Metropolitan landscapes in the Netherlands: effects of policy shifting

Alexandra Tisma

1. Introduction

The landscape of the Netherlands is a man-made, cultural landscape, mainly flat, apart from regions in the eastern and southern extremities, lying between -6 and 20 meters above sea level. Since the beginning of the last millennium, settlers, farmers, city dwellers and engineers have created a system of dykes, barriers and locks defending a part of the inner land, as well as the coastline of the whole country. The abundance of land units with a man-controlled water level has made the word "polder" a Dutch contribution to many languages of the world.

The current land use in the Netherlands is characterized by the considerable prevalence of agricultural areas (65%), almost the smallest percentage of forests in Europe (about 10%) and, surprisingly enough, not so high a percentage of inner waters as one might expect (about 5%). In addition, 3,8% of "nature" areas have also been created by man, often by transforming the agricultural landscape into areas for plants and animals so as to increase biodiversity, but with the limited access for people.

Figure 1. Anna Paulowna polder in the province of North Holland dating from 1846 (photo: Paul Paris, Amstelveen)

There are many features of the Dutch landscape illustrated by the picture above: we see a typical lowlands landscape, with the prevalence of agricultural land, the village of Kleine Sluis somewhere in the distance, a canal in the middle, as well as a mixture of crop fields, pastures and colorful flower production fields for which this country is renown worldwide. Everything is obviously in perfect order and symmetry, with clear borders between urban and rural, neat and beautiful. This landscape perfectly illustrates the four rules of Dutch spatial planning school (Reh et al., 2005): purpose of usefulness, economy of resources, meaning of the place and clarity of form. What is not visible in the picture is the labyrinth of rules and regulations of different policies aimed at developing, protecting, limiting or stimulating such a landscape development. In order to illustrate the effects of the shifting policy and its impact on landscape, we will rely on the example of the use of landscape for recreational purposes, which is becoming an increasingly important issue in the landscape policy.

In Western countries, the cohesion between cities and surrounding green areas within a so-called metropolitan landscape is considered vital for any sustainable urban living conditions. The green and open space surrounding and intersecting city regions is no longer regarded as undeveloped space, but an important asset for sustainable urban living conditions. The current standards of wealth, dynamics, leisure time and mobility, typical for Western metropolitan population, generate the need and possibilities to enjoy green open spaces as “a consumable for all civilians” (Jaarsma and Van Dijk, 2005): the surrounding regional open space, green and rural environment that serves as urban residents’ communal garden. Metropolitan landscapes should, therefore, be treated as multifunctional as they are seen not only as images for admiration, but also as places easily accessible to inhabitants for all forms of relaxation and recreation.

2 Separation of space in the Netherlands

Within the spatial planning policy of the Netherlands, space is divided between "Urban" and "Rural" realms. For several decades now the aim of this national policy has been to keep the urban growth confined to compact cities in order to protect rural landscape from urbanization. However, this policy has never been too strict, hence allowing for the development of the so-called urban fringes, i.e. areas under the pressure of constant urban expansion. They exhibit a mixture of urban and rural functions, resulting in rural landscape fragmentation.

The development of rural areas within the national policy falls under the competence of the Ministry of Agriculture, Nature and Food Quality (LNV) while the development of urban areas falls under the competence of the Ministry of Housing, Spatial Planning, and the Environment (VROM). The two ministries generally cooperate on common issues related to landscape development, even though they sometimes also develop their own policies for the same areas. The reasons for this are very complex and mainly process-related, and will not be tackled in this paper which is primarily concerned with the physical manifestation of landscape-related policy decisions.

Although policies of the above-mentioned ministries overlap in many aspects, the difference between the approaches of the two is that LNV generally uses a direct approach in its policy of nature protection and land acquisition for nature development, while VROM looks at the landscape in combination with other

spatial functions, in other words, it focuses not only on the protection but also on the possibilities for new developments. In theory, this sounds rather good but, in practice, to understand who is doing what, when and how, can be very difficult, not only because the landscape policy issues are distributed between the two ministries, and additionally between their respective departments, divisions or portfolios, but also because the organization and division of tasks within the two ministries changes all the time. The map of all the national and international landscape protection policies that apply to the Netherlands (Figure 2) is one illustration of the situation.

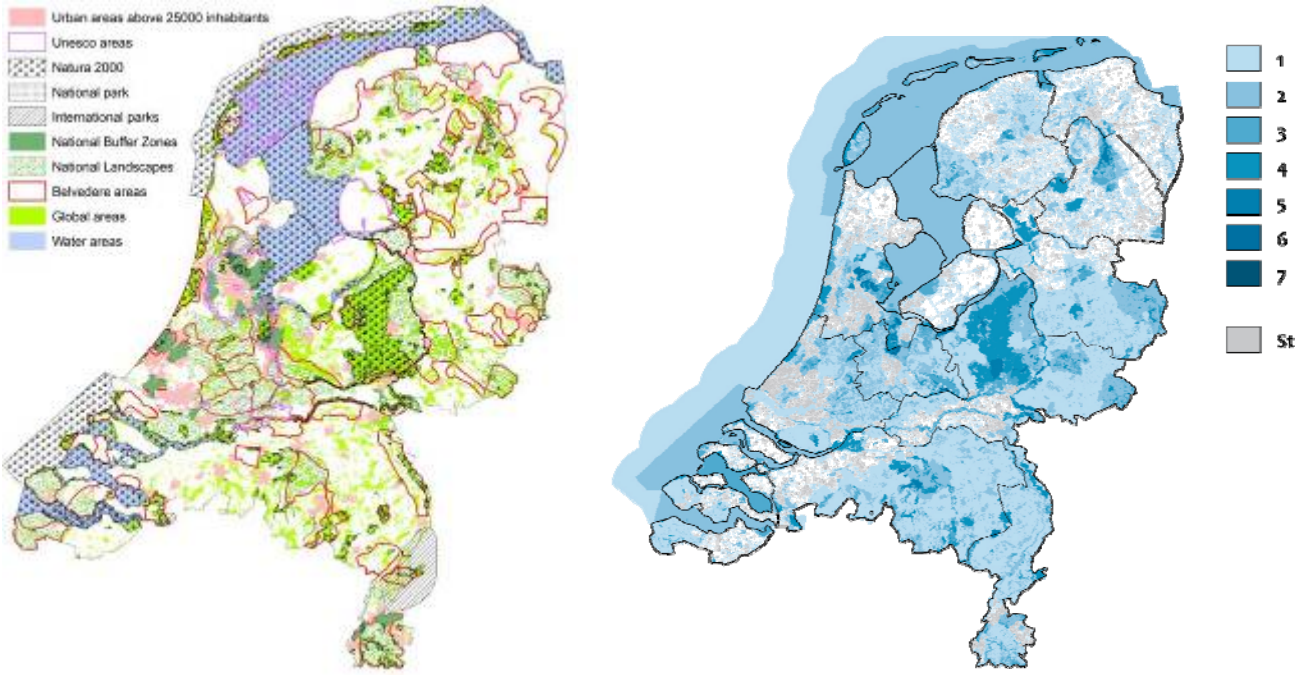

Figure 2. National and international landscape protection policies in the Netherlands

In this figure, numbers 1 - 7 indicate the number of overlapping policy layers. For example, the darkest patch is mostly in the central part of the country, near Hooge Veluwe –the oldest National Park in the Netherlands, recently declared a Cultural Landscape, belonging to National Ecological Network, UNESCO, *Belvedere and Natura 2000* protected areas.

Of course, there are always exceptions to these trends, the most recent and very important being the two years old *Landscape Agenda* program (developed in cooperation between the two ministries) and the *Beautiful Netherlands* program (developed only by VROM). These two overlap again, but still treat the landscape in a multifunctional and integral way, trying to incorporate new insights and approaches to the landscape development and to stop fragmentation of rural landscape, especially in urban fringes. The problem to be solved is that such an ambitious effort is not sufficiently supported by adequate legal and financial instruments (PBL, 2009).

3 Leisure landscapes of the rural Netherlands

For many years, geographers, planners, landscape architects and other professionals have been dealing with the classification of the Dutch landscape

types. The knowledge about different landscape layers and their changes over time is abundant and varied. However, the existing classifications encompass only rural landscapes and are generally based on geological and soil characteristics, as well as on the historic land-use development, and not on their visual or multifunctional character. These classifications exclude urban space and mention it usually as one unspecified category only, while urban fringes do not appear at all.

In the recent Dutch policy documents, the issues of recreation and landscape have been given plenty of attention, often with contradictory goals. On the one hand, the objective of landscape development policy is to protect landscape from urbanization. On the other, there is a growing pressure to open, intensify and transform landscapes in accordance with the leisure needs of citizens. As a consequence, this means imposing to some extent urban functions to rural landscapes and bringing in elements that are as heterotopias fully ignorant of surrounding landscape (Figure 3). The question of how to fit this objective into the existing, mostly open, landscape is not on the agenda of either national or local policies. Moreover, more detailed analyses of rural recreational potentials are not related to landscape typologies.

Figure 3. Ski hill in Bergsche hoek, near Rotterdam (Photo: Paul Paris, Amstelveen)

In order to assess the recreational potential of Dutch landscapes, we conducted a research which involved the overlapping of landscape typology and existing recreational facilities. For that purpose, Dutch landscapes have been classified in eight types (Figure 4). The description of these cultural landscape types has been based on a number of classifications, those by Keuning (1946) and Zonneveld (1991) being among the most important ones. Both sources are generally accepted as important for landscape classification in the Netherlands. The basis of the classification is a combination of soil characteristics and historical land use.

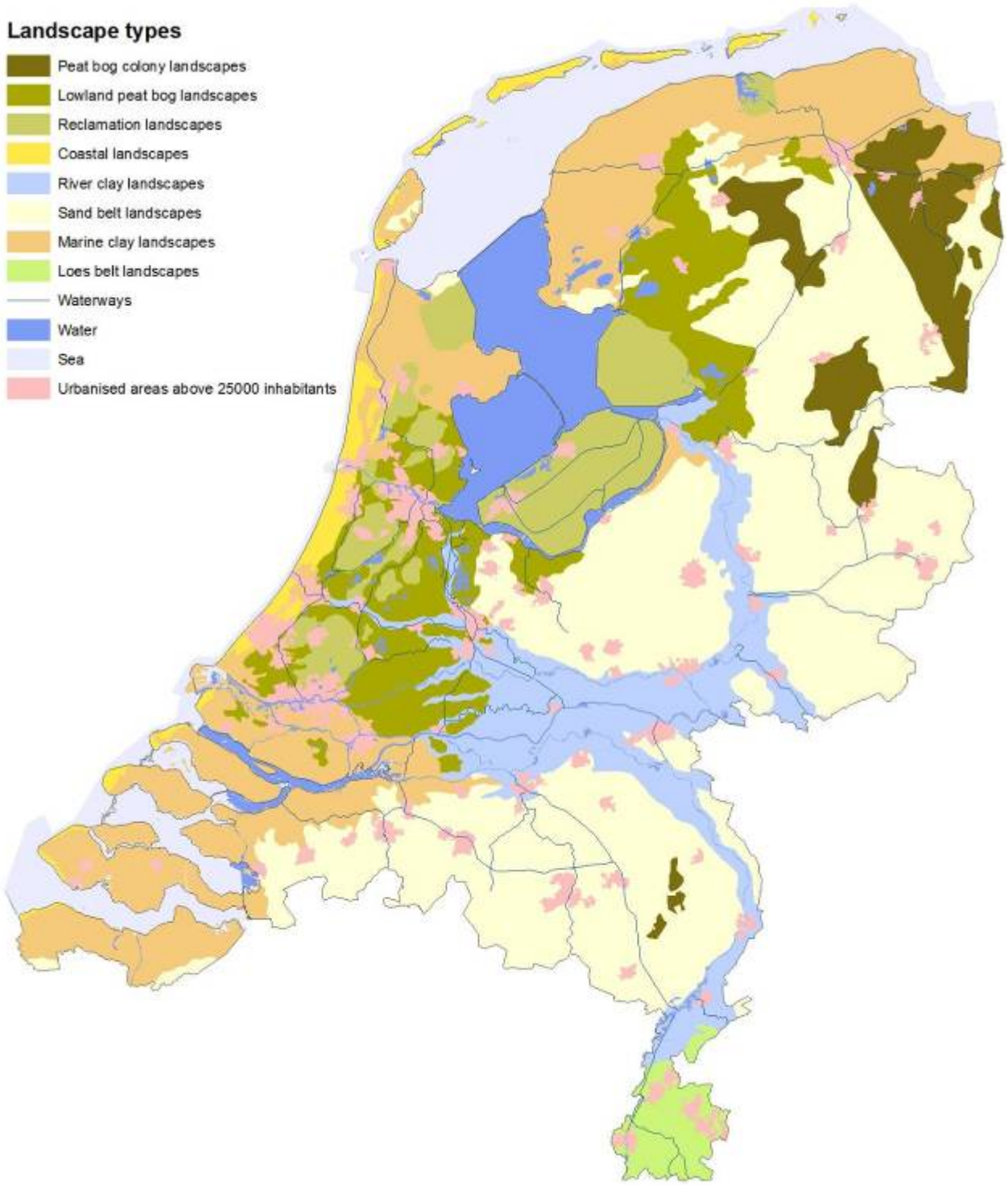

Figure 4. Landscape types (Tisma and Lörzing, 2008)

The second step was to categorize recreational space, making a distinction between three main levels of scope, namely: the large "areas", the long but narrow "lines" and the small, concentrated "points" (Table 1). This simple division is in line with the perception elements made by Kevin Lynch (1971), where areas are described as *districts*, lines as *paths* or *edges*, and points as *nodes* or *landmarks*. Similarly, in ecology terms, *patch*, *corridor* and *stepping stone* are used.

Areas: Large surface areas	Points: Recreational amenities	Lines: Recreational routes and networks
National parks National landscapes National Buffer Zones “Green Star” park areas Beaches and seaside resorts Lakes and lake districts Sandpits Policy defined areas	Theme parks Zoos Holiday villages Golf courses Marinas Other recreational amenities	Network of bicycle trails Network of walking trails Other linear elements

Table 1. Recreational facilities according to their shape

GIS technology has been used to cross-reference the data on available areas, points and lines with the landscape types. Figure 5 shows how it visually looks when all recreational facilities are put together. It is already apparent that the Randstad area is the whitest, compared to the Hoge Veluwe area which is the darkest, but to be able to draw more precise conclusions we had to calculate the densities of areas, lines and points per landscape type. This is how we came up with the three main groups of Dutch “leisure landscapes” (Figure 6).

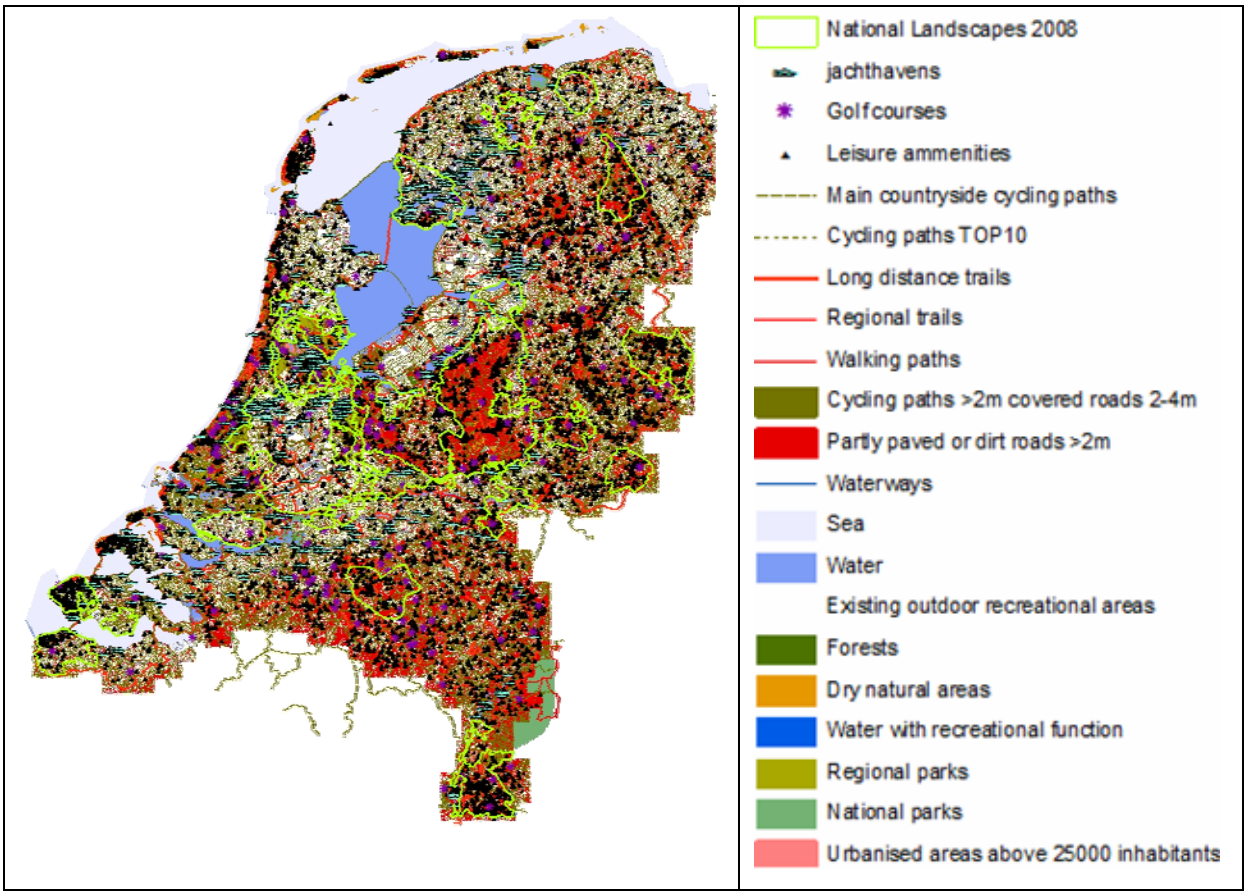

Figure 5. All recreational facilities projected on the map of landscape types

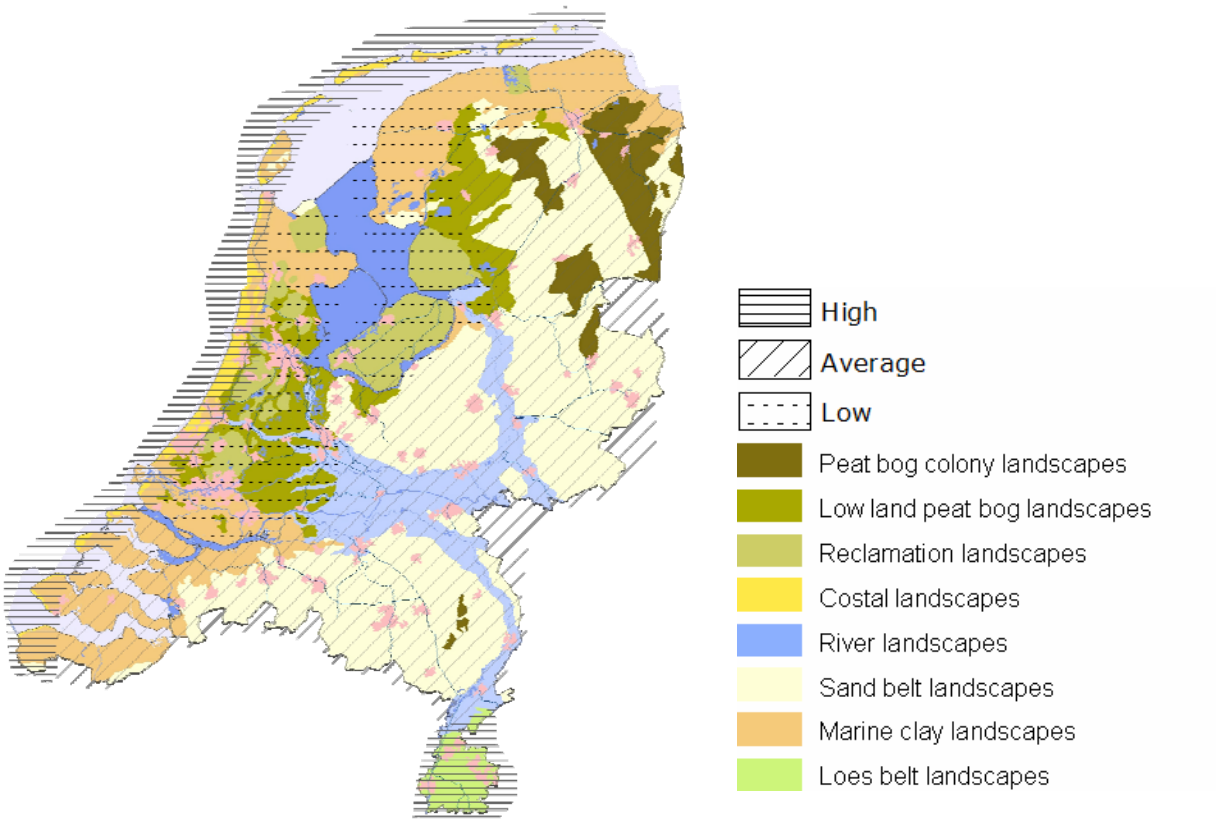

Figure 6. General picture of the potential of Dutch landscapes for leisure

- Leisure landscapes with the **high density** for all recreational facilities are to be found in two landscape types: the coastal dunes and the loess landscapes in the south. These landscapes have been popular since the beginning of recreation and tourism, mainly for their diverse character and their typical landscape transitions. This diversity comprises relief (hills, dunes), forests, groves and hedgerows. Both landscape types have a relatively dense network of trails, paths and country roads. As can be expected in the light of their long-standing tradition as holiday destinations, they have the largest concentrations of recreational and tourist facilities and amenities.
- The sand belt landscapes are in the middle of the scale, showing an **average density** of amenities and networks. Like the loess and coastal areas, the sand belt too has considerable tradition as tourist destination. However, since the sand belt is relatively large (it takes up almost a half of the country) and the distances to the largest concentrations of population are quite big, the density of amenities is clearly lower than in the loess and coastal areas. The network of trails and paths is also average, but it can be very dense in some parts of the sand belt, in particular in the Veluwe and Utrecht Hills regions.
- The **low density** of recreational amenities and hiking and biking trails is to be found in the remaining landscape types, particularly the lowland peat landscapes (large portion of the Green Hart), the (marine and river) clay landscapes and the reclamation landscapes (e.g. Flevopolder). This is mostly due to unfavourable soil conditions (wet and soft soils, practically ruling out any unpaved roads as they would become mud tracks for most of the year) and the typical land pattern of these open landscapes, with their

large and often deep parcels that leave little space for paths. In addition, these landscapes have the lowest percentage of forests. These findings are even more unfortunate in view of the fact that most of these landscapes lie in the vicinity of major cities in the Netherlands, the so-called Randstad area. These are the areas with the highest demand and the lowest supply of recreational facilities (de Vries et al., 2004).

3.1 Capacity of landscape types for recreation and recreational behavior of the Dutch citizens

Protection of landscape openness is one of the most important objectives of the Dutch landscape policy. It has been undoubtedly inspired by the fact that Dutch landscape has been exposed to many threats during the last century, e.g. urbanization and infrastructural developments that led to landscape fragmentation. Open landscape is often seen as synonymous to a landscape which is still intact, and therefore vulnerable. It is something that should be respected and protected because the loss of openness is irreversible. However, as the analyses show, it is open landscapes which have the lowest number of recreational facilities. It is also known (de Vries *et al*., 2008) that open landscapes have the lowest capacity for recreation as opposed to forests (Table 2).

Land Use	walking	cycling
Dry nature area	6	2
Forest	9	3
Parks and public gardens	8	2
Agricultural area, closed landscape	0.2	1.0
Idem, open landscape	0.1	0.5

Table 2. Carrying capacity for walking and cycling in various types of open space (in persons per hectare per day). Source: De Vries *et al.,* 2004.

Turning to the recreational behavior of Dutch people, it should be noted that their most important activities by far are walking and cycling (Goosen, 2006/2007). Most of them engage in these activities either in the vicinity of their homes or in forests and agricultural areas (Goosen, 2006/2007). As indicated in paragraphs above, the country is not very rich in forests, especially the Randstad area which is dominated by low capacity open agricultural landscapes. In addition, according to our analyses, this particular area falls into the category of low density leisure landscapes. Consequently, the problem doubles – the landscape has low density of recreational facilities and it is open, therefore, it has low recreational capacity – while the recreational pressure here is the biggest in the country.

This problem of recreational capacity deficiency in the Randstad area has been recognized by the central government and both ministries (LNV and VROM) are dealing with the problem, again partly together and partly individually. One of the most important policy actions in this regard has been the intensification of the existing National Buffer Zones.

3.2 National Buffer Zones

To prevent Amsterdam, The Hague, Rotterdam and Utrecht from growing together into one ribbon-shaped super-city, the urban area of the Randstad has been intersected by a total of 7 buffers in 1956. These buffers had to be kept open (more specifically: free from large-scale urbanization), and some of them were to be transformed into large park areas. Two additional buffer zones were later envisaged for the urban conglomerate in the southeastern Netherlands, encompassing the cities of South Limburg (Maastricht, Heerlen, etc.) and their suburbs. In 2008, the newest buffer, park Lingezegen, was introduced in Brabant, and the term “buffer zone” was replaced by “National Buffer Zone” (NBZ). At the moment, there are ten of them in total.

Over the last fifty years, the government has continued to pursue the goals of protecting the NBZs through a restrictive building policy in combination with land acquisition for recreational uses. Building is only permitted under the “No, unless” principle; in other words, only if it contributes to the recreational value of the zone. In the Dutch spatial policy, the NBZs are regarded as the largest landscape protection success because of their continuity, successful combination of protection and development, and strong planning safeguards. Nevertheless, in this period, the NBZs have never been free of new urban developments. Even now, there are plans in place approved by the central government (Figure 7, PBL, 2009).

Perhaps the most striking feature of the NBZs is their diversity in terms of geography and land-use. Some of them encompass large areas with mixed land-use, villages, strip developments and greenhouses. By contrast, others include wide-open agrarian landscapes and vast stretches of water. Some NBZs come closer to the more familiar idea of a regional park, with park areas, woodlands and forests. The last category is very interesting exemplifying an active approach to "buffering" urban areas. Here, the wish to keep buffers free from substantial urbanization was supported by the creation of heavy “green areas”, which were supposed to keep all future urbanization at bay. The best examples are the buffer between Amsterdam and Haarlem, which was to be converted into the park area of Spaarnwoude, and Midden-Delfland buffer zone (between the Rotterdam Area and Delft), the only buffer for which a special law was passed (*Reconstructiewet Midden Delfland* or the *Central Delfland Reconstruction Act*, 1977) guaranteeing the legal and financial support for a "complete make-over" of an area of over 5,000 ha.

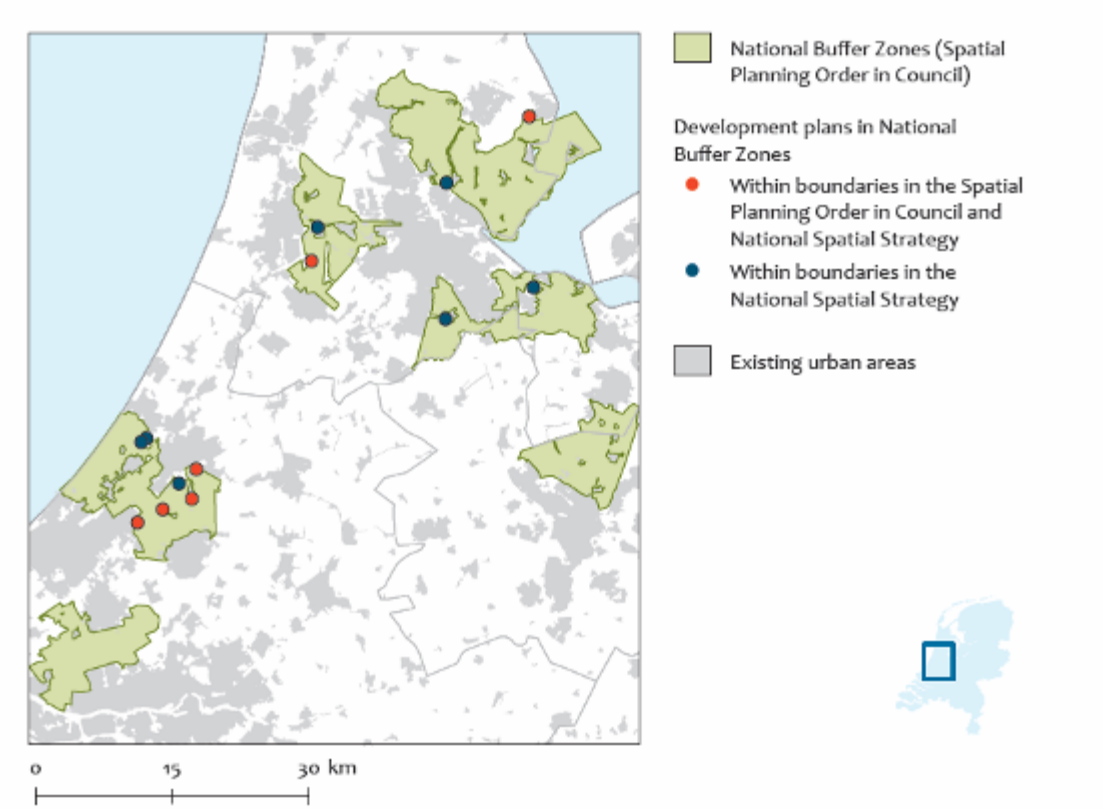

Figure 7. Major development plans in National Buffer Zones (PBL, 2009)

Since recently, the central government has been planning to enrich the NBZs by making their recreational facilities more varied than before (mainly walking and biking paths and trails, and facilities for water recreation). The *Beautiful Netherlands* program has devoted a lot of attention to how this should be done in order to prevent further urbanization of the NBZs. In addition to the protection measures, the program focuses on design stimulating activities, e.g. design workshops, project competitions, instruction books, etc. Yet, there are many different views on how NBZs should be intensified for recreational purposes. In the following chapter we will discuss two of them.

3.3 Randstad Metropolitan Parks

In 2008, a new national policy document was enacted by VROM – the *Randstad 2040 Structural Vision*. Among other issues related to the spatial development of the Randstad area, it mentions the NBZs as possible locations for new "metropolitan parks". According to this document, "the current buffer zones, in the form of green areas between cities, will acquire a more pronounced recreational function" and "metropolitan parks" will, consequently, be added as an extra green-blue quality boost in the NBZs. These new metropolitan parks (according to the *Structural Vision*) should have the significance and allure of a Central Park in New York, a Fontainebleau in Paris or a Hyde Park in London.

It has been about a year since the idea of metropolitan parks has been announced by the *Randstad 2040 Structural Vision*, but it seems to have been already abandoned by both LNV and VROM. The reference to a very urban park such as the Central Park in New York has been perceived as inappropriate for the very rural Randstad situation and most probably had a negative impact on the

political opinion forming. It has recently been replaced by another concept of blue-green infrastructure for the Randstad area. The task to develop a new planning vision is currently delegated to the well-known design office, “West 8”.

In the spring of 2008, a number of landscape architects, urban planners and architects gathered together to devise three spatial development models for the Randstad urban conglomeration in 2040. They did so at the request of VROM. Their work was done in preparation of a strategic policy document, the *Structural Vision Randstad 2040.* These workshops gave priority to the desire for adventurous experiences in extensive landscapes. They resulted in the publication of a book entitled *Designing Randstad*, the first in the *Design and Politics* series. The book aims at offering its readers a glimpse behind the scene – a look at what is involved in designing a future Randstad, and the role the spatial design can play in developing a planning strategy.

Among other issues, the book introduces several approaches to the development of landscape for recreational purposes. A group guided by the Dutch National Advisor for Landscape, Yittje Feddes, presents an idea (Figure 8) which could actually solve the capacity problems and satisfy the needs of Dutch recreants, stemming from the data presented in the paragraph 3.1. "A fine-meshed network of walking, cycling and sailing routes is easy to establish in the land pattern of the polders, with its grid of boundary dykes and ditches", as the Feddes group proposes, meets the needs of an extensive network of walking and cycling paths (being a dominant recreational activity), provides connection with large or small parks or forests (being the most desirable places for recreation) and solves the problem of the open landscapes low capacity (Table 2).

Figure 8. A Landscape Plan for the Randstad, Yttje Feddes, Design Workshops *Randstad 2040*. The red rectangle shows the location of the *Park 21*.

However, this idea has not received official recognition (yet). Meanwhile, another three ideas developed, supported by the same Ministry. The red rectangle in

Figure 7 shows the location of the *Park 21*, a project nominated for winning the *Beautiful Netherlands* competition. To make things even more complicated for the reader of this article, this prize is yet another initiative within the *Beautiful Netherlands* program where Dutch citizens are invited to vote for the most promising three projects out of 26 that received the grant of the *Beautiful Netherlands* Innovation Scheme.

The *Beautiful Netherlands* Innovation Scheme aims to promote environmental quality or to restore, maintain or renew the identity of a place or a landscape. Public and private entities have been invited to submit innovative and example worthy projects that contribute to this objective. If they meet the criteria for such a contribution, they can benefit from the Innovation Scheme.

The first round of the Innovation Scheme competition was closed on July 1, 2009, and had a very huge response involving 224 projects. Of these, 26 projects were granted financial support to a different extent (the total budget of the IMN for 2009 -2011 being 13 million euro). At the same time, these 26 projects have been nominated for the *Beautiful Netherlands* prize. One of them is *Park 21* – Park of the 21st Century, a design for the 1000 ha new park which will be situated beyond the NBZs, very close to the Schiphol airport, between the cities of Hoofddorp and Nieuw-Vennep. The "Vista" Bureau from Amsterdam, designer of the park (Figure 9), claims that this will be the largest metropolitan park in the Netherlands, even larger than the 900 ha Amsterdam forest (developed between 1931 and 1947). The idea is to develop a park which will satisfy not only the needs of the inhabitants of the Haarlemermeer municipality, but which will also, due to the richness and variety of its leisure offer, attract citizens from the whole Randstad area, as well as become an attraction for foreign tourists, because of its closeness to the Schiphol airport (more information at: http://www.park21.info/meer-weten/documenten.)

Figure 9. Design for the *Park21* in Haarlemermeer, "Vista" Bureau, Amsterdam.

Whether this park will ever be completed is rather uncertain as its development is divided in five stages, the final one being planned for the year 2050.

4 Conclusions

Spatial planning in the Netherlands has an age-long tradition, and it is therefore not surprising that relevant objectives, concepts and instruments have changed many times over, leaving the marks of times on the landscape.

Over the past few years, landscape quality has been given special attention in terms of spatial policy through the *Landscape Agenda* program (developed by

VROM and LNV) and the *Beautiful Netherlands* program (VROM only). Nevertheless, the landscape development policies of the two ministries often overlap and are non-transparent.

Designing the Netherlands has a long tradition too and is internationally renowned. It is often said that “the God created the world but the Dutch created the Netherlands”, which is a popular expression of the situation where all the landscapes are man-made. The Dutch government has always played an important role in this process. Today’s tasks and the complex context in which they arise and develop necessitate a continual readjustment of that tradition.

The potential problem of intensifying the leisure capacity of rural landscapes, used as an example in this paper, is that it brings undesirable large-scale recreational objects without carefully fitting them into the rural, often very open, landscape. With this idea in mind, the role of design becomes increasingly important and can be perceived as an additional tool in the landscape development policy realization.

Planning is not a linear process it long was. According to Henk Ovink (Director of National Spatial Planning Ministry of Housing, Spatial Planning and the Environment), design must be given a new place in the bureaucratic context, where planning, organization and politics intersect. However, in spite of all the positive developments, the position of design as policy instrument is still not firmly established.

References

Blank, H. et al. (editors, 2009): Designing Randstad, Series on Policy and Design; 010 Publishers Rotterdam

Goosen, C. M. (2006/2007):Monitoring recreatiegedrag van Nederlanders in landelijke gebieden, WOt-werkdocument 146, Alterra, Wageningen

Jaarsma, C.F., and van Dijk, T. (2005). The paradoxical role of infrastructure in the use of metropolitan green areas by urban residents. In: Voigt, A. and A. Kanonier (2005). The dream of a greater Europe. Book of abstracts 19th AESOP congress, July 13/17, Vienna (Austria): 186-187

Keuning, H.J. (1946): De Historisch-geografische Landschappen van Nederland, Serie Noorduijn's Wetenschappelijke Reeks, Gorinchem 1946

Lynch, K. (1960): The Image of the City, MIT Press, Cambridge MA
PBL (2009): Natuurbalans 2009, Rapportnr. 500402017, Planbureau voor de Leefomgeving, Bilthoven

Reh, W. Steenbergen, C. and Aten, D. (2006): Sea of Land; The polder as an atlas of Dutch Landscape Architecture, UNH Amsterdam

Tisma, A. and Lörzing, H. (2008 PBL - working document): Leisure landscapes of the Netherlands.

Vries, S. de, M. Hoogerwerf en W.J. de Regt, 2004. AVANAR: een ruimtelijk model voor het berekenen van vraag-aanbodverhoudingen voor recreatieve activiteiten. Alterra-rapport 1094, Wageningen (in Dutch)

VROM (2008): Randstad 2040 Structural Vision

Zonneveld, J.I.S. (1991): Levend land - De geografie van het Nederlandse landschap, Bohn Stafleu Van Loghum, Houten/Antwerpen

Links

VROM landscape
http://www.vrom.nl/pagina.html?id=36851

Programe Beautiful Netherlands

- http://www.vrom.nl/pagina.html?id=32952
- http://www.nederlandmooi.nl
- https://kennispleinmooinederland.vrom.nl/activiteiten/publieksprijs
- www.park21.info
- http://www.metropoolregioamsterdam.nl/index.en.html

LNV landscape
http://www.minlnv.nl/portal/page?_pageid=116,1641092&_dad=portal&_schema=PORTAL