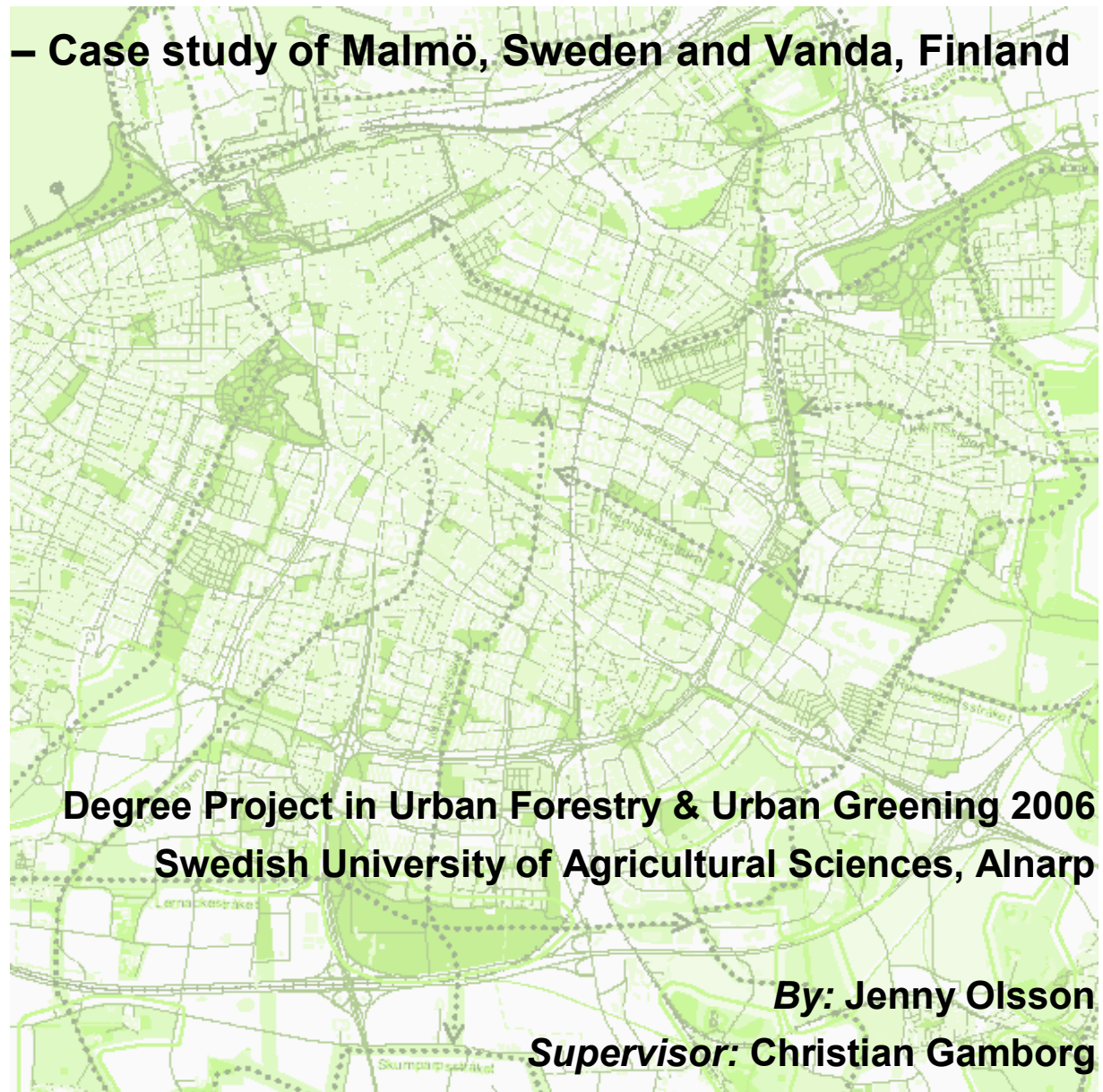# Collaborative planning
# as an instrument in the municipalities
# green planning

## – Case study of Malmö, Sweden and Vanda, Finland

**Degree Project in Urban Forestry & Urban Greening 2006**
**Swedish University of Agricultural Sciences, Alnarp**

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## Foreword

## Summary

The urban green areas have a great importance for the local environment in the cities and for people's health. Municipalities own many of the urban green areas and they make plans for these areas, so called green plans, to improve the long-term decision-making. Public participation is getting more and more attention in the society and when including public participation in planning it is called collaborative planning.

This project is a comparison of two green plans of which one is using traditional planning and the other one is using collaborative planning. By comparing them, strengths and weaknesses with collaborative planning can be visualised.

The vision of the traditional plan made in Malmö, Sweden, is to fulfil the citizens green need with a variety of green areas. The vision of the collaborative plan in Vanda, Finland, is to plan together with the citizens for a sustainable management.

Malmö's plan is using inventories and analyses to give a clear picture of the situation today. From that, the planners have developed suggestions for improvement of the green structure. Vanda's planning process started with public meetings where the citizens were valuing the strengths, weaknesses, opportunities and threats with the green areas. Smaller working groups were then further evolving this material. Local development committees were prioritising which the most important green areas are, as well as prioritising the suggestions for improvement of the green structure. A draft plan was made and sent out for consideration as well as presented at open meetings, changes were made and then the plan was finally approved upon.

Strengths with collaborative planning are that the knowledge of the citizens, planners and experts is combined. When local people can influence the green areas they become adapted to the local needs. The decisions taken get a better quality and conflicts are dealt with in an early stage.

Weaknesses with collaborative planning are that the process is more difficult to handle. The results are more difficult to present because it does not provide quantitative facts and clear analyses but is the result from a discussion and a learning process. Collaborative planning takes more time than traditional planning and therefore more resources are needed.

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# 1 Introduction

## 1.1 Background

In a time of increasing urbanisation, the green areas in the cities have a key roll in the development of sustainable urban communities. By the year 2008, half of the world's population, and 75 percent of the people in Europe, will be living in towns and cities (World Bank 2007, EEA 2006)

The urban green areas provide a wide range of services that are of vital importance for the local environment and the public health. These areas should therefore be protected and well managed. However, a high pressure on the green areas from several different interests in the society often leads to management conflicts.

Public participation is a method to decrease conflicts and provide for better management decisions. Participatory methods have become increasingly acknowledged during the last decade. The municipalities have an important role in the implementation of participatory methods because they own many of the urban green areas and have the possibility for close contact to the citizens. Some municipalities have started this process by creating plans for their urban green areas, often called green plans, in order to improve the long-term decision-making.

## 1.2 Problem statement and aim

In green planning there are different interests involved, from the public and from different departments in the municipality. The green plans should take many different opinions and interests in consideration as well as being long-termed. This make the traditional way of planning unsuitable and a new upcoming method is collaborative planning. Collaborative planning is a useful framework because it applies public participation and combines the knowledge of civil servants, experts and the public.

The aim of this project is to discuss how the municipalities can work with collaborative planning and long-term planning when it comes to urban forestry. *Which are the strengths and weaknesses in terms of collaborative planning and how are green plans dealing with this and the long-term aspect?*

## 1.3 Method

This project is a case study of two actual plans for urban forestry; the green plans of Malmö, Sweden and Vanda, Finland. The aim of the analysis is to describe and compare the plans to find strengths and weaknesses. Three parts of the plans are focused upon. The first part is vision, aims and objectives because these show what the plan want to achieve. The second part is the planning process because this shows how the municipalities have come to the conclusions and suggestions in the plan. The third part of the analysis includes the plan suggestions which show how detailed the plan is and the use of the plan.

The two municipalities are chosen because they have different planning approaches but also because of contacts and available material. Malmö is a larger city with a low amount available green area per inhabitant and their green plan is more traditional. Vanda is smaller and with a greater amount green areas and their plan is collaborative.

The material used in the project is the two green plans as well as literature and interviews.

In the beginning of the project, I made semi-structured phone interviews with three Swedish municipalities. The interviews gave a good introduction to how Swedish municipalities work with green areas and what they think about public participation.

At the European Forum on Urban Forestry that took place in Florence in May 2006, I met people from municipalities in Finland who work with collaborative planning in their urban forest. These semi-structured interviews gave me concrete examples of how municipalities can include public participation in their planning.

At the very end, I made two semi structured phone interviews with the planners in Malmö and Vanda to get more profound information than the plans were providing.

## 1.4  Delimitation

The project only covers the two green plans, not the physical plan or any other plans made in the municipalities. The main scope of the project is on Swedish municipalities even though one green plan is taken from Finland. Both plans focus on recreational and biodiversity issues but in this project, the focus is on the recreational part of the plans.

# 2 Theory

This chapter gives an introduction to urban forestry, public participation and Swedish municipalities' relations to these aspects.

## 2.1 Urban forestry and urban green areas

Forests are often said to have three main functions: economical, ecological and social. Urban forestry covers these aspects in an urban setting with emphasis on the social part.

### 2.1.1 Urbanisation and its impact on forestry

Two thirds of the European population is living in towns or cities (Konijnendijk 2000). The urbanization has drastically changed the relationship between human society and the nature. People's knowledge about the production cycle has decreased and the interest for recreation developed in the 1930s when people got more free time and holiday. Many conflicts occur when it comes to cutting trees down and this is a indication of that people have strong feelings for trees even though living in a urbanised society (Konijnendijk 2000). A new forestry discipline was developed to address new aspects of forestry for meeting the needs of urbanised societies.

### 2.1.2 Definition of urban forestry

Urban forestry is defined as "the art, science and technology of managing trees and forest resources in and around urban community ecosystems for the psychological, sociological, economic and aesthetic benefits trees provide to society" (Helms 1998). This means that urban forestry does not only include the management of urban woodlands, but also parks, street trees and other vegetation in the cities. It includes both the physical aspects of growing trees and the social conflicts and benefits. However, the term urban forest often gives the impression that it is a forest that is considered and therefore the term urban green areas is often used when talking about land in the cities that is not built upon.

Urban forestry can be divided into three main categories of activities (see figure 1): the overall policy-making that includes planning and design, the technical approaches that deal with plant selection and establishment and then the management (Randrup et al. 2005). In order to handle all these different aspects, urban forestry involves a range of disciplines such as horticulture, landscape architecture, urban planning, landscape ecology, social sciences and forestry.
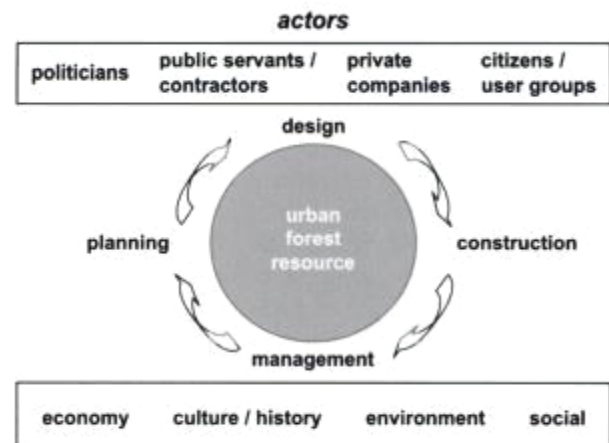


Figure 1. The urban forestry model (Randrup et al. 2005)

### 2.1.3 Categories of urban forests

Urban forests can be divided into four categories according to the placement and function they have (Rydberg & Falck 1999): a) Trees near houses, i.e. groups of trees that stand close to buildings and have a high esthetical value. b) Neighbourhood forests, i.e. small forests within the residential areas that can create opportunities for children to play. c) District forests, i.e. medium sized forest that are frequently used by walkers and bikers for passing through, or for short dog walks. d) The recreational forest, which is often on the urban fringe and people might travel there for recreation as well as use it for longer walks and exercising.

Urban forests can also be divided according to their experience values (Regionplane- och Trafikkontoret, 2001). It can be values such as the mystique of wild forests, forests harmonies, freedom and space, diversity of species and nature's teaching, cultural history, activity and challenge, facilities and meeting places.

## 2.1.4 Benefits of urban forests

With an increasing amount of the population living in the cities, the urban environment becomes more important. There are many benefits of trees in cities and often, urban forests have multiple benefits. Here a few of these benefits are shortly mentioned.

Social benefits are for example recreation and improvement of the home and work environment, which lead to better physical and mental health. Trees also have an aesthetic benefit with different colours and forms of the trees and the different seasons can be experienced. Climatic and physical benefits are that the trees control and reduce air pollution as well as having a positive impact on the groundwater. Urban forests also give possibilities for flora and fauna to exist in the cities. Finally, there are economical benefits such as timber, increased property values and tourism (Tyrväinen et al 2005).

## 2.1.5 Characteristics of urban forestry

Some criteria and indicators differentiate urban forestry from conventional forestry (see table 1). One major difference is that urban forestry is taking place in high-pressure areas, where a great diversity of demands are present and limited recourses are available (Konijnendijk 2000). Communication and participation is of high importance in order to handle people's different opinions and avoid conflicts (Daniels & Walker 2001).

| Criteria | Urban Forestry | Conventional forestry |
|---|---|---|
| Location | In or near an urban centre with which the forest has a clear relation | In rural areas |
| Use | Recreation and nature protection | Wood production |
| Conflicts | Conflicts are more frequent because of many different interests and limited recourses | Conflicts are less frequent and intense |
| Problems and issues | High urban pressure as well as social demands, vandalism and recreational pressure | Less urban in their character |
| Actors in policy processes | Dominance of local actors and decisions are largely based upon their opinions | Regional and national actors are more dominant |
| Policy instruments | Higher economic value per hectare. Higher importance of communication and public relation methods | Communication and participation instruments are often less developed as the need for them is minor than in urban areas |

*Table 1*. Criteria to distinguish urban forestry from other types of forestry (Konijnendijk 2000)

## 2.2 Public participation

As mentioned above, public participation is important in urban forestry and many benefits can be achieved when implementing it. The attention towards participatory processes is increasing in the society. Several international conventions as well as national legislations and recommendations have been developed during the last decades.

### 2.2.1 Definition of public participation and collaborative planning

Communication is the transfer of a message from a sender to a receiver (Daniels & Walker 2001). If information goes both ways, it is a two-way communication. Public participation is predecisional two-way communication between an agency responsible for a decision and the public affected of the decision (Daniels & Walkers 2001). It is defined as "a voluntary process whereby people, individually or through organized groups, can exchange information, express opinions and articulate interests, and have the potential to influence decisions or the outcome of the matter at hand" (FAO/ECE/ILO 2001). In the two-way communication of public participation, the parties should act in equity and there should be mutual understanding and learning (Herzele & Denutte 2003).

When public participation is used in a planning situation, it is more specifically called collaborative planning. In Urban forestry, a participatory approach should include collaborative- planning, design and management (see figure 1) (Herzele & Denutte 2003).

### 2.2.2 Levels of empowerment

A gradient of empowerment differentiate information and consultation from participation (see figure 2). Consultation, on level three, is a way to provide people with the green areas they want and to work with the citizens instead of for them. Then, by a gradual delegation of tasks and power, a more complete participation, illustrated by level four on the ladder, can be successfully achieved (Herzele & Denutte 2003).
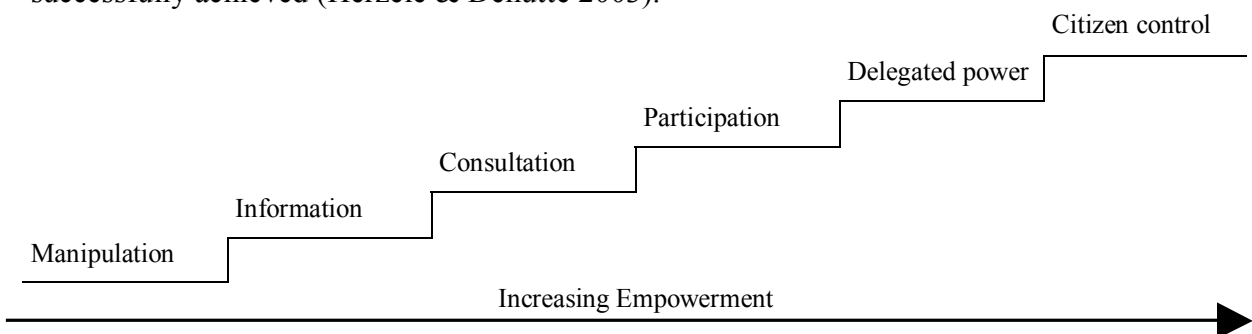
*Figure 2*. Arnstein's ladder of participation (Arnstein 1969).

### 2.2.3 Aspects to consider in public participation

There are many advises and recommendations for how a participation process should be carried out. This is a short summary of some of the most important aspects (Boon 2002).

In a participatory process, all stakeholders should be represented and all the stakeholders should have equal influence on the outcome. The outcome will then represent most people's wishes, which as a result prevent conflicts and give the decision greater political legitimacy.

It can be difficult to find all stakeholders and to get them to participate. Especially people who are not active in any organisation and non-users, as well as old people, children, youth and immigrants can be problematic to include. It is advisable to use many different methods to attract different kind of people (Boon 2002).

Participatory methods can be divided in individual methods, group methods and open meetings. Individual methods such as surveys and interviews are cost efficient and give a strong representativeness but possibilities for feedback are small and no interaction between stakeholders take place. Group methods have the strength that they give good conditions for

learning, discussions and a common understanding. Open meetings distribute information efficient to many people but in discussions there is a risk that only strong opinions are heard.

The participation process should be initiated in the beginning of the planning process and continue throughout the whole process. This increases peoples influence and ownership of the process. It should be clear from the start what the negotiation is about, and what it is not about. Surveys of participatory processes show that people often are disappointed about how much power they had (Sipilä & Tyrväinen 2005). This can to some extent be avoided by making it more clear from the start what they are allowed to have influence on. If people feel that they cannot influence the decisions, their motivation for participation disappears.

A survey of a collaborative green planning process in Helsinki show that people think that city planning should be left to professionals, but also that people think that public involvement is necessary for producing a sufficient green plan. People felt that participation is more important in local planning than in city planning and more important in setting aims than in deciding management methods (Sipilä & Tyrväinen 2005).

Finally, it should be taken in account that public participation and collaborative planning takes longer time than a traditional planning process (Boon 2002). To listen, learn and thereafter act will however give many advantages, which are outlined in the following part.

### 2.2.4  Benefits of public participation

Three major objectives for public participation can be stressed (Herzele et al. 2005):

*Enhancing the quality of decision making*

Bottom up approaches avoids standardisation, simplification and weakening of the local cultural identity (Herzele 2004, Pinto-Correia, Gustavson & Pirnat 2005). It gives contextual and place related approaches with flexibility to adjust policies to local conditions. By having a participatory process, the knowledge of authorities and professionals from different disciplines can be combined with the local knowledge of the citizens. The public can challenge established views and reformulate problems in ways that allow creative ideas and solutions. A successful procedure should give a common understanding and conflicts should be defined and resolved at an early stage. By listening to everyone's views from the beginning and throughout the whole process, a consensus can be reached and the decisions become effective and of high quality (Herzele et al. 2005).

*Encouraging a sense of ownership*

To take part in a participation process makes people feel more connected to the green area. Information and influence on the management gives people a greater sense of ownership and the area becomes more important in their daily life. This feeling makes people become more responsible and is often reported to reduce vandalism and littering in the area.

Involvement is not only a way to encourage people to take care of green areas but also to make them more involved in the local society. A participatory process empowers people and reduces the distancing that is characteristic for the urban society. The benefits of a participatory process in the urban forests might also reflect onto other parts of the community by encouraging local initiatives (Herzele et al. 2005).

*Raising awareness of urban forestry related issues*

For many people, the urban forests are their only contact to the nature. The participatory process includes mutual learning and thereby it increases people's knowledge about urban forests. The participants learn about other people's opinions and the multifunctional use of the green areas. They can also learn about the environment and natural processes and this might lead to a better understanding of environmental issues in general (Herzele et al. 2005).

## 2.3 Municipalities and municipal plans

Municipalities have a central role in Swedish and Finish democracy, since it is here global commitments, EU regulations and national legislations in many cases are implemented. It is on the municipality level most of the contact to citizens occur and the municipalities' forestland is generally located in or close to urban areas.

### 2.3.1 The municipalities ownership of urban forests

Sweden has 290 municipalities and the municipalities are the owners of about 60 % of the urban forests, but only 1.4 % of the total forest area. Most municipalities own forest but it differs greatly how much they have, in average it is 1499 ha (Lundquist 2005). A municipality forest is defined as "common land, which all inhabitants of the municipality are the owner of" (Wigelius 1935).

The municipalities' ownership of forests has occurred during a long period of time and did not appear through a specific legislation at a certain time. Some towns have owned forests since long before 1900, and used them for grazing and hunting. However, the main increase has taken place during the 20th century. In the beginning of 20th century, many municipalities bought forests to prevent the overexploitation that came with the industrialisation. The next big change was in the 1960s when the increasing urbanisation motivated many municipalities to buy a lot of land for city development reasons. In many cases, the estimations of how much land that was needed were too high and this land have still not been urbanised. Currently, municipalities buy and sell forests in small scale mainly for reasons of recreation, nature care and exploitation. (Lidestav 1994).

### 2.3.2 Public participation in municipalities

Two international conventions important for public participation in the municipalities are Agenda 21 and the Aarhus convention. The Aarhus convention on "access to information, public participation in decision-making and access to justice in environmental matters" is an environmental agreement that links environmental rights with human rights (UNECE 2006). It focuses on interactions between the public and authorities in the negotiation and implementation of international agreements.

Agenda 21 is a "comprehensive plan of action to be taken globally, nationally and locally by organizations of the United Nations system, governments, and major groups in every area in which human impacts on the environment"(UNSDD 2006). Local Agenda 21 is a program that provides a framework for implementing sustainable development at the local level. The program states that local authorities is the level of governance closest to the people as they play a vital role in educating, mobilising and responding to the public to promote sustainable development. Most municipalities in Sweden have an Agenda 21 coordinator employed.

In the Swedish and Finish society, local knowledge and public participation is increasingly recognised as an important issue especially in the field of nature conservation. The Swedish environmental protection agency has recently enlightened the significance of public participation. The municipalities most often seem to have participatory activities in specific projects and these projects are often nature care projects that are partly subsidised by the Swedish environmental protection agency, so called NIP (Naturvårdsinvesteringsprogrammet) projects[1].

In a participatory process, experts and authorities have to leave the traditional way of planning and communicate with users, citizens and interest groups. To actually leave the outcome of the process open and give the power to the participants can be difficult for many civil servants. Many of them are positive to consultation, but want to take the final decisions themselves[2].

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[1] Anna-Karin Olsson, Municipal ecologist in Höör, Phone 2006-05-02; Catrine Ek, Municipal ecologist in Trelleborg, Phone call 2006-05-03; Per Blomberg, Development coordinator in Lund, Phone 2006-05-05
[2] Anna-Karin Olsson, Municipal ecologist in Höör, Phone 2006-05-02

## 2.3.3 Municipal green plans

Municipalities make long-term plans to improve their decision-making. Many decisions will get long-term consequences and there are long-term political goals and projects that take long time to finalise (Lidestav 1994).

In a city environment, it is mainly the Planning and Building Act (1987:10) having regulations for the green areas. According to the Planning and Building Act the municipalities should have a physical plan for their land use, water use and building development. The plan should give attention to all nature- and cultural areas and it should be presented how different interests are satisfied. About half of the municipalities in Sweden also have a green plan where they go more in detail with the green structure, biodiversity and recreation. Neither the physical plan nor the green plan is legally binding but they serve as a guideline for the legally binding detailed plans. The detailed plans are made for areas in the process of exploitation, and it is then possible to protect areas for parks and recreation (SNF 2006).

Green areas strategies involves three levels, a policy level with a formulated Park Policy, a tactical level with a Green Plan and an operational level with various maintenance tools[3].
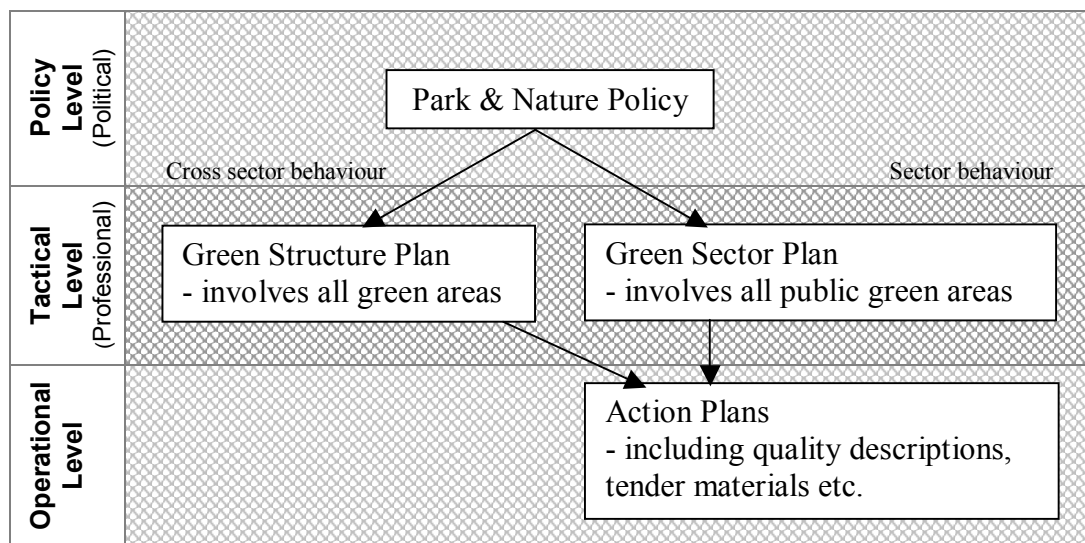


*Figure 3*. Green space strategy [3]

In the policy level, basic local green values are described and a vision for the green department is formulated as well objectives for both the tactical and operational level. The tactical level is going into recreation with the everyday life and public health, maintenance of biodiversity, city structure with relations between city and green structure, cultural identity and improvement of the environmental quality. In the operational level, there are descriptions of the qualities in the areas and there are tender materials. Agenda 21 plans can also be included here[3].

The green issues are often divided between more than one department in the municipality, a Park Department, City Planning Department and Leisure Department etc. When making a long-term green plan it is important, that it is made in cooperation between all departments concerned since the departments otherwise might work against each other or overlap each other's work.

Policies and plans may exist and have the right ambition, but implementation of existing plans is often insufficient in urban green areas (COST E12). Even though the municipalities have a physical plan and a green plan, many of them state that a problem with their green areas is the lack of a long-term strategy[4] (Lundquist 2005). Long-term physical plans and public participation are key issues for a sustainable development of urban forests and the preservation of these (FAO 2005).

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[3] Thomas Randrup, Professor in Parks and Urban Landscapes, KVL, Denmark, Presentation 2005-09-01
[4] Anna-Karin Olsson, Municipal ecologist in Höör, Phone 2006-05-02

# 3 Presentation of the green plans

This chapter introduce the two green plans and is divided in four parts; a general introduction, vision, aims and objectives, planning process and use of the plans. For each part, Malmö's green plan is first described and then comes the description of Vanda's green plan.

## 3.1 Introduction of the municipalities and their green plans

| Malmö | | Vanda |
|---|---|---|
| **Population:** 271 000 | | **Population:** 185 000 |
| **Total area:** 15 840 ha | | **Total area:** 242 700 ha |
| **Accessible green area:** 33m$^2$ /inhabitant (excludes agricultural land) | | **Accessible green area:** 680m$^2$ / inhabitant (includes agricultural land) |
| (Strategisk utveckling Malmö stad 2006, Malmö municipality 2003) | | (Vanda municipality 2006, Vanda municipality 2001) |

*Table 2.* Facts about the municipalities

### 3.1.1 Malmö

Malmö is situated in southern Sweden in the Öresund region and has three famous parks in the city centre. However, the amount of green area per inhabitant is lower in Malmö compared to most other Swedish cities, 33 m$^2$ per inhabitant compared to 100 m$^2$ that is the average for the ten largest cities in Sweden (Malmö municipality 2003, pg 67). The reason for this is that the city developed in a treeless and flat landscape where almost all land was used for agricultural purposes. The agricultural management has decreased the amount of accessible green areas to a minimum level and most of the green areas in the city have been created after the urbanisation. Because of its location, the city developed on a relatively small area and became densely populated (Malmö municipality 2003).

The Park and Highway Department, City Planning Department, Leisure Department and Estates Department made the green plan in Malmö. It took seven years to complete it and it became adopted by Malmö city council in 2003 (Malmö municipality 2003). The plan was made to have a basis before taking decisions in planning situations. Malmö is in an expansive stage and the largest threat against the green areas is the exploitation[5]. Founded on extensive inventories and analyses, the plan presents suggestions for how to protect and develop Malmös' green structure and biodiversity (Malmö municipality 2003).

### 3.1.2 Vanda

Vanda (in Finish Vantaa) is located in southern Finland just north of Helsinki, and is sometimes seen as a suburb to the capital. The city has, as most cities in Scandinavia, developed in the forest and most of the green areas in the city are remains from before the urbanisation. Vanda is a young city and the development has not been particularly well planned, the location of the housing areas was more depending on who owned the land than on city planning. The city has many green areas but the municipality owns less than half of them (Vanda municipality 2001).

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[5] Mats Wirén, Municipal ecologist Malmö, Phone 2007-01-22

The green plan in Vanda is made by the Park Department in cooperation with other departments and is valid for the period 2001-2010. The work with the plan was going on for one and a half years and it was then approved upon by the city council in 2001. The plan helps to guide the planning, design and management of the municipality's green areas. The plan tries to explore how the citizens and other parties want to develop the green areas, which services they are expecting and how they want the green areas to be maintained (Vanda municipality 2001). Also in Vanda the largest threat against the green areas is exploitation. The plan was made because the Park Department wanted a more democratic way of taking decisions concerning the green areas, and to give the decisions greater legitimacy[6].

## 3.2 Vision, aims and objectives

The vision, aims and objectives of the green plan are important because they illustrate what the planners want to achieve with the plan. The vision is expressing the ideal long-term outcomes and the aims and objectives signify the areas of priority. Aims are rather general statements of the direction of the plan and the objectives are more specific on how to achieve the aims.

### 3.2.1 Malmö

**Vision**

"Malmö municipality will provide a good living environment with a variety of qualitative and accessible green areas. The urban areas and rural areas will be characterised by a rich and varied natural- and cultural environment with high recreational and biological qualities" (Malmö municipality 2003, pg 6)

**Aims and objectives**

*1. To increase the quantity of green areas in Malmö* (Malmö municipality 2003, pg 7)

New green areas will be created in areas where there is a deficiency. The larger green area that can be created the better it is since large green areas have prospects for more functions (Malmö municipality 2003, pg 57).

*2. To secure valuable green areas by protecting them from exploitation* (Malmö municipality 2003, pg 7)

When all types of changes in land use are to be done, special carefulness of green values should be taken during the work. Before the work starts, an environmental impact assessment should be made which includes a description of the existing values and an estimation of what consequences the change will have on the environment. To reach the green goals it is important that the valuable green areas do not diminish. If exploitation of green areas anyway takes place, compensation should be made with a replacement area of the same size and values (Malmö municipality 2003, pg 58).

In a city environment, it is the Planning and Building Act that protects green areas. To protect green areas from exploitation it can be necessary to make new detailed plans for some areas. Outside the city and on the city fringe, the Environmental Act has different forms of protection, i.e. national parks, nature- and cultural reserves, coastal protection and biotope protection. Another way to protect valuable areas is to make an agreement with the landowner. However, this does not give the same long-term guarantee (Malmö municipality 2003, pg 57). In Malmö, coastal protection and biotope protection exists and the process to make one nature reserve has started. Two areas are also suggested to become Nature 2000 areas.

*3. To create a variety of parks and natural- and recreational areas, that together with gardens, fulfil the "green need" of the citizens in Malmö* (Malmö municipality 2003, pg 7)

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[6] Aino Leino, Park Manager Vanda, Phone 2007-01-23

All types of green areas have a function for people and it is important that all types of deficiencies are limited, from small green areas in the neighbourhood to larger recreational areas. Analyses can categorise the green areas and visualise which areas in Malmö that are lacking one or more of different types. To reduce these deficiencies new green areas of all types have to be created (Malmö municipality 2003, pg 59).

*4. To create a green network that creates good accessibility throughout Malmö* (Malmö municipality 2003, pg 7)

A green network is composed of longer green corridors accessible for the public. The corridors are built up of green areas and green links in between those. The links are often narrow and used for transportation to and between the green areas, but they can also have a value in themselves. Furthermore, the network is important for the spreading of plants and animals. A covering green net should be created by improving and completing the green structure in the municipality with new green links and green areas. Outside the city, there are good possibilities to elongate the routs and to cooperate with neighbouring municipalities. In the city, it is more difficult to create new corridors so the green structure also has to be improved in other ways. Green qualities can be strengthened by making the cycling routes greener and planting more trees in squares and schoolyards. It is also important to increase the accessibility to the green areas by making new walking and cycling paths, and to limit the barrier effect of roads and other infrastructure (Malmö municipality 2003, pg 60).

*5. To create a richer and more varied range of species and habitats within the city limits* (Malmö municipality 2003, pg 9)

To increase the green area will influence the species richness positively but it is also important to improve existing green areas with new species and biotopes (Malmö municipality 2003, pg 61).

*6. To reinforce the different landscape types in the city, and to develop areas with different character within each landscape type* (Malmö municipality 2003, pg 9)

Larger areas with similar character and structure can be identified and different landscape types defined. Within each landscape type, different characters should be emphasised (Malmö municipality 2003, pg 62).


### 3.2.2 Vanda

**Vision**

"The green areas have been planned together with the citizens; managed in a sustainable way and are characteristic for their area" (Vanda municipality 2001, pg 11)

**Aims and objectives**

*1. A systematic and continuous cooperation with the citizens and other interest groups* (Vanda municipality 2001, pg 12)

Through collaboration, green areas of higher quality that fulfil the citizens needs can be realized. To reach the goal, the park department cooperate with citizens of all ages, different interest groups and people that represent different opinions. However, because of limited resources, focus is on associations, boards and neighbourhood committees. In important planning projects, everyone can take part.

A functioning cooperation between the different municipality administrations is necessary for the construction of a pleasant green environment. Overlapping between different administrations is thereby prohibited and the activities become mutual when the responsibility of the different administrations is clearly defined.

Children and young people should take part in the planning and development of their local environment. Through participation and practical work, the children learn to appreciate their

environment and to take care of it. The park department is increasing their interaction with schools and childcare institutions.

The citizens should be informed about green issues in a, for them, suitable way. The citizens ought to get information about the possibilities that the green areas offer and about the management that take place in the areas. The starting point of the information should be the citizens need for it. The information should be personified so that people easily can get access to it and understand the information. Internet, local newspapers, signs in the areas and letters to interest groups should be used to reach people.

*2. Vanda has a permanent and covering green structure net with green areas and green routs* (Vanda municipality 2001, pg 16)

People should have possibilities for recreation close to home in varying green areas that give a valuable experience. A covering green net constitute an ecological connection for organisms and recreation possibilities for people. Green corridors make it easier for people to get to the green areas and the net of green areas secures a diversified environment. New walking and cycling routes should be developed and the citizens are prioritising where they are most needed. The green areas should be protected so that a green net for recreation can be permanent.

*3. The rivers and streams are a pride for Vanda's green areas* (Vanda municipality 2001, pg 18)

The rivers going through Vanda provide the most beautiful green areas of the city. The citizens want to relax there and this possibility is encouraged with connective and natural routes along the rivers. A special development program for the recreational use of the rivers is started and will be based on a broad cooperation between citizens, landowners and authorities.

*4. The green areas are free from litter and have not been vandalised* (Vanda municipality 2001, pg 19)

Engagement develops with participation and this increases peoples feeling of responsibility and decreases vandalism and littering. Peoples attitude towards green areas affect the littering and vandalism of them. The attitudes are influenced of the state of the green areas. An area that is poorly maintained increases the carelessness, and full rubbish bins give the "permission to litter". It is important that the park department maintain the areas. The citizens are encouraged to take part in the cleaning and sport organisations and other associations are offered compensation in return for helping cleaning.

*5. Playgrounds and neighbourhood parks are in good condition and easy to access* (Vanda municipality 2001, pg 20)

The neighbourhood parks are important as playgrounds for children and as a common space for everyone. Natural conditions and natural elements should be used for each park. The connections to the areas should be safe. Playgrounds should be placed by the green areas and they should be safe and encourage the children to take initiatives.

*6. Open cultural landscapes are maintained* (Vanda municipality 2001, pg 22)

The arable land is a visible heritage from earlier generation's culture. In the municipality's farms, the citizens can be outdoor, get exercise, and try different kinds of cultivation and landscape conservation. The agricultural land should be maintained because of its' high landscape value.

*7. Green areas in new housing areas are constructed within two years after the building is finished* (Vanda municipality 2001, pg 23)

Several new housing areas will be developed in Vanda. These areas should be guaranteed to have green areas within a reasonable time. In the detailed plans for the housing areas, the construction and maintenance of the green areas should be included.

## 3.3 Planning process

In the assessed plans, different methods have been used to analyse the green areas to thereafter make suggestions on how to improve the green areas. This section will describe these methods.

### 3.3.1 Malmö

In the case of Malmö they were developing three methods for analysing the green areas in the planning process. The methods are the green model, deficiency analyse and structural analyse

*Green Model*

The green model (Malmö municipality 2003, pg 13) is the green plans tool to categorise and analyse the green areas that are used for recreation in Malmö. The green model is a classification system where different categories and sub categories are defined. To cover all existing green areas in the city, eight main categories and 23 sub categories are defined. The eight main categories are: parks, nature- and recreational areas, sports areas, cemeteries, institutional- and workplace connected green areas, green areas connected to housing areas, agricultural land and other land. The main factor behind this division is the land use and how open the areas are to the public. Because the two categories parks and nature- and recreational areas generally have a great recreational value, and are open to the public, special focus has been given to them. These two main categories have been divided into five sub categories according to size. Size generally has a great influence on which possibilities for recreation there are in an area and how much it is used. The sub categories are greenery, neighbourhood parks, district parks, city parks and nature and recreational areas. These have been given recommended values for the maximum distance to them from people's homes and for traffic barriers on the way (see table 3). Different aspects were taken into consideration for the valuation of what can

**Greenery**
*Area: 0.2-1ha*
*Distance: 300 m*
*Traffic barrier: 3000 cars/day*

**Neighbourhood parks**
*Area: 1-5 ha*
*Distance: 500 m*
*Traffic barrier: 3000 cars/day*

**District parks**
*Area: 5-10 ha*
*Distance: 1 km*
*Traffic barrier: 8000 cars/day*

**City parks**
*Area: >10 ha*
*Distance: 2 km*
*Traffic barrier: 8000 cars/day*

**Nature and recreational areas**
*Area: >35 ha*
*Distance: 3km*
*Traffic barrier: 8000 cars/day*

*Table 3*. Sub categories and recommended values. (Malmö municipality 2003, pg 17)

be an acceptable distance. These aspects were: research studies on how far people are willing to walk to different types of green areas, research studies on the importance of different sized green areas for people's wellbeing, generally accepted values that often are used in city planning and an estimation of what is realistic to accomplish in Malmö considering the special conditions and possibilities the municipality have. From these recommended values, it is possible to make an analysis on which housing areas have a deficiency of green areas.

*Deficiency analysis*

The deficiency analysis (Malmö municipality 2003, pg 20) shows which housing areas that have a deficiency of one or more of the previously mentioned sub categories. The deficiency analysis map has been made digitally and the distance is calculated as the straight-line distance and not the actual distance. Each green area has been given a buffer zone from the outer border and according to the distance value set for that area. The parts of the city that is not covered by any buffer zone have a deficiency in green areas (See map in appendix 1). Traffic barriers have not been included in the digital analysis because of technical reasons, an optical estimation has however been done. The deficiency analyse also make clear which of the nature and recreational areas that are protected, i.e. in detailed plans or nature reserves, and which ones that are not. It illustrates how these large unprotected areas would affect the deficiency if they were protected.

*Structural analysis*

The structural analysis (Malmö municipality 2003, pg 36) show how different green objects are connected to each other and where the green areas, green corridors, major barriers and shortages are situated. The green structure in Malmö was analysed in order to find the possibilities of developing a covering green network in the municipality. The analysis of the connection between different green areas show that it is possible to distinguish a principal structure of two long and quite well connected corridors and a number of less connected and shorter corridors. The green network is however very sparsely, the corridors are not connected to each other and many green areas are not in or close to corridors.

## 3.3.2 Vanda

In Vanda the green plan was developed in a collaborative planning process. The work with the green plan started in the beginning of year 2000 when civil servants from the Park Department in cooperation with other departments developed a plan for the process (Vanda municipality 2001, pg 54). The purpose of the plan was decided upon as well as who to involve. The first thing needed to be done was to collect opinions about the green areas and their management from all parties: the employees in the park department, other departments and the citizens in Vanda.

Vanda is divided into six city districts and a seminar was held in each of these districts. Information about the seminars was sent out in local newspapers and radio and everyone who wanted could participate. In the seminars, people were asked for the green areas strengths, weaknesses, opportunities and threats. Special meetings were carried out for children, young people and representatives of the private sector. A total of 250 persons took part in these seminars. All opinions presented at the meetings were documented and classified. The opinions most people were focusing on was lifted up as the frame of the plan and a working group was further developing this material.

The working group was composed of people representing different authorities and housing associations as well as Finland's Nature Protection Association and a children safety association. Often the working group was divided into smaller sub-groups to make the work more efficient. Some experts were also invited to take part in the sub-groups.

The development committees in each city districts were deciding which of green areas that should be prioritised and in which order the different management tasks should be implemented. Architects and the park department were further developing the suggestions that the committees made.

In the summer of 2000, a draft plan was composed of all the material collected as well as the results from the many meetings. The working group commented on it and then it was sent to more than 400 private persons and different authorities. Meetings where people could comment on the draft were held in two city districts, in some of the development committees, for the staff of the park department and other departments as well as for youth, disabled and elderly associations. Written comments were sent in by a recycling central, a children safety organisation, the city museum, the youth delegation and the planning-, education-, leisure-, social-, and health department.

The working group processed all the comments and developed the draft into a final plan. The green plan was thereafter approved by the city council in 2001.

During the whole process, the work could be followed by material sent out to the service place in each city district and at the municipality web pages. In total over 1100 people took part in the process, many of them were representing an association.

## 3.4 Use of the plans

To show the degree of detail in the plans this section will describe some of the plan suggestions. Thereafter, the means of implementation is described to get an understanding of how the plan will be used.

### 3.4.1 Malmö

**Suggestions**

The suggestions in Malmös' plan are divided into two parts. The first part shows the possibilities to improve the green structure in the municipality (See map in appendix 2) (Malmö municipality 2003, pg 64). The second part uses the biotope inventories to analyse which biotopes that exist and how they are distributed across the municipality, and it suggests how to change the biotope composition and structure (Malmö municipality 2003, pg 100). Here focus will be on the first part and with a short description of suggestions for one green corridor.

The suggestions to improve the green structure show how it is possible to build a covering green network with green- corridors, areas and links. In total, it is describing 16 green corridors and 33 new larger green areas (some of the new green areas already exist but are unprotected). The network will connect most of the larger green areas to each other and the placement and size of the new green areas is based on the principal that all the different categories of green areas should be evenly spread over the municipality. The suggestions increase the green areas from 33 $m^2$ to 48$m^2$ per person (the average for the ten largest cities in Sweden is 100 $m^2$ per person). With the suggested green structure, the deficiency of different types of green areas is greatly reduced. A deficiency analysis made after an inclusion of the suggestions show that only a few living areas still have a deficiency of one or more of the sub categories of green areas.

*The Coastal corridor (Kuststråket)*

The Coastal corridor is one of the municipality's most coherent green corridors (Malmö municipality 2003, pg 72). Along the coast, there are many large and attractive areas with a varying character. However, in two places the link is broken. The first place is in the harbour area between central Malmö and a recreational area and here the suggestion is to move the cycling path so it gets a greener and nicer appearance. A new bridge over a river will also improve the accessibility to this recreational area.

The other weak link is close to Limhamns industrial area. Here it is suggested to make a new walking path along the water and to create a nature park inside the industrial area in Limhamn. In total, the suggestion includes improvements of a number of areas and links that together will make the coastal corridor more accessible and attractive.

**Implementation and monitoring**

It says in Malmö's green plan that green planning should be lifted up to a comprehensive level where the green structure gets the same status as building- and infrastructure. A deliberate, long termed and strategically green planning is important to be able to set the planned exploitation in relationship with existing and planned green structure (Malmö municipality 2003, pg 4). The aims in the plan should be worked into different areas of the municipality and be a basis for the work with everything concerning the green structure, and be used as a background in the physical planning of the city.

### 3.4.2 Vanda

**Suggestions**

For each of the six city districts there is a description of the characteristics of the area and what management that has been decided for the district during the planning process. According to the plan, it is important to judge where it is most important to put in resources,

which goals that can be reached with existing resources and to use the resources more effective. In the plan, the citizens' opinions and the general safety have been used for prioritising the suggestions (Vanda municipality 2001, pg 60). One of the city districts, Myrbacka, will be taken as an example of the suggestions in the plan (See map, appendix 3).

*Myrbacka*

Myrbacka is a densely urbanised living and working place area surrounded by green areas. According to the plan, the green areas should be developed by improving the lighting, paths, vegetation and activity possibilities (Vanda municipality 2001, pg 24). The playgrounds should be safe and maintained and new playgrounds are being built in some existing and in all new housing areas. Dog areas should be created in some places and it is important to preserve the small forest surrounding the sports area as well as the green link passing by it. Tavastby is an important culture-historical environment. The old mansions should be protected and the agricultural land surrounding the village preserved.

Vanda River is situated in the east of the area. The most important goal in Myrbacka is to increase the recreational use of Vanda River and other water bodies. Therefore, the following projects will be prioritised in Myrbacka.

- An area by the Vanda River should be developed to a diversified recreational area. To improve the accessibility to this area a bridge is built over Vanda River and a new walking path along the river is constructed.
- By one lake, new paths should be developed and the lighting and other park constructions should be improved.
- By another river, new paths should be created as well as new parks, bridges should be maintained and a new bridge built over the river. The accessibility and information is improved with footbridges and signs.

**Implementation and monitoring**

With the green plan, it is possible to study the green areas and guide the planning, construction, management and services to reach the vision of the city. In the plan, it says that it should increase and develop the cooperation between the citizens and other parties and between the different public administrations (Vanda municipality 2001, pg 10). Thereby, different parties may pay more attention to the green areas and it awakens discussions about the areas and their importance. This should not only increase the knowledge among the politicians and the citizens, but also create a positive image of Vanda's green areas and their management (Vanda municipality 2001, pg 61). However, to implement the green plan an increased budget is needed (Vanda municipality 2001, pg 39)

In the plan, it is stated that the planning and development of the green areas is a continuous process that is not finished with the plan (Vanda municipality 2001, pg 42). The plan should regularly be evaluated and supplemented. In this, the citizens should have a great part as well as they had in making the plan. In the six city districts, open meetings are arranged every year and the implementation and realisation of the plan is discussed. A political organ is needed to which the realization and the revising of the plan can be reported. To follow up how the goals of the plan are reached different recommended values should be set up. The development of these values is followed and it is evaluated together with the citizens how they are reached.

A green area report should be published every autumn to inform about what has been done during the past year, what is under planning and construction and decisions about future management (Vanda municipality 2001, pg 11). The report has a map that points out exactly where the park department plans some activity in the coming year, and it includes a short written description of what is planned. Each project also has a contact person who people can get in touch with for more information.

# 4 Analysis of the green plans

*Vision*

In Malmö, the city planners have many visions for what they think the green areas should contribute with to the city, e.g. a good living environment as well as a varied natural and cultural environment. At the same time the areas should be accessible and of high quality. The planners want to satisfy the "green need" among the citizens with a variety of green areas.

In Vanda, they want the green areas to be planned together with the citizens, managed in a sustainable way and characteristic for the region. Thus, the focus in Vanda, as compared to Malmö, is more on how the green areas should be planned and managed than on what the areas should provide.

|  | Malmö | Vanda |
|---|---|---|
| Vision | Fulfil the citizens "green need" with a variety of green areas | Sustainable management together with the citizens |
| Method | Analysis made by authorities | Collaborative planning |
| Implementation | To have a comprehensive green plan that is taken into consideration when dealing with all issues concerning the green areas | To have a plan that is continuously evaluated and discussed, i.e. a living document. |

*Table 4.* Comparison of the plans

*Aims*

Malmö's plan is putting a lot of attention towards increasing the green areas and protecting existing green areas from exploitation. The reason for this is most likely the fact that Malmö has little green area compared to Vanda and to other Swedish cities. Malmö's plan is on the tactical level in the green space model (see figure 3). It is focusing much on the green areas relation to the city but also on the recreation and biodiversity. It is more connected to the policy level with overall visions than it is to the operational level and the management.

Vandas plan is also on the tactical level but they have a stronger connection to the operational level than the policy level. In Vanda, which has much more green area than in Malmö, the plan is focusing more on how to maintain and develop the existing values than how to increase and protect green areas. Thus, the cooperation between citizens, interest groups and the authorities make up the largest part of the plan in Vanda. Through collaborative planning, they want to achieve green areas of high quality that are sustainable managed. They have set strategic aims for each city district and the plan also has a relation to the management of the green areas, as one of the objectives is to publish a yearly overview of planned management projects.

Both municipalities have understood the importance of the green structure forming a coherent net for recreation and ecological coherency for organisms and these aspects are included in both plans.

*Planning process*

In Malmö, the citizens have not been involved at all in the planning process. The plan is only providing information to the citizens on what the municipality is planning, so the process is on the information level on Arnstein's ladder of participation (see figure 2). The authors of the plan have classified all green areas and made some different analyses. All green areas have been included in the plan and the situation of today is visualised with analyses and maps showing the deficiencies and possibilities to develop a green structure net. This way, the Malmö-plan really shows the current situation with the green areas in relation to city planning. The analyses are based on quantitative facts and a lot of numbers and values are

presented. However, the analyses and suggestions build upon a generalised connection between the green areas size and their potential to have a valuable content and design and thereby a weakening of the local identity.

In collaborative planning peoples' opinions is asked for and it is not easy to take the final decisions when there are contradictory opinions. When using analyses, it takes less time and resources to take the decisions and the process it is easier for the planners to handle. The planners often do not have education in social sciences. For them, it might for instance be more difficult to hold public meetings than to make analyses and present facts. With analyses, there are quantitative facts behind the decisions, which are easy to present. Exact numbers and clear maps make the background to the decisions understandable.


In Vanda, it has been a collaborative planning process. They started using participation in the very beginning and continued with it through the whole process. Open meetings and group methods were used, but no individual methods. All citizens were invited to open meetings but there were no active attempts to include individuals and non-users. 1100 people took part in the process, most of them were representing an association and thereby talking for a larger group. The Park Department put special emphasis on including children, young and old people as well as the private sector, with special meetings for these groups. On Arnstein's ladder of participation the process is on the participation level, people had an influence over the results of the process but no power over the process (see figure 2).

Benefits with collaborative planning, as they have done in Vanda, is an improved quality of decisions by combining the knowledge of local people, different user groups, experts and the planners. The local identity is strengthened when people's experiences and requirements of the green areas are taken into account. When listening to the local people the green areas become of higher quality and fulfil the local needs, they do not become standardised over the city. With the participation, the local people feel more connected to "their" green areas. A feeling of ownership of the area makes the interest for the areas greater and with that, an increasing responsibility comes. A collaborative planning process can also raise the interests and knowledge of the urban green areas among people. Since there are many different municipal departments that relate to the green areas, collaboration between these during the planning process will define the different responsibilities and avoid overlapping. In urban forestry compared to conventional forestry there are higher social demands and more interests involved. Therefore, conflicts are more often present than in rural areas. Because of the closeness to people, and to avoid conflicts, an important policy instrument in urban forestry is communication and public relation (see Table 1)


*Use of the plans*

The suggestions of the plans are quite different in the two cities. In Vanda, the plan is the outcome of a collaborative planning process. During the planning process, the involved citizens have been prioritising the upcoming suggestion. It is not clearly described in the plan why these suggestions have become the prioritised ones. Thus, for people who have not taken part in the process it is not possible to understand the background for these decisions. In Malmö, the plan suggestions are clearly related to the analyses made.

In Malmö, the proposals are divided according to the different green corridors and there are a high number of suggestions on how to improve the green structure. The suggestions do not go into exact size, design or values of the areas. In Vanda, the suggestions are divided after the six city districts. The suggestions are fewer than in Malmö's plan and these finale suggestions have been valued as the most important projects during the participatory process. Like in Malmö, the suggestions in Vanda's plan will improve the accessibility and the green structure. The facilities in the areas are also treated by the plan but it does not go into design or experience values of the areas.

In addition to the mentioned differences, also the implementation factor has been treated differently in the two plans. In Malmö, the authors very loosely say that the plan should be

worked into all areas that are related to green areas in the municipality. Nothing is written about whether the plan will be monitored. It is a detailed plan that gives many suggestions. But what is the next step? How will the plan be implemented?

In Vanda, the authors have made clear how the plan will be implemented and monitored and a political organ will be responsible to follow the implementation. Open meetings will be held once a year to discuss how different activities have been carried out and how upcoming activities should be done, as well as the future need for management initiatives and new constructions. The park department will publish a green area report once a year giving an overview of how the management and implementation is going. When having a collaborative process people have put time into it and it is important that people afterwards can see the implementation of the decisions. Otherwise, they feel their participation was not taken seriously. The green area report and the open meetings is allowing people to follow up on the processes and get information on what is going on in the park department. They also get information about if something is planned in their neighbourhood for the coming year and can thereby react if they do not approve of something. One problem with implementation of green plans is often the economical resources. In Vanda, an increased budget is needed for the realisation of the plan. If this budget is not approved upon, the implementation might not happen or go so slow that people loose the interest for the participation.

The long-term aim of the plan in Malmö is to give the green areas the same status as housing areas and infrastructure, as the largest threat against the green areas is exploitation. The analyses will make it possible to see the planned exploitation in relation to existing and planned green areas. Also in Vanda, the largest threat against the green areas is exploitation. Instead of making analyses, they have used collaborative planning to create a discussion about the green areas. By doing this the knowledge and interest for the green areas might be increased among the politicians and the public.

# 5 Discussion

There have been no collaborative planning in Malmö, the green plan is building on inventories and analyses. From the green plan, the citizens can get information about municipality planning but they have not had any influence on the plan. Thus, on Arnstein's ladder of participation, the process would be on the information level. To avoid conflicts and standardisations of the green areas and to make people feel more connected to their local green areas, steps up on the participation ladder should be taken. A first thing could be to ask what the citizens want, and thereby get up to the consultation level. The next step up to participation is taken by letting people influence the outcome of the plan.

In collaborative planning, the idea is to involve people in setting aims rather than deciding management methods. The earlier in the process people are involved the better it is, because aims are decided upon quite early in the process. People generally want to have influence on local planning rather than city planning. Malmö's plan is not dealing with the local planning but is written on a comprehensive level that threat the placement of green areas and the development of a green structure net. Therefore, although it would have been better to include the citizens from the beginning, Malmö is in a good stage for starting to include them before the planning go more in detail and into local planning.


Vanda has been following recommendations on how to perform the collaborative planning. The collaboration was initiated in the beginning of the process and continued throughout the whole process. The methods that were used are open meetings and group methods, but no individual methods. To also have individual methods would have shown a more representative picture of what people want, but group methods are the best to achieve a common understanding and decisions everyone can agree upon. A greater variation of methods for involving people would have attracted different kinds of people. Meetings tend to appeal to a certain type of people.

On Arnstein's ladder of participation, the collaboration process is on the participation level. The citizens have not been delegated any power over the process but they have been able to influence the outcome. To increase the empowerment of the citizens, and take further steps up on the ladder from participation, does not necessary lead to an increase of the benefits. In a green planning situation in the municipality, it might not be realistic to let people take control over the process, and the increased costs for such a step might not be equivalent to the increased benefit.

One important factor in successful participatory planning is to include all stakeholders to get a representative outcome. In Vanda, 1100 citizens took part in the process. Most of them were representing an association. However, it is difficult to know if these people really were communicating with their groups or if their personal opinions were over emphasised. People who are not active in any organisation as well as non-users, old people, children, and immigrants can be difficult to involve in the collaborative green planning. The Park Department put special emphasis on including children, young and old people as well as the private sector with special meetings for these groups. All citizens were invited to open meetings, but there were no active attempts to include individuals or non-users who often do not understand that they also have a stake, and for this reason are difficult to involve. The collaborative process is very briefly described in the Vanda-plan. Without any more details, it is impossible to know if the process was conducted in a satisfying way. Did all stakeholders have an equal influence on the outcome? Was the procedure successful to give a common understanding?


In Vanda, they have planned the monitoring of the plan, but in Malmö they have not done that. One constraint with green plans is the implementation of them. Monitoring and reviewing a plan keeps the process of planning alive after the document is written and makes

sure that the plan is put into practice. In the view of public participation, this gives an opportunity to continue the involvement of stakeholders and to keep the dialogue active.

Protection of green areas is of great importance for the recreational use and is given a lot of attention in Malmö's plan but is also mentioned in Vanda's plan. Protected areas outside the city and on the urban fringe are often nature reserves. The municipalities have the possibility to create reserves and these often have a main purpose of recreation and nature protection. The part of the nature reserve set aside for so called free development is often high in the reserves own by municipalities and many state that the reason for this is to promote recreation (Lundquist 2005) However, people in common prefer managed and more park-like forests rather than nature care areas that are left for free ecological development (Hörnsten 2003). Thus, the knowledge about urban forestry seems to be insufficient in the municipalities.

Inside the cities, it would be a great improvement if there were obligate regulations for a minimum of recreational areas and how close these should be to people's homes. Malmö municipality have recommended values for this in their plan but still has to make them obligate. The Park Department could then in greater extent focus on a sustainable management and development of the green areas for the benefit of people's life quality and the city environment.

It would have been interesting to compare this study with other similar studies of green plans. However, it has not been possible to find such studies.

It could have been even more relevant to compare two cities more like each other than Malmö and Vanda. Malmö is larger than Vanda is and has much less green areas. The collaborative planning they have done in Vanda is therefore not directly applicable in Malmö. In Malmö, more resources would be needed for a participatory approach since the population is larger. But at the same time, the necessity of collaborative planning might be larger in Malmö than in Vanda since there is much less green area per inhabitant and therefore the pressure and number of different interests might lead to more and larger conflicts. Another aspect of importance is that in Malmö, one of the groups of people that are generally seen as difficult to involve is highly present, i.e. the immigrants (26% of Malmö's population is born outside Sweden (Strategisk utveckling Malmö Stad 2006)). Immigrants have different demands of the green areas than Swedes and their needs could be taken into account with a collaborative planning process.

Collaborative planning and public participation can be difficult issues to get a grip of. Even if the good intentions are there, it can be complicated to understand how to actually use the methods in the municipalities. Vanda's plan offers valuable ideas and inspiration to municipalities on how to create a green plan together with the citizens. Malmö's plan gives ideas on useful analyses to get an overview of a city's green structure. The analyses can then become the starting point of a participatory process.

# 6  Conclusion

The strengths with collaborative planning when making green plans is that the knowledge of the planners, experts and local people is combined. Standardisation of the green areas is avoided when the local people influence "their" green areas and make them suitable for the local needs. The decisions become of better quality and conflicts can be avoided when everyone's opinions are taken into consideration from the start.

Weaknesses with collaborative planning are that it does not provide quantitative facts that are easy to present. The collaborative planning process is more difficult to handle and take more time compared to conventional planning, and it is therefore more resource demanding.

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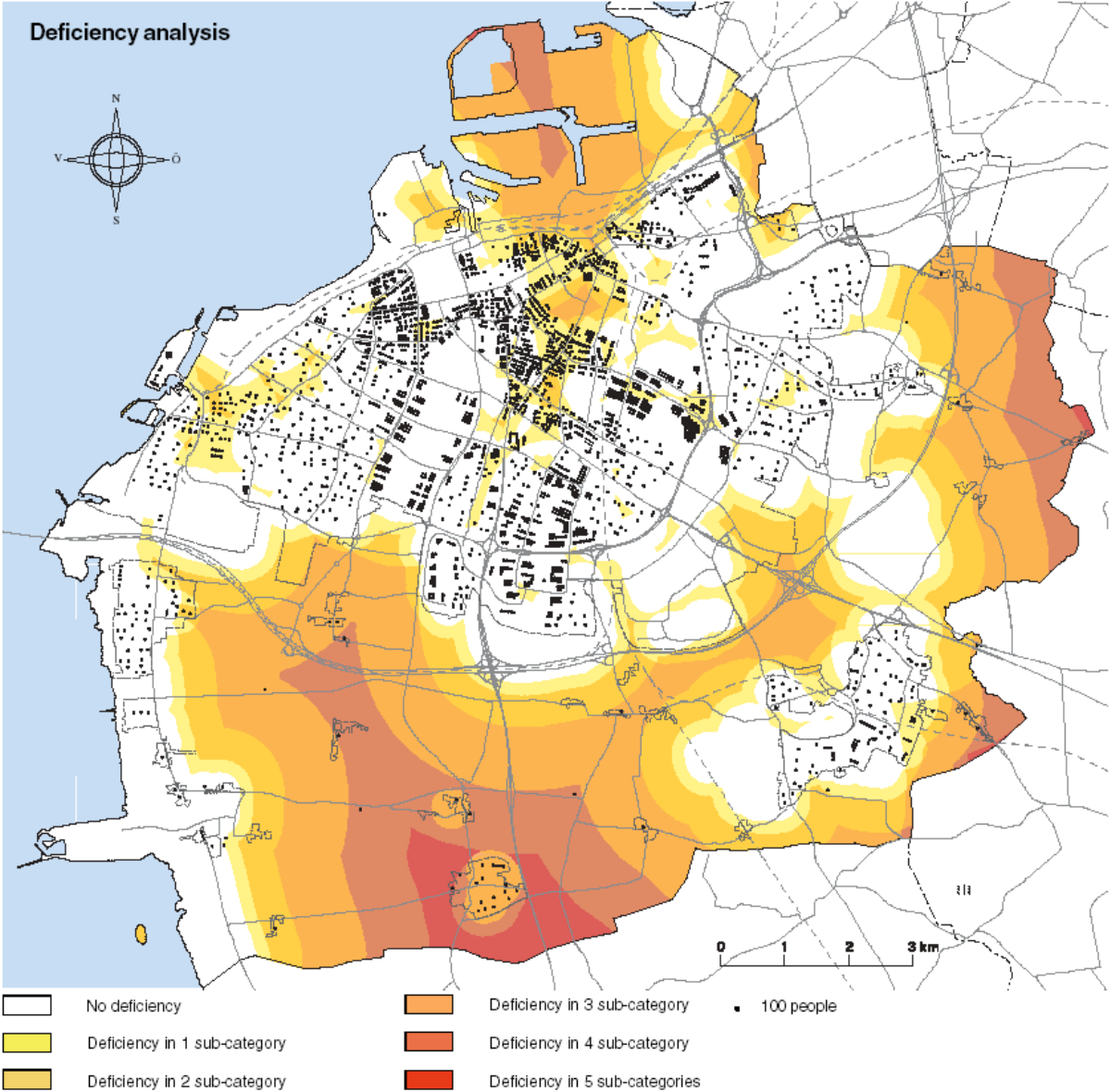
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# 8  Appendix

**1. Green area deficiency map Malmö**

## 2. Map of proposals for a green structure in Malmö



Map of proposal
**A green network**

Proposed green corridors

Proposed larger areas

Area in which larger green areas are proposed
(and sports facilities in certain cases)

## 3. Map of proposals Myrbacka & Mårtensdal, Vanda