial planning, the country has passed through a period of know-how acquisition, which we call the “The Dutch Learning Process”, to set policies and balance the trade of between goals. In many aspects they have yielded very successful outcomes but there are also limited results. That is why we have examined the Netherlands in order to figure out “Dutch Model” by finding answers to the questions of “How they did?”; “How they were successful?”

2. The Netherlands

The Netherlands, with its increasing today's population of 16 million, is one of the most urbanized countries. The average population density increased from 157 in 1900 to 466 inhabitants/km² in 2000; and the build up area density of the most urbanized area in the country, Randstad conurbation, has the density of 2000 inhabitants/km². The population has grown by 1.72 times, whereas the residential area enlarged by 2.42 between 1950-1996. The land is a scarce commodity in the Netherlands, where as well %40 of the total country is under sea level. Thus water with its long standing problems and risks of float is also limiting the portion of territory, hence necessitating water management.

Netherlands is a wealthy country with its growing economy of the amount of \$20,905 GDP per capita, similar to that of Germany and France. Along with, the government has also been able to well manage the financial sources for the improvement of spatial planning in the country. The national expenditures on all categories QOL expenditures increased from 3 billion Euro to 5 billion Euro since the middle of 80s. However not only the amount but also the nature or composition of the expenditures has also changed. Such that: the share of transport decreased from 70 % to 60% and the other types of QOL expenditures such as urban renewal, preservation of nature and environment has increased from 30% to 40 %. Although discussions are still going on, the Dutch government has recently proposed its investment plan by the end of 2010 as follows: New Roads: 2.0 billion Euro (0.7 for road pricing); Public Transport: 2.0 billion Euro; Vital Cities: 2.0 billion Euro; Nature Conservation: 1.3 billion Euro. All kinds of spatial development investments constitute the 11 % of total GDP with the total amount of 38 billion Euro. Within these expenditures, the national government has the share of 5.3 billion Euro, provincial and local authorities spends 2.7 billion Euro and private sector has the highest part with the figure of 30 billion Euro.

Compared to spatial planning, transport planning was less successful such that the share of public transport, 14%, is still low compared to many developed European countries. The private car use percentage, 74 % is rather high; however the level of cycling and walking achieved, was satisfactory with the percent of 8%. Besides the unbalanced model split as introduced above, one of the problems is the increase of average distances traveled. The annual distance by car increased from 7990 to 9077 billion Passenger-km by the percent of 14%. And for the public transport, the increase was 36% from 1287 to 1756 billion passenger-km between 1986-1998. Moreover, the government has also foreseen a 30 % growth of total mobility within next 20 years.

3. Dutch Spatial Planning System

Today's general policy framework for spatial development is based on transparency, integrity of all necessary disciplines, and coordination of stakeholders; leading to the idea of ‘*centralized where necessary and rather decentralized where possible*’. The core of planning relies on reaching to consensus by exchange of knowledge, team works, negotiations, persuasions among all linked

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actors within government, all non governmental bodies, private sector and public intervention in the national scale and with the EU in the international platform, all together so called “polder model”.

The history of modern spatial planning in The Netherlands goes back to beginning of the nineteenth century when first, the spatial planning at local level was made obligatory to the municipalities with the enforcement of “Housing Act” in 1901. In 1931 after the revision of Housing Act, the regional level spatial planning was introduced and adapted. This was followed by the introduction of national level planning with issuing the first “National Spatial Planning Act”. Thus, the spatial planning at tree levels so called “Three Tier System” had been completely established in 1960. The major roles of each authority at each level is summarized in the below Table 1 in order to show the functioning of the system at each level. “Fifth National Policy Document on Spatial Planning” (2000-2020) was preceded by 4 different policy documents for 4 planning terms. The point, when developing these 5 successive spatial plans was that the former is the key to prepare the latter. What was realized as lacking or unsuccessful within the present was the concern of the following planning term. This is what we call the learning period of spatial planning in the Netherlands. Table 2, further summarizes and compares the four policy documents for 4 spatial planning periods.

4. 5th National Policy Document on Spatial Planning

The Fifth National Policy Document on Spatial Planning entitled “Making Space, Sharing Space” was published as a draft report at the end of December 2000. With the fifth national policy document, the Netherlands is expecting to be initiating a new and more successful spatial planning term. The reason is that the government has developed seven important policy objectives, shaped by the overall mission which has been described as the “Enhancement and the Balanced Distribution of the Total Quality of Life”. These major policy objectives of the fifth policy document were summarized as follows:

1) Achievement of international aspects

A transnational approach, through European perspective, has been included due to two main reasons. First is to help to develop a European spatial planning framework which will be quite necessary in return especially for the economic and environmentally sustainable development of the regions outside the borders. Second is the formation of transnational logistical network for a better international interactions and relations that will help to strengthen the Netherlands’s position within the European Union.

2) Balanced economic growth & environmental quality

The fifth plan not only promotes the economic growth but also aims to take measures to ease the bad impacts on the environment in order to maintain and even increase the sustainability. The government continues to create new jobs and build new commercial, business and

industrial centers, at the same time together with challenges for renewing postwar developments. A better economy not only yields increase in GDP and tax revenues of the government but also causes congestion and environmental pollution. The decision within the fifth plan is to attempt to establish the balance between environment and economic growth by using the financial benefits of the economic growth as a source to maintain and even improve the quality of environment.

3) Compact cities and open landscapes

Even though a restrictive policy has been followed in Netherlands, urban sprawl still can be observed though smaller than many other European countries. That is why a special emphasize has been given to manage the urban growth to achieve compact urban developments and save more open rural green areas. The Dutch government is planning to construct %50 of the total new houses within the current built-up area of the cities. One of the key aspects of the fifth policy is the concentration of housing, work and other facilities in the cities. This will help to decrease mobility while to increase accessibility to many facilities such as works, recreational areas and so on.

4) Network Cities

Since the Dutch society is developing to be a network society, this policy objective is of high importance to meet the changing life styles of the citizens. The idea of urban network has two parts; first is development of city centers and the second is that connecting the city centers through efficient transport networks aiming to use the facilities of cities more efficiently. The largest network of the fifth policy is the network within the Randstad conurbation connecting the five very important cities for the Netherlands (Amsterdam, The Hague, Rotterdam, Utrecht and Almere).

5) Multiple and intensified land use

Multiple land use is one of the promising concepts of the Dutch Model Spatial Planning in order to manage and concentrate efficient use of urban and rural areas. Multiple land use has four dimensions: the first is to make use of even very small piece of land; the second refers to the mixture of function in the same place; the third is to make more use of one parcel of land quantitatively like high rise or underground construction and finally fourth concept is the time management of multiple functioning of one space. Within the idea of the multiple and intensified land use in the fifth policy, the government embarks on a program, called as “Stimulation of Intensified Use of Space Program” (StiR). In this program, twenty two projects have been selected to act as key projects which will be supported by expertise together with funds to prove how some of the multiple land use aspects affect the quality of life. For example, the availability of more effective use of space along the motorways or around the sea and air ports by taking necessary measures is under this title of the document.

6) Nature Preservation

Nature has been a historical concept of the history of the spatial planning in the country, and it was included in

the fifth document. National landscapes account for 15% for the Netherlands and seven areas have been designated as National Landscape. Besides provinces can designate areas in accordance with the large scale National Contour Plan then the national government will invest to improve the provincial and national landscapes

7) Vital Cities

“More Vital Cities”, this is what the Dutch government wants to achieve by the end of the planning term. Vitality has three dimensions: Individual Life Aspiration Satisfaction, by better working and living environments; Overall Social Satisfaction, by more green areas; Economic Satisfaction by higher income. The Dutch government has chosen 30 cities for urban renewal to realize the target of vital cities.

6. Assessing the Dutch Spatial Planning

Critical Assessment on the performance of the Dutch Model was made as being the scholars of land use and transport from outside of the country.

1) How they experienced in spatial planning to develop well planned society?

For their spatial planning policies, the integration and collaboration of all stake holders helped them to experience and learn faster and to reach better the next challenge. Though the process to reach consensus is rather long and hard, once it has been achieved, the outcomes are quite satisfactory. Of course, being a small country with population of 16 million that helped the government to manage the coordination that may be much more difficult for larger countries. It should also be mentioned that the high economic growth and a high GDP constituted a big source to the government. The Dutch government was successful in spending it for better spatial developments.

2) How they proved concepts that altered with changing needs and desires?

High public involvement in policy making led the government to understand and response the changing needs of the Dutch society. Nevertheless, as claimed by the Dutch government, they still lack to meet the changing desires to satisfy the QOL expectations. This will be in the policy bottlenecks of the next 20 years. This indicates how the Dutch government emphasized the claims of its society.

3) How they realized compact and clustered urban development and saved open spaces?

The awareness of environment and nature has been rather a historical fact for the Dutch society and it has developed many policies to protect the nature and environment. The government expenditures also support their approach such that the share of environmental expenditures, as of GDP, is higher when compared to other two developed European countries UK and Germany. Although dispersed development has been less rather than many other countries; still urban sprawl and uncontrolled growth had occurred especially after the second world war. As they expect a population growth and some important changes in the demography, the danger of the high

dispersion is proving problems. Therefore the government, in order to manage the future growth, has produced many policies and measures for their planning period of 2010. Also, the involvement of the Dutch government in land and housing market also played a role to control the growth, to some extent.

4) How the financial system functions in government?

There are two main topics on interactions of financial and spatial planning systems, where the debate is still being pursued. First, although decentralization towards the local authorities is aimed, the financial system, especially taxation policies, do not match with the proposed decentralization. Highly centralized nature of taxation system lessens the freedom of provincial and local governments. Nevertheless, the central government has been successful in shaping and allocating its expenditures and improving taxation policies such as green taxes. The other is that Private Public Partnership needs to be improved especially within the transport sector for efficient involvement of the private sector by means of real estate development and infrastructure investments and operations.

5) How the “Polder Model” & “Three Tier Structure” works in policy making

The polder model, a model for reaching consensus through transparency and collaboration, is one of the well achieved issues about planning in the Netherlands if compared to many other countries. This was succeeded by a long period of learning and is still being improved by many supporting measures and programs. Besides, the system also takes its power from the unofficial rules which are not written but well respected by many while cooperating in execution. The three tier spatial planning was also well established but still existing two weak points need to be improved. The first is the financial weakness of regional and local authorities. The second is the weakness of the reverse functioning of the system that is to say that from top, national to down, local interrelations work well however, from down to top still many problems exist in execution.

6) How transport planning matches land use planning?

They developed effective spatial policies and hence got more successful results compared to that of transportation. However, being aware of land use and transport interaction, both ministers are highly coordinated in such a way that the Ministry of Transport gives its final decision after consultation with the Ministry in charge of Spatial Planning. For example, through Randstad Conurbation development facilities, regional transport improvement programs have the highest priority. Also their renewal policies for post world war developments are supported by new transport improvements. Besides, the government also knows that the public transport network quantitatively and qualitatively should be improved since the share and the service attributes are low when compared to many other developed countries. The Dutch government declared this policy declared it among its six main policy challenges for 2010 to meet the increasing demand for transport.

Table 1: The Three-Tiers Spatial Planning System

LEVEL	BODIES IN CHARGE	MAJOR ROLES
National (1960)	Central Government (Ministry of Housing Spatial Planning and Environment) Parliament	<ul style="list-style-type: none"> Countrywide policy objectives and policy instruments (Key planning decisions) General spatial planning principles and guidelines to be followed by the regional and local authorities Directives to provincial and local authorities where necessary Budgeting for financing and supporting regional and local developments and projects, Implementation of large scale national and international significance projects and infrastructures
Regional (1931)	Provincial Council Provincial Executive	<ul style="list-style-type: none"> Regional level zoning plans as guidelines for the local level authorities Supervision of municipal and water management board decisions
Local (1931)	Municipal Council Municipal Executive	<ul style="list-style-type: none"> Detailed local land use plans developments and implementations Building permits covering all construction activities

Table 2: Comparison of first four National Policy Documents on Spatial Planning

	Term	Scope	Highlights	Non-Fulfillment
First National Policy Document on Spatial Planning	end of 50's, beginning of 60's	<ul style="list-style-type: none"> The problems of spatial development were set and determined. Effort was forwarded to mainly the development of the Western part of the country known as Randstad, especially taking into account the European markets and industrial development. 	<ul style="list-style-type: none"> It was 1st national level and long term spatial planning report. It was the first joined study of different governmental agencies together with experts and researches from the universities. It awoke the awareness of both government and citizens on the issues of spatial planning. 	<ul style="list-style-type: none"> It was not a problem solving approach as no policy and policy instruments were offered to tackle the problems.
Second National Policy Document on Spatial Planning	60's	<ul style="list-style-type: none"> The policies and policy instruments about spatial development were specified in order to solve the problems. To meet the growth, the concept of development of old and new urban regions were introduced and implemented together with the improved transport systems. 	<ul style="list-style-type: none"> It contained the detailed evaluation of existing concepts and development of policy instruments that can be adapted Netherlands with its political and social nature. (Randstad, Green Heart) Through the aim of transparency the document was publicized to inform the public on spatial planning and development issues 	<ul style="list-style-type: none"> Since the ways of applying the policies were not fully described, the results were rather slow below the expectations.
Third National Policy Document on Spatial Planning	70's , beginning of 80's	<ul style="list-style-type: none"> Programs and projects to apply the policies were entirely described with a set of relevant reports. A more emphasize has been placed on the adaptation of urban region policies supported by further implementations for controlling the suburbanization. 	<ul style="list-style-type: none"> Through the implementation of policies and policy instruments further co ordination was developed within the government and with other sector for all levels (Key Planning Decisions (KPD) Procedures) The attention was drawn to increasing urban quality more than ever before. 	<ul style="list-style-type: none"> The problem of scarcity of resources, which should have been assigned for new developments, was encountered. By the end of its term the plan was already in adequate to satisfy the rapidly changing needs of society.
Fourth and Fourth Extra National Policy Document on Spatial Planning	end of 80's, 90's	<ul style="list-style-type: none"> A special emphasize was placed on environmental matters within the idea of stimulating the economy by taking into consideration the impacts on environment simultaneously and ROM as area specific policy approach was introduced to deal with environmental problems. Rather a strict policy was followed to restrict the suburbanization and control the renewal and development of cities strengthening the idea of compact cities. The concepts of "contrast of areas", "diversity instead of monotony", "compact cities" were adapted with special interest in increasing the spatial quality, hence emphasizing the quality of life more than ever before. 	<ul style="list-style-type: none"> On the way to prepare the final document, Physical Planning Key Decisions were fully practiced through the involvement of citizens, NGO, NPO, different level of governmental authorities, experts, researches by distributing thousands of draft reports and analyzing the responses. Policies for more compact cities like the large scale residential areas within the city regions (VINEX locations) strengthened the idea of network society and economy ABC policy was adapted to stimulate the controlled development of business and industry areas. 	<ul style="list-style-type: none"> The restrictions for developments in rural areas and city center developments were not as successful as expected. Proposed ABC Policy outcomes were found to be overestimated It was lacking of a kind of in case approach such that if the results were not satisfactory, there should have been provided with some flexibility for required adjustment. The level of quality of life reached by the end of the term of the fourth document was not satisfactory as expected . Results of presumed control of VDT through land use and transport policies were below expectations.